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S. HRG. 106–339

BALLISTIC MISSILES: THREAT AND RESPONSE

HEARINGS

BEFORE THE

COMMITTEE ON FOREIGN RELATIONS
UNITED STATES SENATE

ONE HUNDRED SIXTH CONGRESS

FIRST SESSION

APRIL 15 AND 20, MAY 4, 5, 13, 25, 26, AND SEPTEMBER 16, 1999

Printed for the use of the Committee on Foreign Relations

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U.S. VULNERABILITY TO BALLISTIC MISSILE ATTACK

THURSDAY, APRIL 15, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice at 10:03 a.m., in room SD–562, Dirksen Senate Office Building, Hon. Chuck Hagel presiding.

Present: Senator Hagel.

Senator HAGEL. Good morning.

Mr. Secretary, if you would like to take a seat, I think we have fortified you well with water. If you would like anything else, we can get that, too.

Is that seat a little low, Mr. Secretary?

Mr. WEINBERGER. It's all right, thank you.

Senator HAGEL. I think we can get something for you. Those seats are very low.

I started to understand early on in this business, Mr. Secretary, that all the Senators up here looked larger than life. I quickly realized that we were being propped up from underneath, as most of us are, by our staffs, anyway, if not by these seat cushions. We are just a little more direct about it.

Mr. Secretary, welcome.

Let me first explain to those who are here, if there is any question, I am not Chairman Helms. I am Senator Hagel, a member of this committee. Chairman Helms has been delayed on some personal business and is hoping to arrive here before the conclusion of this hearing. That is why I am here.

Mr. Secretary, I have a statement that I will read in preparation for your testimony. My remarks will include some of Chairman Helms' statement. Chairman Helms' statement will be placed in the record.

[The opening statement of Senator Helms follows:]

OPENING STATEMENT OF SENATOR JESSE HELMS

It's an honor to have this distinguished American, former Secretary of Defense, Caspar Weinberger, with us for today's Senate Foreign Relations Committee hearing devoted to missile defense and the Clinton administration's proposed amendments to the 1972 ABM Treaty.

Mr. Secretary, welcome back to the Foreign Relations Committee. It is indeed appropriate that you are leading off the Committee's consideration of this treaty, because it was during your leadership in the Reagan administration that the U.S. set the goal of building a nationwide missile defense to protect this country from ballistic missile attack. It is sad that as we sit here, eighteen years later, America is

still unprotected. With your help and guidance, Mr. Secretary, I believe Congress may soon do something about that.

This is the first in a series of eight hearings of the Foreign Relations Committee devoted to the missile threat to the United States, the need for missile defense, and the question of whether the Senate should agree to amendments to revive and expand the ABM Treaty. Senators Hagel, Grams, Ashcroft, Coverdell and others will chair hearings in the coming weeks on various aspects of this treaty.

As we begin this process, let it be clear at the outset: The Committee is not here merely to consider technical changes to the ABM Treaty. We are here to consider *the ABM treaty itself.*

The issue before us is: Should the United States continue to be bound by this dangerous and antiquated arms control pact, born of the cold war, which now prevents America from defending its territory from ballistic missile attack? The answer, in my view, is a resounding "NO!"

The Committee will proceed on the legal presumption that the ABM Treaty is no longer in force—that it expired when our treaty partner, the Soviet Union, ceased to exist. Therefore, what the Committee is considering today is a proposed new ABM Treaty, recreated with four new treaty partners. Now, I will not go into the detailed legal arguments here—indeed, we will have a hearing in the coming weeks devoted exclusively to discussing and debating this aspect of the matter.

But one thing is irrefutable: Regardless of the treaty's legal status, the Senate vote on these ABM amendments will be a referendum on the ABM Treaty itself. The Senate's rejection of these amendments would strike down the Clinton administration's efforts to reconstitute the ABM Treaty and would constitute a resounding vote of "no confidence" in continued U.S. adherence to that fatally-flawed agreement.

The President knows and understands this—which is why he is refusing to honor his pledge to submit the ABM amendments to the Senate for a vote. As we begin these hearings, I note that tomorrow will mark exactly 700 days since President Clinton made a legally-binding commitment to submit the ABM amendments for the Senate's advice and consent—700 days!

Now I have been accused from time to time of holding treaties hostage. But I don't hold a candle to the President in this matter. The President is holding the revised ABM Treaty hostage because he fears that the Senate will refuse to ratify it. Which, if I am successful, is just what we will do.

We must get rid of the ABM Treaty if we are going to meet the security challenges of the next century. During the cold war, the United States depended on the doctrine of "Mutually Assured Destruction"—or "MAD"—to deter Soviet missile attack—a pathetic alternative to a national missile defense indeed. Even in the context of the cold war, as President Reagan famously said, "MAD was NUTS." But now that the cold war is over, continuing to intentionally expose our nation to ballistic missile attack by rogue states, as a matter of policy, is quite simply INSANE.

Under the MAD doctrine, we assumed that our adversary was what the political scientists like to call a "rational actor"—someone who would be deterred from launching a first strike against us by the promise of a devastating U.S. nuclear response.

I challenge anyone to argue with a straight face that the adversaries of the 21st century—the Saddam Husseins, Kim Jong Ils, and Ossama Bin Ladens of the world—are "rational actors." We cannot depend on MAD to deter them.

The world has changed a great deal since the ABM Treaty was ratified 27 years ago. The U.S. faces new and very different threats today. China has two dozen ICBMs pointed at the U.S., and both China and Russia are recklessly proliferating dangerous technology to rogue regimes around the world. Some twenty nations, many hostile to the U.S., are working to develop nuclear, chemical and biological warheads and the missile technology to deliver them. Iran is working on a missile that can hit the continental United States, and North Korea's unstable regime tested a missile over Japan this past fall which is capable, TODAY, of striking Alaska and Hawaii—a capability, I might add, which caught the United States intelligence community completely by surprise.

Mr. Secretary, among other things, the Committee will benefit from your assessment of the threats we will face in the coming years, how they differ from the threats of the cold war, and how missile defense can contribute to our national security. I also will be interested to know whether you would advise the Committee to agree to the administration's plan to resurrect the ABM Treaty with four new partners.

In closing, let me emphasize: the Senate has been patient with the administration—700 days of patience to be precise. But our patience has its limits. As most of you know, I have set a deadline of June 1 for the administration to submit the ABM amendments to the Senate. By then, the Committee should have concluded its

hearings, and will be prepared to vote expeditiously on the treaty amendments, so that the Senate can vote on them before the August recess.

Now if the administration expects cooperation from the Committee on its priorities, then I will expect their cooperation in the Senate's consideration of the ABM Treaty. Let the President make his case for reviving the ABM Treaty, we will make our case against it, and then the Senate will vote. And if I have my way, we will defeat this treaty and move forward to deploy a national missile defense.

Mr. Secretary, we look forward to your testimony.

Senator HAGEL. I will keep my remarks brief so that we can hear from you and get into a dialog which I think is going to be important for our committee.

Let me begin, Mr. Secretary, by expressing on behalf of the entire committee our appreciation to you and to say that, in fact, it is a distinct honor to have you with us this morning.

This hearing is devoted to missile defense and the Clinton administration's proposed amendments to the 1972 ABM Treaty.

It is appropriate that Secretary Weinberger be the lead-off witness of this committee in its consideration of this treaty. It was during Secretary Weinberger's leadership in the Reagan administration that the U.S. set the goal of building a nation-wide missile defense system to protect this country from ballistic missile attack.

It is sad that, as we sit here 18 years later, America is still unprotected. With your help and guidance, Mr. Secretary, I believe Congress may soon do something to remedy that.

Today's hearing is the first in a series of hearings of the Foreign Relations Committee devoted to the missile threat to the United States, the need for missile defense and the question of whether the Senate should agree to amendments to revive and expand the ABM Treaty.

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The issue before us is should the United States continue to be bound by this outdated and antiquated arms control pact, born of the cold war, which now prevents America from defending its territory from ballistic missile attack? That is the question.

The answer, in my view, is a very clear and resounding no.

Chairman Helms has directed the committee to proceed on the legal presumption that the ABM Treaty is no longer in force, that it expired when our treaty partner, the Soviet Union, ceased to exist. Therefore, what the committee is considering today is a proposed new ABM Treaty, recreated with four new treaty partners.

I will not go into the detailed legal arguments here. Indeed, we will have a hearing in the coming weeks devoted exclusively to discussing and debating this aspect of the matter.

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Perhaps the President knows and understands this. That may be why he is refusing to honor his pledge to submit the ABM amendments to the Senate for a vote. As we begin these hearings, I note that tomorrow will mark exactly 700 days since President Clinton made a legally binding commitment to submit the ABM amendments for the Senate's advice and consent.

The security of the American people is the most important responsibility of the government. Surveys have shown that the American people believe they are safe from ballistic missile attack. They believe that, if a missile were fired at the United States today, all that our military would have to do is shoot the missile down. The reality is that the United States cannot shoot down any incoming ballistic missile. We are completely vulnerable to a missile attack from any country or terrorist group, and we are vulnerable to both deliberate and accidental missile launches.

Last summer, the North Koreans launched a Taepo Dong–I missile over Japan, exposing our vulnerability and demonstrating their capabilities. That missile has the capability today to reach U.S. territory with a chemical or a biological payload.

India and Pakistan have now joined the nuclear club by testing nuclear devices and just this week have begun test firing long range missiles. Our intelligence community was surprised by these developments. Many Americans remember our previous strategic military situation.

During World War II, vast oceans kept away these kinds of military threats from the American homeland. Oceans again insulated the U.S. mainland from the wars in Korea and Vietnam.

Today, the strategic situation has changed, changed dramatically, and missiles now can reach almost any American city within minutes.

We were surprised in December 1941 by the attack on our naval forces at Pearl Harbor. Time was on our side, then. We had several years to rebuild our navy and raise an army. Today we no longer have the luxury of time or of the oceans that once protected us. We need to recognize and admit that we have a problem in defending ourselves against missile attack. We need to stop talking and start taking action to protect ourselves.

Now, only two things stand in our way: the ABM Treaty and the administration's opposition to deploying a missile defense system as long as the Russians object to renegotiating the ABM Treaty.

Mr. Secretary, I again welcome you, and appreciate very much your getting up very early this morning to join us. With that, please proceed.

STATEMENT OF HON. CASPAR WEINBERGER, FORMER SECRETARY OF DEFENSE AND CHAIRMAN, FORBES MAGAZINE, WASHINGTON, DC

Mr. WEINBERGER. Thank you very much, Mr. Chairman. It is always an honor to be invited to speak before a Senate committee. I am deeply conscious of that honor and am very pleased, indeed, to be invited and to be here.

I don't have a formal statement. I have a few notes that I would make very brief mention of, and then I would be delighted to try

to take your questions and those of any of the other members who come.

I was very pleased, indeed, to hear you say that the hearings are going to be about the treaty itself. This is because I think we all need to recognize that we simply cannot deploy any kind of effective system as long as the ABM Treaty is in effect.

I have been talking about this subject now since 1983, when President Reagan first proposed it and even before, when we talked about it, before he made his formal proposal. We recognize that article 15 of the treaty provides for any country that feels that its national interest requires it, to be able to step out of the treaty by simply giving 6 months notice. I think it is long overdue that we give that notice and step out of the treaty.

All through the Reagan administration, everything that we did was challenged within the administration and by outsiders on the ground that what we were talking about was not treaty compliant. So you always had to try to tailor everything you were doing, including the research, to make something that would fit within the treaty.

Since the treaty bans anything that is effective, all the work that we were doing would only have been effective if we had coupled it with a proposal to get rid of the treaty, which we did.

It was never done during those years. I wish it had been. But we now have the treaty itself, which offers that opportunity, so we are not in any sense violating a treaty we entered into, but we would be doing what is essential if we want to have any kind of effective defense. A lot of the amendments to the treaty that you are talking about, that the present administration has proposed, are amendments, first of all, to take in four new countries because the Soviet Union, as you said, is deceased and the treaty is no longer in effect. These would be Russia, Belarus, Kazakhstan, and Ukraine. That would make it infinitely more difficult ever to work out a provision by which we could step out of the treaty, as we can under this practically defunct treaty now.

So I think it is more than time that we give our notice, step out of the treaty, and let the world know that we are going to proceed with effective missile defense.

Meanwhile, all of the research could be useful only—only—if we step out of the treaty. People who said why are you spending all of this money when you can't deploy anything had a point. It was not a good point, but it was a point. It is essential that we realize that the treaty itself is deliberately designed to make it impossible to deploy an effective defense.

I never really felt it was a wise treaty for us to have entered into in the first place. There may have been good cold war reasons for it, but I did not share them. In any event, the fact of the matter is that, to my mind, it has always seemed exactly parallel to a situation in which announced to the world that we were not going to equip our troops with gas masks and that we would sign an agreement with some other countries that they would not equip their troops with gas masks, that then it was perfectly all right to send the troops into battle knowing that they might possibly be gassed and that they would have no defense.

I do not think you encourage anybody to give up a weapon when you announce that you are not going to have any defense against it. That is one of the compelling reasons why I think we need to step out of this treaty now, and announce to the world that we are going to proceed not only with research, not only to study, and not only to test, but to deploy an effective system that makes use of space and that is the most effective we can get.

It seems hard to believe, but we had a number of people who were talking about some kind of changes, and whether they are in the formal changes the administration has committed to or not, I don't know. I don't even know if they have actually submitted their changes yet to the Senate.

But one of those changes was designed to give some sort of permission for very slow reentry vehicles but to ban anything that defended against a fast reentry vehicle. So, again, you are talking about banning anything that is effective.

Those are the principal reasons why I think we should, in consideration of missile defense, start with the treaty and end the treaty. Then we should get on with serious study leading to deployment. I think we have lost a lot of time. The program was virtually gutted in 1993, after having been started in 1983. But I think we have a lot of valuable work that has been done and, if we went full bore at it with no treaty blocking it, then I think we could get it in a comparatively short time. And I think we need it in a comparatively short time.

I think Mr. Rumsfeld's Commission did a marvelous job in pointing out the need for it. The threat is far more imminent than any of the intelligence agencies thought, far more imminent than the administration announced was the case. So I think every reason compels us to get on with this in our kind of world and not endanger American troops, American people, or American cities by announcing again to the world that not only do we not have this kind of defense but that we never intend to get one.

Those are the principal points I wished to make, Mr. Chairman, and I would be delighted to try to deal with your questions now.

Senator HAGEL. Mr. Secretary, thank you, again, for appearing this morning.

I have some questions that I would like to ask and Chairman Helms has some questions, as well, which I will ask on his behalf.

Mr. WEINBERGER. All right.

Senator HAGEL. Let me begin, Mr. Secretary, by asking this question. You alluded to this in your comments and I mentioned it in my statement. The administration said that deploying a missile defense system to protect American citizens would violate the 1972 ABM Treaty. Would you frame up for us in some detail what your understanding is of that treaty's provisions that would be violated?

Mr. WEINBERGER. The treaty itself is designed to ban any kind of effective defense. It authorized and allowed, as I remember it, the United States to have two ground-based sites, which are essentially, in this kind of world, in this kind of day, ineffective sites. One would be to protect the national capital and the other would be to deal with missiles at the point where the military then

thought was the most likely entry point. It was North Dakota, as I remember it.

We decided back in 1973 or 1974 not to proceed with either site. The Soviets then proceeded to take advantage of that and put in some ground-based defenses around Moscow. But they also did a lot of other things that were violative of the treaty, such as developing a huge new radar at Krasnoyarsk that could only have the effect of guiding, warning, and defending against incoming missiles, and a guidance system to destroy them. It proceeded with a number of actions of that kind that violated the treaty.

My information is that, to this day, they are using a large amount of their very scarce resources to continue to try to get a missile defense system that would violate the treaty.

The treaty in effect banned all other effective defenses except those two permitted ground-based sites. The intention was very clear. We understood it and we accepted it at that time in 1972. It was to ban any kind of defensive system on the theory that if you were totally vulnerable, you were completely safe—not a theory that I ever accepted.

Senator HAGEL. Thank you.

Why should the United States continue to abide by a treaty that may no longer be in its vital national security interests?

Mr. WEINBERGER. I don't think we should. I think by every legal reasoning—and I have seen three or four opinions by law firms commissioned to look at the question—the treaty is dead.

One of the partners, the only other partner, to the treaty, the Soviet Union, is dead, and the treaty is no longer in effect.

However, Mr. Clinton announced very early on that it was going to be the cornerstone, the keystone, of our defenses and we were going to adhere to it rigorously. He announced, as I recall, with considerable excitement that the Russians had agreed to the same thing. I am sure they probably tell him they would agree to it. But they are continuing to work on missile defense.

Senator HAGEL. Mr. Secretary, one of the arguments that has been used by opponents of a national missile defense system is aren't we being a little short-sighted and can not weapons of mass destruction be delivered via a suitcase and other delivery vehicles. That is true.

What is your response to that, when they say why would we invest billions and billions of dollars to set up a system when, in fact, some terrorist group could bring in a nuclear weapon via a suitcase?

Mr. WEINBERGER. Well, there could indeed be a nuclear weapon brought in in a suitcase, and there have been all kinds of other types of very lethal weapons, including the one that hit a Japanese subway, and various others, which can cause an enormous amount of damage. But I don't think it is an argument for not taking the kind of protections and the kind of precautions that a missile defense system would bring, simply because there may be other ways that destruction can be delivered.

The new explosives that have been developed are not as lethal or not as devastating as nuclear weapons, but they are enormously devastating. But this is not a reason, I think, to not proceed with protections that ultimately can safeguard us from the most immi-

nent danger and the danger that can do the most damage. A bomb in a suitcase certainly would be extraordinarily difficult and unpleasant, and all of the other things. But in total destruction, the destruction that could be delivered by a nuclear missile of the kind that Korea has tested, that China has, that Russia has, all of those are of much greater destructive capabilities.

I don't think the argument that you could deliver one in a suitcase is anything that should prevent us from proceeding to do the maximum amount of defense we can against intercontinental or intermediate range ballistic missiles. I also think we obviously should do our best to continue our defensive work against anybody carrying the suitcase and to improve our intelligence capabilities so that we will know about those sooner.

Senator HAGEL. Mr. Secretary, what are your thoughts, generally, on the Russian dynamic of this? In particular, the critics also cite the fact that the Russians are threatening to withhold ratification of SALT II. The Duma has been talking, discussing, and debating SALT II for 6 years. Would you care to enlarge on the Russian part of this equation?

Mr. WEINBERGER. Well, I think, first, the Russians have a great many nuclear weapons, intercontinental and intermediate range ballistic missiles. I have seen figures ranging up to 22,000 to 23,000 warheads and probably somewhere in the neighborhood of 7,000 to 9,000 deliverable vehicles. But I think that it is widely known that they have these.

It is also widely known that they have been working on defenses, starting almost within a year after signing the ABM Treaty. I think that they have probably a number of problems. Their maintenance conditions are very poor. Their morale is very poor. Soldiers have not been paid for months, and they live in conditions that we would not put hardened criminals in.

But they are there and the missiles are there. We have known this for a long time. It is, I think, folly not to take every step we possibly can to defend ourselves against a possible attack from there, from China, from North Korea, from Iran and Iraq. As we have seen and as you mentioned correctly, India and Pakistan are deploying them. North Korea has fired a three stage missile over Japan. While in their first one only two stages worked, but a three stage missile is a very sophisticated weapon, and indicates a capability that, as they work further on it, will enable them to hit the Western United States and, ultimately, other parts of our country.

It seems to me that we have the capability of developing a defensive system that can be effective. It is the height of folly, criminal folly, I would say, not to work on it and not to deploy it.

Senator HAGEL. What is your opinion regarding the Newly Independent States from the former Soviet Union, the CIS States, as to would they be bound by the provisions of the 1972 ABM Treaty that the United States negotiated with the former Soviet Union?

Mr. WEINBERGER. I don't think so, sir. Now that is an off-hand legal opinion. But the Soviet Union is gone and the Soviet Union was the official party to the treaty. Under every interpretation that I have ever seen, with one party dead that means that the contract, treaty, agreement, or whatever it may be, under those circumstances is nullified and is no longer in effect.

However, the Clinton administration is attempting, as we said, to bring in four new members of the former Soviet Union and have them all be part of this. This would simply make it more difficult for us ever to get out of it and would make it more of a tempting threat to the Russians and the three other countries of the former Soviet Union to violate the treaty since we will be announcing that we will not have any defenses.

Senator HAGEL. Would you develop for this committee some of the specific perspectives that you mentioned were in the Rumsfeld Commission's work on the timing of the threat from Iran, North Korea, and other nations? You know better than anyone, Mr. Secretary, that intelligence communities in this country constantly have understated and underestimated the ability of these rogue nations to come up with these sophisticated weapons.

Mr. WEINBERGER. Mr. Chairman, I think that for one reason or another the threat has been seen by the intelligence community or members of it to be much farther out in time than I would see it. And I think the Rumsfeld Commission performed an enormously valuable service by pointing out that the assumptions behind some of the intelligence community's analyses were that countries like Iran, Iraq, and North Korea did not have the indigenous capability to develop these weapons by themselves and that, therefore, in order to acquire that kind of capability, it would be anywhere from 9, 10, 12, or 15 years before they posed any kind of threat.

Well, even 12 or 15 years seems to me to be a comparatively short time the way things go.

But what the intelligence community's analyses did not point out was that these countries are not limited by their indigenous capability. They are perfectly capable of buying, as Russia is perfectly capable of selling and has sold, valuable components to these rogue countries that will enable them to get these kinds of weapons much sooner.

It is very clear from North Korea's testing and exploding the three stage weapon that they have proceeded much farther along this path than any of the intelligence analyses indicated. I think the estimate now has been reduced to 4 to 5 years. I would think that, if they put their minds to it—which they would do since we have said we will not have any defenses, thereby encouraging them to do so—they could get it in probably a couple of years.

We don't know what they are doing. We don't know what they are doing underground. We found out when the U.N. inspectors were finally permitted, in response to Saddam Hussein's various solemn promises, to look at a few things, that Iraq had a lot more underground than we knew about. It was not destroyed in the aerial war because it was underground.

So I don't think anyone can say with any confidence how far along they are. It is not an area in which I would feel there is much room for error. I don't think that we could shrug our shoulders later on and say well, we didn't quite give you the accurate information on that, we made a mistake. That might comfort them in a few years but I don't think it would comfort anybody else.

I think in this case we have to use the worst case assumption, and that is that I think it is quite possible that some extremely devastating weapons could be put together by essentially hostile

countries in anywhere from 2, to 3, to 4 years. That is a very, very short time.

It is sooner than it would take us to get an effective system now that we have postponed all of the active research and development work that had started in 1983.

Senator HAGEL. Would you care to frame up your perspective on what is going on in India and Pakistan with their nuclear efforts?

Mr. WEINBERGER. Well, they have been working on this for a long time, Mr. Chairman. I was struck—I would not say amused—but I was struck by the fact that, when India exploded a nuclear device, as it is always called in the press, there was great shock and astonishment expressed by the administration a few months ago. What surprised me—what I found to be rather ironic, was that the DJP Party in India that is in office now had made it a point of their campaign that they were, indeed, going to deploy and test nuclear weapons. That was one of the promises on which they were elected.

I can only assume that the failure to accept that was based upon the theory that some people never keep campaign promises.

But this was a campaign promise. They kept it and they exploded the "device," and it should not have been a surprise to anybody. Pakistan's following was a perfectly normal thing to expect because Pakistan has to demonstrate that it, too, has the same capability as a means of trying to keep their country defended.

Senator HAGEL. All of these are obviously inter-related pieces to the broader issue that we are dealing with today and will continue to deal with over the next few weeks in hearings on ABM. But I also would welcome your perspectives on China.

We have many dynamics that are part of our relationship there, especially now in light of the Los Alamos issue which has complicated, further complicated, an already complicated relationship. Focus, if you would, Mr. Secretary, on the nuclear capability and where you think China may be headed with that capability for their own defense interests.

Mr. WEINBERGER. Well, we know and I think it is generally accepted that the People's Republic has about 400 missiles of a range that is possible to reach areas of the United States and other countries, of course.

They have had these and have been working on them for quite a long time. They have had a lot of technical difficulties with launching, and that is one of the things that we helped them with by the transfer of technology and by the technology that was stolen.

We also helped them improve their guidance, the accuracy of their guidance systems which, of course, is tied to the accuracy of the missile. And we helped them, again, I think inadvertently, with their theft of technology that had enabled us to design and deploy a very effective, small warhead, the W–88. They have obtained this.

Now I know that Zlu Ronji said that they could do all of these things by themselves, so they would not have any necessity to steal them. But the simple fact of the matter was they did want and need them and they did obtain them. I am not privy to exactly how they got them, but they did get them.

Senator HAGEL. I will exercise the Chair's prerogative here, Mr. Secretary, and veer somewhat away from ABM to Kosovo. I noted a piece that you wrote in the New York Times a few days ago which I thought was on target—speaking of military capability.

I would welcome for the record and this committee would welcome any thoughts you might have on where we are in Kosovo and what we must do to pursue our goal there.

Mr. WEINBERGER. I certainly would be glad to do that, Mr. Chairman. I don't have any special knowledge or access to very much intelligence information anymore. But I do have a lot of strongly held opinions—some people call them prejudices—and I will be glad to discuss those, if you want me to, briefly.

I think that in Kosovo we are in a war situation. What bothers me more than anything else is it strikes me as having great similarity to the situation in Vietnam, which was the first time we ever went into a war not intending to win. We sent about 565,000 American troops to a war that we did not consider important enough to win, that we did not consider important enough to support them to win, to put in the resources to win. We did not intend to win it.

It strikes me that that is what we are doing now in putting in resources to attack Serbia. I think we are 2 to 3 years late about it. I think we should have done it when Serbia first practiced their most brutal atrocities in Bosnia. I think it is proper that we are in Kosovo and proper that we are now trying to stop Milosevic.

But what disturbs me is that I have not seen, among all of the wide variety of statements of the administration as to what their aims are, what their goals are, I have not seen any mention of the word victory or any definition of the term victory.

We have been told that we are trying to degrade Milosevic's military capability. Of course, you do that every time you hit a truck or a tank. We are told that the aim is to bring him back to the negotiating table. If that succeeded, he would make all of the same kinds of promises he always makes and always breaks. But we have never said anything about getting him out of power or doing anything except negotiate with him. This, I think, is not a solution that is going to solve this thing nor is it going to produce any kind of permanent change. Nor is it going to get the Kosovars back into their own country.

When you displace close to a million people, and it is now something over 900,000 people who were forcibly displaced under the most brutal conditions imaginable, including kidnapping, pillage, robbery, rape and all the rest, which we have seen every day and every night—these are not just television shots, these are conditions that are actually happening, as we know from other information—you have a situation that can only be corrected if you go to the root of it, go to the heart of it.

I thought you had an excellent piece, Mr. Chairman, in one of the papers, the title of which was "The Exit Strategy: The Only Exit Strategy Is Victory."

We hear a lot of very stilted terminology about exit strategy and that we might go in in a permissive environment. I suppose this means that you get formal permission to invade somebody. But it just seems to me to be a little difficult to accomplish.

But we do not seem to have any intention to bring this thing to a head and complete it the way it needs to be completed. There have even been some suggestions that solutions must be developed that do not humiliate Serbia or Milosevic. We never really worried about not humiliating Tojo, or Hitler, or some of these other people that we had to attack. It seems to me that there is the same kind of situation now.

So I think we should set up a set of aims that makes it very clear that, first of all, Milosevic has to go. This is because I think as long as he is there, he will promise anything, will lie, and will break his word as soon as he thinks it is safe to do so.

I think that the Kosovars have to be allowed to return peaceably. I think most of their homes will have to be rebuilt and the damage repaired. I think there will ultimately have to be some kind of army of occupation put together by NATO, not by us and not by the U.N. I don't think we need to participate to any great extent in that. But it needs to be an army that is there, not a peacekeeping army, but an army of occupation, to make sure that ultimately Serbia gets the kind of government that can live in peace with its neighbors.

This clearly involves eliminating Milosevic from control. We did it in a much smaller scale, an infinitely smaller scale, in Panama. Mr. Noriega is in jail and I think Mr. Milosevic should be in jail, either awaiting execution or serving a life sentence as a war criminal, which is what we did with a number of other people in that category in other wars.

Senator HAGEL. Mr. Secretary, as always this panel is grateful. I have occasionally referred to you as one of the preeminent public servants of our time. I think my colleagues have the same appreciation and definition for what you have given our country, Mr. Secretary, over many years.

Once again, you continue to contribute and we are again grateful.

We will look at the record and if there is any clarification that we need, we will get back to you. But, as always, we are grateful.

If there are any additional thoughts or comments you would like to make, please do so.

Mr. WEINBERGER. I just think the hearings are a great public service, most necessary at this time, and, really, to my knowledge, the first time we have started to consider that the only way we can have any kind of effective defense is to step out of this ABM Treaty, and no longer be bound by it. This would be under the terms stated in the treaty itself.

I think it is vital to start serious debate and consideration of that topic now, and, as I say, I think it is a great public service that the committee is launching on this path.

Senator HAGEL. Mr. Secretary, it was nice to see you. Thank you.

Mr. WEINBERGER. Thank you very much, Senator.

[Whereupon, at 10:40 a.m., the committee adjourned, to reconvene at 9:30 a.m., April 20, 1999.]

CURRENT AND GROWING MISSILE THREATS TO THE U.S.

TUESDAY, APRIL 20, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 9:31 a.m., in room SD–562, Dirksen Senate Office Building, Hon. Chuck Hagel presiding.

Present: Senators Hagel and Frist.

Senator HAGEL. Good morning.

Today's hearing is the second of a series of hearings focused on the threat of ballistic missile attacks on the United States, the urgent need for missile defenses and the need for the United States to disassociate itself from an obsolete arms control agreement, the 1972 Anti-Ballistic Missile Treaty.

This morning we have three distinguished witnesses. The first panel will consist of Dr. James Schlesinger. Dr. Schlesinger has held many important senior national security positions in the U.S. Government. He has served as Director of Central Intelligence, Secretary of Defense and Secretary of Energy. Presidents of both parties have repeatedly sought Dr. Schlesinger's counsel and assistance.

Dr. Schlesinger, we are very proud and pleased to have you with us this morning.

On the second panel is Dr. William Schneider, who was a member of the Rumsfeld Commission and is an adjunct fellow at the Hudson Institute. Dr. Schneider is also the president of International Planning Services and is the former Under Secretary of State for Security Assistance.

Mr. Secretary, when you come to the table, we will be grateful for your presence and contribution as well.

Our third witness is the Honorable James Lilley, former U.S. Ambassador to Korea and China. He has a long and distinguished career in intelligence, national security, and diplomacy.

Ambassador Lilley is currently a resident fellow and director of Asian Studies at the American Enterprise Institute. I assume he will be along shortly. I do not see him yet, but I know that he will be here.

America's national security lies in the interests of preventing the proliferation of ballistic missile and warhead technology. According to unclassified information from the Defense Intelligence Agency, at least 10 countries have operational ballistic missiles with ranges

greater than 500 kilometers. Within the next decade, that number will grow again by half, to 15.

Many of these nations—Iran, Iraq, Libya, Syria, and North Korea—are clearly hostile to the United States. Two things are certain. First, any of the countries I have just mentioned could launch a ship-based ballistic missile strike against a U.S. city today.

I wish to be clear on this point. Every U.S. coastal city, from Seattle to Bangor, Maine, faces the present and growing danger of ballistic missile attack.

Last year, the Rumsfeld Commission warned that the sea-launch option is very real and very plausible.

Similarly, our intelligence community has warned that forward basing from dedicated vessels or freighters could pose a missile attack threat to the United States in the near-term.

The ranges and capabilities of ballistic missile programs are growing rapidly, largely due to the assistance given these programs by Russia and China. This will translate into the achievement of ICBM capability for several countries.

One country, in particular, is in the final stages of developing an ICBM. Last August, North Korea stunned everyone by launching a version of the Taepo Dong–I missile, which had a third stage. While we have known about the Taepo Dong–I missile for several years, we did not expect North Korea to stack a third stage on it to give the system intercontinental range.

The U.S. intelligence community has warned that with this missile, North Korea has the ability to deliver small payloads to ICBM ranges.

Moreover, North Korea has worked on the Taepo Dong–I with implications for its other, even longer-range, missile, the Taepo Dong–II. As we have learned more about this program, we have become increasingly concerned that the missile could be used to attack cities in Alaska and Hawaii.

Now the U.S. intelligence community judges that with the staging technology demonstrated on the Taepo Dong–I, North Korea's Taepo Dong–II could probably reach the rest of the United States, depending on the size of its payload.

In other words, North Korea is on the verge of fielding a ballistic missile capable not only of striking my home State of Nebraska, in the exact middle of the United States, but anywhere in the United States.

Just as troubling, the Rumsfeld Commission warns that Iran could join North Korea in its ability to inflict major destruction on the United States within about 5 years of a decision to acquire such a capability.

All of this, of course, is in addition to the omnipresent threat of deliberate or accidental attack against the United States by Russia or China, both of whom have numerous ballistic missile capabilities and both are capable of destroying U.S. cities.

Obviously, with such a serious threat growing steadily worse, one would assume that the United States would have deployed long ago a missile defense system to protect the American people. One would assume that the Federal Government would have made certain by now that the United States is never exposed to the threat of ballistic missile attack.

Well, such assumptions are wrong. The United States has no defense against this threat.

This administration, in fact, aggressively blocked every effort by the Congress to implement a national missile defense system, to the point of vetoing an entire defense bill because it mandated the immediate deployment of a missile shield.

The fact is the United States is vulnerable to nuclear and biological tipped missiles.

This morning's two panels will focus on this issue and the tangential issues that accompany missile defense. Again, on behalf of my colleagues on the committee and Chairman Helms, we are grateful that the three of you would take your time to come up to share with us your thoughts and make a contribution to this effort.

With that, let me now ask the former Secretary of Energy and Defense, and former CIA Director—a complete public servant—Jim Schlesinger, for his testimony.

Mr. Secretary, welcome.

STATEMENT OF HON. JAMES R. SCHLESINGER, FORMER SECRETARY OF DEFENSE, FORMER SECRETARY OF ENERGY, AND FORMER DIRECTOR OF THE UNITED STATES CENTRAL INTELLIGENCE AGENCY

Dr. SCHLESINGER. Thank you so much, Mr. Chairman.

Mr. Chairman, I appreciate the invitation of the committee to discuss the possibilities of ballistic missile attack against the United States and the defenses that we might deploy to protect against such an attack.

In the time limited, I can, of course, touch only on a few major points. First, the prominent political role of the United States in the world makes it a prime target for resentful nations. Its military preponderance will spur other nations to seek asymmetrical ways of threatening to inflict pain on this country, thereby hoping to limit our response to actions on their part.

There is a variety of ways to inflict such pain and, thus, a variety of potential threats. Ballistic missile attack is one prominent possibility. But there are others, including cyber attack, chemical attack, and biological attack.

As you know, the Department of Defense is devoting increasing attention to such possible attacks. It has recently established the Defense Threat Reduction Agency and the Threat Reduction Advisory Committee.

Among such possible threats, that of ballistic missile attack is the most dramatic, if not necessarily the one of highest probability. The potential is there already and will likely grow in the near-term.

As you mentioned, Mr. Chairman, the recent test of the Taepo Dong missile by North Korea is but an harbinger of what will inevitably come. In both South Asia and Southwest Asia, ballistic missile capabilities have already been demonstrated and are undergoing rapid development.

While such capabilities are not of intercontinental range, they could threaten American bases or American allies and could be transported closer to the American mainland to make them potential threats to the mainland.

Despite international efforts to restrict the spread of technology, it is spreading and will do so increasingly. Unlike some of the other potential threats referred to earlier, the ballistic missile threat will remain a national threat rather than a threat of terrorist subgroups.

Still, the number and variety of such potential threats will grow and, thereby, foster a high degree of uncertainty, contrasting to the cold war, when the source of the threat was clearly known.

I stress both this potential and this variety since it underscores the complexity and some difficulties in deploying appropriate, even if limited, missile defenses.

Third, to achieve a suitable ballistic missile defense, one that could cope with a limited attack, should, in my judgment, be a major objective in U.S. defense policy. Both Houses of Congress have now passed legislation endorsing a policy of near-term deployment. Extended as the controversy over that legislation may have been, now comes the truly difficult part—determining the architecture of the ballistic missile defense to be deployed. While we seek a thin area defense, we must avoid just any defense, especially one designed against a narrowly defined threat.

Any such defense could turn out to be simply a token. The worst possible outcome would be a limited defense focused too narrowly on a single threat and one that could readily be circumvented.

It is crucial that we not confuse a ballistic missile defense with a relatively simple weapon system, such as the F–15. A ballistic missile defense would be a complex system of systems, selected from a range of possible deployments, combinations of sensors, and capabilities of interceptors. The choice of systems architecture is crucial. One could all too easily wind up with an unduly constrained system, lacking capability against the range of emerging threats.

In this connection, I suggest that we should be wary of the very limited system proposed for deployment in Alaska or by some in North Dakota, which might deal with a rudimentary threat, let us say, from North Korea, and with little else.

The architecture of any system chosen for deployment should be subject in advance to rigorous technical analysis. Above all, it should not be so constrained as to lack the capability for growth to cope with the growing variety of threats.

In choosing among alternative architectures, systems adaptability and flexibility should be prerequisites.

In choosing a system architecture, we must be assured in advance that the system can be adapted to the broad range of threats which may emerge. Consequently, we should avoid any impulse leading to a rush to acquisition.

Fourth, in this connection, we must remain alert to the possibility mentioned in the Rumsfeld Commission report, that, before nations can develop ICBM's capable of reaching the United States, they could deploy shorter-range ballistic missiles on ships. You mentioned this in your opening statement, Mr. Chairman.

A ballistic missile defense, let us say, to Alaska, could not cope with such a threat. In selecting a system architecture, we must remain mindful of such a possibility so that some hostile country does not get the impression that it could have a free ride.

In this connection also, we must be alert to and exploit the possibilities for intelligence. Some of the South Asian nations, including those we term rogue states, have limited shipbuilding capability or, for that matter, limited sea-faring experience. We should be alert to the construction or the modification of ships that could be used for this purpose and to the possibility of collecting information from the multinational crews that might be hired for such a purpose.

Gathering such intelligence would create the opportunity of interdiction in a number of forms. But such possibilities drive home the point that what we must avoid is a ballistic missile defense deliberately constrained and focused on a narrowly defined threat.

Fifth, this brings us, Mr. Chairman, to the controversial issue of the restraints imposed by the ABM Treaty of 1972, as modified.

An adequate defense cannot be attained within the present framework of those constraints. Consequently, to deploy a suitable defense would require either the modification or the abrogation of the existing treaty.

I should observe that I agree with some of the critics who believe that we are not legally bound by a treaty with a State that has simply disappeared and has disintegrated into its component parts.

Nevertheless, the treaty does exist. It is part of the international environment and, irrespective of its legal force, there are political advantages as well as disadvantages in its continuation.

Unquestionably, we would pay a political price in simply abrogating the treaty, as some urge. In particular, we should not casually damage our political relationship with Russia in a way that simultaneously would damage the Russian prestige and make the Russians less cooperative with us. Particularly this is so given the presently disturbed relationships arising from differences reflecting Russia's long-term association with Serbia.

Nevertheless, Mr. Chairman, we must now allow ourselves to be precluded from deploying suitable defenses by the treaty in its present form. What I would suggest is that the United States move firmly toward deployment of a suitable and adequate thin area defense, preferably within the framework of the treaty. This would require substantial modification to permit a system architecture that could deal with the emerging range of threats.

But we must bear in mind that the Russians have a much greater stake in the preservation of the ABM Treaty than do we. It is that treaty and other arms control agreements with the United States that provide much of Russia's continuing international prestige.

A modification of the ABM Treaty, as opposed to its abrogation, which permitted the United States to deploy a thin area defense in a manner that does not challenge a continuing Russian retaliatory capability would seem to be in Russia's interest, particularly so as Russia itself may come to be threatened by spreading nuclear capabilities among rogue nations and others.

Yet in moving toward modification of the treaty, we must convey to the Russians that we are firm in our commitment to deploy an efficient, if limited, defense and that we must have treaty modification sufficient to allow a flexible and adaptable architecture. To negotiate for something less, which, regrettably, would be an easy temptation, might leave us in that position of deploying a fixed,

limited, and ultimately, a virtually token defense. Sufficient modification must be our clear objective—not minimal modification that would leave us with little more than a token defense.

Sixth, and finally, in the period ahead, a limited nuclear attack on the United States regrettably will become a growing possibility. It could come from a variety of perpetrators. I should have said a limited missile attack on the United States. It could come from a variety of perpetrators. Because of the range and the novelty of such possibilities, it will likely be difficult to achieve an early assessment of missile buildup or pending attacks among the candidate nations. We should, therefore, move with all deliberate speed toward an effective defense of the United States against such missile attacks.

But we must also remember that such an attack need not come primarily from ballistic missiles. Most notably, we must simultaneously be alert to the proliferation of cruise missiles and move toward an effective defense against cruise missiles, which will likely constitute the next turn in the road.

Thank you, Mr. Chairman. I would be delighted to answer any questions.

[The prepared statement of Dr. Schlesinger follows:]

PREPARED STATEMENT OF HON. JAMES R. SCHLESINGER

Mr. Chairman, Members of the Committee:

I appreciate the invitation of the Committee to discuss the possibilities of ballistic missile attack against the United States—and the defenses that we might deploy to provide protection against a limited attack. In the time allotted, I can, of course, touch only on a few major points

1. The prominent political role of the United States in the world makes it a prime target for resentful nations. Its military preponderance will spur other nations to seek asymmetrical ways of threatening to inflict pain on this country, thereby hoping to limit our response to actions on their part. There are a variety of ways to inflict such pain—and thus a variety of potential threats. Ballistic missile attack is one prominent possibility. But there are others including cyber attack, chemical attack, and biological attack. As you know, the Department of Defense is devoting increasing attention to such possible attacks. It has recently established the Defense Threat Reduction Agency and the Threat Reduction Advisory Committee.

2. Among such possible threats, that of ballistic missile attack is the most dramatic, if not necessarily the one of highest probability. The potential is there already and will likely grow in the near term. The recent test of the TAEPO-DONG missile by North Korea is but a harbinger of what will inevitably come. In both South Asia and Southwest Asia ballistic missile capabilities have already been demonstrated—and are undergoing rapid development. While such capabilities are not of intercontinental range, they could threaten American bases or American allies and could be transported closer to the American mainland—to make them potential threats. Despite international efforts to restrict the spread of technology, it is spreading and will do so increasingly. Unlike some of the other potential threats, referred to earlier, the ballistic missile threat will remain a national threat rather than that of terrorist subgroups. Still the number and the variety of such potential threats will grow—and thereby foster a high degree of uncertainty contrasting to the Cold War, when the source of the threat was clearly known. I stress both this potential and this variety, since it underscores the complexity and some difficulties in deploying appropriate, even if limited, missile defenses.

3. To achieve a suitable ballistic missile defense—one that could cope with a limited attack—should in my judgment be a major objective in U.S. defense policy. Both Houses of Congress have now passed legislation endorsing a policy of near-term deployment. Extended as the controversy over that legislation may have been, now comes the truly difficult part: determining the architecture of the BMD to be deployed. While we seek a thin area defense, we must avoid just *any* defense, especially one designed against a narrowly-defined threat. Any such defense could turn out to be simply a token. The worst possible outcome would be a limited defense focused too narrowly on a single threat, and one that could readily be circumvented.

It is crucial that we not confuse a BMD with a relatively simple weapon-system, such as the F–15. A BMD would be a complex system-of-systems, selected from a ranch of possible deployments, combinations of sensors, and capabilities of interceptors. The choice of system architecture is critical. One could all too easily wind up with an unduly constrained system lacking capability against the range of emerging potential threats. In this connection, I suggest we should be wary of the very limited system proposed for deployment in Alaska, which might deal with a rudimentary threat, let us say, from North Korea—and with little else.

The architecture of any system chosen for deployment should be subject in advance to rigorous technical analysis. Above all, it should not be so constrained, as to lack the capacity of growth to cope with a growing variety of threats. In choosing among alternative architectures, system adaptability and flexibility should be prerequisites. In choosing a system architecture, we must be assured in advance that that system can be adapted to the broad range of threats which may emerge. Consequently, we should avoid any impulse leading to a "rush to acquisition."

4. In this connection, we must remain alert to the possibility mentioned in the Rumsfeld Commission report that, before nations can develop ICBM's capable of reaching the United States, they could deploy shorter-range ballistic missiles on ships. A BMD with circumscribed sensors and confined, let us say, to Alaska could not cope with such a threat. In selecting a system architecture, we must remain mindful of such a possibility—so that some hostile country does not get the impression that it could have a free ride.

In this connection also, we must be alert to and exploit the possibilities for intelligence. Some of the South Asian nations, including those we term rogue states, have limited shipbuilding capacity or for that matter seafaring experience. We should be alert to the construction or the modification of ships that could be used for this purpose—and to the possibility of collecting information from the multi-national crews that might be hired for such a purpose. Gathering such intelligence would create the opportunity of interdiction in a variety of forms. But such possibilities drive home the point that what we must avoid is a BMD deliberately constrained and focused on a narrowly-defined threat.

5. This brings us to the controversial issue of the restraints imposed by the ABM Treaty of 1972, as modified. An adequate defense cannot be attained within the present framework of those restraints. Consequently, to deploy a suitable defense would require either modification or abrogation of the existing treaty. I should observe that I agree with some of the critics who believe that we are not legally bound by a treaty with a state that has simply disappeared and has disintegrated into its component parts. Nonetheless, the treaty does exist. It is part of the international environment and, irrespective of its legal force, there are political advantages as well as disadvantages in its continuation. Unquestionably we would pay a political price in simply abrogating the treaty, as some urge. In particular, we should not casually damage our political relationship with Russia—in a way that simultaneously would damage their prestige and make the Russians less cooperative with us. Particularly, this is so given the presently disturbed relationship arising from differences reflecting Russia's long-term association with Serbia.

Nevertheless, we must not allow ourselves to be precluded from deploying suitable defenses by the treaty in its present form.

What I would suggest is that the United States move firmly toward deployment of a suitable and *adequate* thin area defense preferably within the framework of the treaty. This would require substantial modification to permit a system architecture that could deal with the emerging range of threat. But we must bear in mind that the Russians have a much greater stake in the preservation of the ABM Treaty than do we. It is that treaty—and other arms control agreements with the United States—that provides much of Russia's continuing international prestige. A modification of the ABM Treaty (as opposed to its abrogation) which permitted the United States to deploy a thin area defense in a manner that does not challenge a continuing Russian retaliatory capability would seem to be in Russia's interest—particularly so as Russia itself may come to be threatened by spreading nuclear capabilities among rogue nations and others.

Yet in moving towards modification of the treaty, we must convey to the Russians that we are firm in our commitment to deploy an efficient, if limited, defense and that we must have treaty modification sufficient to allow a flexible and adaptable architecture. To negotiate for something less (which regrettably would be an easy temptation) might leave us in that position of deploying a fixed, limited, and, ultimately, a virtually token defense. Sufficient modification must be our clear objective—not minimal modification that would leave us with little more than a token defense.

6. In the period ahead, a limited missile attack on the United States regrettably will become a growing possibility. It could come from a variety of perpetrators. Because of the range and the novelty of such possibilities, it will likely be difficult to achieve an early assessment of missile buildup and pending attacks among the candidate nations. We should, therefore, move with all deliberate speed toward an effective defense of the United States against nuclear attack. But we must also remember that such an attack need not come primarily from ballistic missiles. Most notably, we must simultaneously be alert to the proliferation of cruise missiles, and move toward an effective defense against cruise missiles—which will likely constitute the next turn in the road.

Senator HAGEL. Mr. Secretary, thank you.

If I could call your attention to the last page of my copy of your testimony, I will just quote a sentence back to you, Mr. Secretary. You say, "What I would suggest is that the United States move firmly toward deployment of a suitable and adequate thin area defense, preferably within the framework of the treaty," the ABM 1972 treaty.

Would you explain that in your reference to "within the framework of the treaty?"

Dr. SCHLESINGER. Mr. Chairman, as you will recall, the original treaty of 1972 called for two sites. In 1974, the treaty was modified by agreement between the Soviet Union and the United States to reduce that to one potential site. We, of course, ultimately decided to have no sites.

But the treaty was modified in the past; it can be modified in the future with the collaboration of the other party, in this case, Russia.

We must bear in mind that a one site defense probably will be inadequate for the growing array of threats, and we need not be constrained, we should not be constrained, with limitations on space based sensors. For example, even the limited defense that we are talking about will depend upon SBIRS-LOW, the Space Based Infra-red Satellite System. Otherwise, we will not be able to detect in sufficient time the warheads that might be attacking the United States.

Therefore, I think we need to modify the treaty to permit a minimum number of sites, but sufficient to protect the continental United States as well as Alaska and Hawaii and to adjust our research and development plans and potential deployment plans with regard to sensors so that we have a full understanding of any threats that might be directed against the United States.

That will require a substantial modification of the treaty, but it should not be so substantial that it would deny to Russia what the Russians clearly value, and that is the continued existence of a retaliatory capability against the United States—indeed, probably the only retaliatory capability in the world, including China.

Senator HAGEL. Mr. Secretary, what if the Russians prefer not to renegotiate the ABM Treaty?

Dr. SCHLESINGER. That is what I referred to, Mr. Chairman, when I said we must be very clear that we are firm on deployment as we develop the technology. As I have indicated, it is very much in the Russian interest to permit an adjustment of the treaty, as we had in 1974, to adjust to new circumstances. If the Russians are unwilling to do that, then I think we have no alternative but to move toward abrogation.

Senator HAGEL. Mr. Secretary, you referred on a number of occasions in your testimony to the urgency here. In your opinion, how long would you give the Russians to get serious about negotiating the necessary change in the ABM Treaty before you would say to the President we must move forward with or without the Russians?

Dr. SCHLESINGER. Well, Mr. Chairman, ideally, I would start now and I would put them on notice that we are developing technology for a thin area defense and that it is not a threat to their retaliatory capability; that we are determined to do so and that the precise details will come later on as we know more about the technologies that we develop. But we must put them on notice now that that is the direction in which we are going and we should not be equivocal about putting them on notice.

I am fearful that we may go in with a kind of tenuous "wouldn't you mind our adjusting the treaty somewhat," and the Russians, under those circumstances, would be very much inclined to say no. They must be clear in their minds that we are determined to make that adjustment.

Within a period of I would hope 18 months we would have a better feel for the technologies that we would exploit. Then we could go to more precise definition of how that treaty should be adjusted.

Alternatively, we could say we want to have three sites and we want to have freedom to explore any kind of sensors, whether they are space based or ground based, and we could do that now. That would provide greater latitude for any set of technologies that we would choose to deploy.

Senator HAGEL. Mr. Secretary, you have been involved over a good many years in defense issues. You mention in your statement that we must not limit ourselves to a technologically limited base of options here.

Would you care to explain and enlarge upon that, because it very much cuts through the issue with the Russians and all the other dynamics here? How would we do that?

Dr. SCHLESINGER. That is quite correct, Mr. Chairman. The danger in negotiating with the Russians is that we make a limited adjustment, one time, that permits us to have a limited defense that turns out to be a token defense that we deploy in Alaska or in North Dakota at one site with a stringent limitation on the sensors that we could employ.

If that were the case, we might be able to stop a missile attack from North Korea, which will remain limited for some time.

I doubt that we would be able to stop even a limited attack, let us say, from China, or an accidental launch from Russia because they will be moving toward penetration aids. We need to have a system sufficiently sophisticated that it can deal with at least simple penetration aids by another country.

As you mentioned in your opening statement, there is the whole problem of protecting against launch vehicles, launched from ships offshore.

Obviously, if we have a system in Alaska and a ship is moved off the coast of Mexico, that system will have very limited capability to protect the United States. We need to have a capability that looks in all azimuths.

Senator HAGEL. With your current knowledge of the technology available, do you believe that it is feasible that we can, in fact, achieve some of the more limited dynamics of what you are talking about here within a relatively short period of time?

Dr. SCHLESINGER. We can achieve—I trust that we can achieve a limited defense within a reasonably short period of time if we are talking about 7 or 8 years to deployment.

Senator HAGEL. Seven or 8 years to deployment?

Dr. SCHLESINGER. Seven or 8 years to deployment.

The problem that we face, I think, is that there must be the capability for growth in that initially deployed system so that we are not constrained to dealing with whatever the limited threat that that initial system could deal with. That is part of the problem of negotiating effectively with the Russians or, if they won't play the game, ultimately moving toward abrogation of the treaty.

Further, we don't have the technology at this time. The 6 most recent tests of the THAAD missile have been, to say the least, disappointing. Before we begin to deploy, we should have a firm grasp on the technology. Nothing would be worse, it seems to me, than to spend a great deal of money on a deployment of a system that turns out to fizzle, thus disgracing the concept as well as wasting the money.

Senator HAGEL. Mr. Secretary, what should we be doing with the Chinese in this area of missile defense? Should we be negotiating a treaty, bringing them into talks? How should we be working with the Chinese?

Dr. SCHLESINGER. I think that, once again, we have to make clear to the Chinese, and they are very reluctant to accept this—far more reluctant, I believe than Russia, even though China is not a signatory to the ABM Treaty and, therefore, does not have the legal rights that Russia has—they are far more reluctant to see this development because it would deny to them the capability to use their missile forces against Japan, Taiwan, Korea, and the like.

I think that we must recognize that in our deployments in the Western Pacific we have much of our forces tied up in very limited real estate, small bases that are highly vulnerable to attack; and that, therefore, we need to protect those limited bits of real estate against a missile attack; and that we are not prepared, we should inform the Chinese, merely to propitiate them and allow Okinawa, let us say, to remain vulnerable to attack; that we believe that it is necessary, not only from the standpoint of our own interests but from that of the overall security and stability in Asia, for us, when we have the technology, to deploy defenses; and that we would be deploying defenses that would protect our bases in the Pacific and would include in that protection of Japan, whether or not they are pleased to hear that; and that it would protect South Korea as well.

The delicate problem is the subject of Taiwan. I think that this is a subject on which the least said, the better; that we ought to continue to reiterate that, indeed, the United States policy, as it has been since 1972, is a one-China policy; that we continue to believe that the People's Republic of China and the Republic of China will work out their differences peacefully; and that we ought not to develop an articulated defense.

Now in the circumstances, the Chinese will understand that we, particularly if we deploy the Aegis system, have the capability of providing a missile defense for Taiwan. But I do not think we should ever say that. The Chinese would regard it not only as a threat but as interference, as they say, in their domestic affairs.

Senator HAGEL. I suspect Ambassador Lilley will have something to say about this as well.

If I could move a little way from China to the subcontinent, where India and Pakistan reside and where we now have new members of the club, Mr. Secretary, what kind of policy should we be pursuing in regard to Pakistan and India on their nuclear efforts?

Dr. SCHLESINGER. The policy should be to encourage them to have safe retaliatory capabilities, protected retaliatory capabilities, so that neither side might be tempted to strike first to exploit the vulnerability on the other side.

I think that we should recognize the developments in South Asia between India and Pakistan are, to a greater extent than elsewhere, contained in South Asia. It is obvious, I think, that the development of missiles and nuclear weapons by Iran and/or Iraq would have much broader implications and could not be contained within a limited geographic area.

Pakistan and India, to a large extent, are focused on each other and, even though that development has disappointed us in terms of the partial failure of our nonproliferation policies, it is not as menacing as the nuclear and missile developments, say, in North Korea. As North Korea acquires a nuclear capability, I cannot see that the Japanese will disregard such a development. They would then be tempted to move in that direction.

In the mid-1970's, we headed off South Korea from developing nuclear weapons. If North Korea has a nuclear capability or missile capability, South Korea, too, would be tempted. It would have the capacity for infectiousness. Happily, in South Asia there is less capacity for infectiousness of the region. Therefore, we ought not to be too desperate or to pay too high a price to either of the parties merely to get them to collaborate on, let us say, the Nonproliferation Treaty or the CTB.

Senator HAGEL. In your opinion, are we pursuing the correct policy with North Korea in regard to oil, fuel, food, and things that we are putting on the table in order to get entry to their facilities?

Dr. SCHLESINGER. Well, it has its ironical aspects, Mr. Chairman. In order to head off a 60-megawatt reactor, which is capable of producing plutonium for several nuclear weapons, we are providing 3,000 thermal megawatts over time, which will have the capability of producing many, many nuclear weapons.

The premise of our policy has been that time is on our side; that the North Korean regime might implode, collapse; and that, therefore, they would never be in a threatening position, let's say, in 2010.

It is an interesting premise, but there is no guarantee that that premise is correct. In the last 5 years since we signed the agreement with North Korea, it seems to me that the premise has become increasingly questionable.

It was a trade. It was a trade that was pushed by the Department of Defense on the premise that it was better to freeze temporarily their move toward nuclear capabilities. And in the process, we failed to sustain the IAEA, which we had induced to make challenge, to demand challenge inspections of North Korea.

That was a trade. I think it was pushed by Secretary Perry at the time. It may have been a good trade at the time. It has become more questionable, and I think that Secretary Perry's new report, as a special envoy, will point to some of the difficulties in that limited agreement because of the movement of North Korea toward additional facilities that we do not fully understand.

Senator HAGEL. Mr. Secretary, you mentioned a moment ago, when we were talking about India and Pakistan, the CTBT. Do you know if that is a useful treaty for dealing with the India-Pakistan situation?

Dr. SCHLESINGER. Well, no, in a word.

The CTBT has been based on a premise that is widespread in the scientific community that other nations will develop their nuclear capabilities or refrain from developing such capabilities based on what the United States does; and that if we limit ourselves in testing, then other nations will refrain from testing and, therefore, presumably, developing nuclear capabilities.

That is a wholly invalid premise. The motivation for other countries to develop nuclear weapons has nothing to do with whether or not we test. It has to do with their relations with their neighbors. In the case of India, the Indians talk about China as well as Pakistan. Pakistan clearly is concerned about India, being in a conventionally much weaker position than their opponent.

Whether or not the United States tests is totally irrelevant. The notion that Saddam Hussein, Kim Il-sung or Kim Jong-il will refrain from nuclear tests because the United States has given them up is just, it seems to me, a misleading premise.

Therefore, we ought not to believe that CTBT is an effective antiproliferation device. It is something that developed in the 1960's, after the disappointments of the Soviet return to nuclear testing, the 50- and 60-megaton weapons that were tested in 1961. It led to the partial test ban treaty. The desire to have a complete test ban treaty acquired a momentum at that time that had some relationship to the bipolar world of the 1960's and 1970's, but has very little relationship to the set of motivations in this proliferating world that we see today.

Senator HAGEL. Thank you.

Senator Helms asked that I ask this question.

Would you recommend that the Senate adopt the administration's proposed changes to the ABM Treaty relating to multilateralization and demarcation?

Dr. SCHLESINGER. I think that that would be very frustrating. I fear that it would be very frustrating.

Why is that? It's because I think that we have some political advantage in continuing our relation with the Russians; and that that would require, if we go ahead with a missile defense, a Russian capability to say yes to modification of the treaty.

It seems to me that when you throw in Kazakhstan, Belarus, and Ukraine as parties to such a modification, there is the possibility

of manipulation. To prevent such modification, the Russians can urge Belarus—whose relationship with Russia reflects the fear in Belarus that the Russians are too damn moderate—to thwart any such change in the treaty. It would make it unduly complicated to change the treaty.

We have taken the position that Russia is the true legatee of the Soviet Union with regard to strategic forces. And this to spread out a negotiation by making all of these parties part of the ABM Treaty would, in my judgment, be a mistake.

Senator HAGEL. Mr. Secretary, may I ask you one additional question? You can frame this any way you like.

Would you give this committee the benefit of your thoughts on the situation in Kosovo? Anywhere you want to start or end, we would be grateful for your words.

I am a little off from the intent and objective of this hearing, but, actually, it did come up and, as you know, it is very much a part of our relationship with Russia. What we are doing there and what we may yet do has significant consequences.

Dr. SCHLESINGER. Foreign policy, by and large, is concerned with the relationships amongst great powers.

Senator HAGEL. Excuse me. Mr. Secretary, would you pull the microphone a little closer, please?

Dr. SCHLESINGER. Yes. Foreign policy, by and large, is concerned with the relationship amongst great powers. Russia is down on its luck, but it may well come back as a great power and it certainly is the most significant potential power in Europe and potentially in Eurasia, as well, along with China.

It seems to me that the administration was quite correct when it said that getting along with the Russians during its first 6 years was a correct policy.

When Mr. Primakov was half way across to the United States, at Shannon Airport he was informed that we were going to start bombing the Serbs for whom the Russians have had a protective attitude for at least a century and a half, as the Serbs attempted to separate themselves from the Ottoman Empire. That was a serious blunder on our part, to allow our relations with a major power to deteriorate in this way.

Serbia has subsequently asked to join the Association of Belarus and Russia, and we don't know where that will go. But it is not a healthy sign from the overall standpoint of our foreign policy.

To the extent that we decided to move into the quarrel in Kosovo, we should have thought through in advance what the response was going to be on the other side and whether or not we could achieve our objectives with the means that we had put up.

We did not. The result is that, when we started bombing, this triggered the very outcome that we wanted to avoid—to wit, the massive expulsion of Kosovars from Kosovo and the spilling over of that conflict beyond the borders of Yugoslavia. In the process, we also, at least temporarily, immensely strengthened Milosevic within the country—not one of our objectives.

It seems to me that we must decide what we wish to be the outcome in Kosovo and to put together the means to achieve that end. If we want to achieve the results that we started with, that we

started out asserting were our goals, then we must be prepared to create a credible ground threat.

In the absence of a credible ground threat, Milosevic and the Serbs will hunker down, I believe. They will absorb the punishment. It will have a damaging effect ultimately within NATO.

There are those countries that sympathize with the Serbs, including some of the new members of NATO. And it will ultimately be divisive, I fear, unless we are prepared either to move quickly to terminate it or to achieve ways of enforcing our will.

At the moment, we seem to be hung up on neither, and we are proceeding with a bombing response which will do immense damage to the infrastructure of Serbia but which will not necessarily cause Milosevic or the Serbs to yield.

Senator HAGEL. Mr. Secretary, thank you.

Dr. SCHLESINGER. Thank you, Mr. Chairman.

Senator HAGEL. We are grateful for your contribution and, as always, your insights. I am sure we will have occasion to revisit not only this subject but many others.

Mr. Secretary, thank you.

Dr. SCHLESINGER. Thank you, Mr. Chairman.

Senator HAGEL. Now we will ask Ambassador Lilley and Secretary Schneider to come forward and when they do, we will get started.

Gentlemen, welcome once again. We have been joined, as you can see, by our friend and colleague, the distinguished Senator from Tennessee, Bill Frist. He will be poised to ask very insightful, direct questions as we go along.

If we could, we will now ask Secretary Schneider for his testimony. Then we will ask Ambassador Lilley and will then get into some questions.

Thank you.

STATEMENT OF HON. WILLIAM SCHNEIDER, JR., FORMER UNDER SECRETARY OF STATE FOR SECURITY ASSISTANCE, SCIENCE, AND TECHNOLOGY, ADJUNCT FELLOW, HUDSON INSTITUTE, WASHINGTON, DC

Dr. SCHNEIDER. Thank you very much, Mr. Chairman. I appreciate the privilege of testifying before this committee.

As you know, I previously served as Under Secretary of State and, subsequently, as chairman of the General Advisory Committee on Arms Control and Disarmament in the Arms Control and Disarmament Agency and more recently served as a member of the Commission to Assess the Ballistic Missile Threat to the United States, the Rumsfeld Commission.

This commission, as you know, delivered its report in July, 1998. The question of proliferation can no longer be thought of as an isolated and far-off threat to the United States. The burden of evidence available to the U.S. Government was reviewed by the Rumsfeld Commission and presented to the Congress last July.

Among the major conclusions of this congressionally mandated study are these.

First, the threat to the United States posed by these emerging capabilities of ballistic missiles and weapons of mass destruction is

more mature and evolving more rapidly than has been reported in estimates and reports by the intelligence community.

Moreover, the warning times the United States can expect of new, threatening ballistic missile deployments are being reduced. Under some possible scenarios, including rebasing or the transfer of operational missiles, sea or air-launch options, shortened development programs that might include testing in a third country, or some combination of these, the United States might have little or no warning before an operational deployment of ballistic missiles able to reach the United States.

The surge in the proliferation of ballistic missiles and weapons of mass destruction during the 1990's has created an environmental fact for the United States' national security policy for the next quarter century or more. Moreover, the nature of contemporary ballistic missile proliferation and weapons of mass destruction proliferation challenges many of the underlying assumptions of policy, including the abstention from the defense of U.S. territory from long-range ballistic missile attack.

This posture is currently required under the provisions of the ABM Treaty of 1972.

My testimony today will focus on proliferation related developments in Iran and assess the implications of these developments for U.S. security.

In starting out, I think it is helpful to try to get an understanding of the nature of the contemporary proliferation process because the process since the end of the cold war is qualitatively different from that prior to the end of the cold war.

Before the end of the cold war, Russia was an effective party to the nonproliferation regimes in place. Its interest resided in containing rather than facilitating the spread of the technology of weapons of mass destruction.

Multilateral export controls limited the access of potential proliferators to scientific and industrial technology and equipment pertinent to the development of ballistic missiles and weapons of mass destruction. Moreover, the United States and most other governments, apart from China, restricted access to technology relating to weapons of mass destruction and ballistic missile technology.

The end of the cold war brought about stark changes in Russia and its incentives relating to nonproliferation compliance. Export controls, especially multilateral controls, largely disappeared as an effective counter proliferation instrument.

Regional rivalries created an interest in regional powers deterring outside intervention in regional disputes. This subject was referred to by Secretary Schlesinger during his testimony.

The existing nonproliferation regime has proven to be ill-suited to the manner in which post-cold war proliferation has taken place. Proliferators have not focused on obtaining the most advanced technology. Instead, they have focused on obtaining obsolescent but functional WMD and ballistic missile technology.

Russia has economic incentives as well as policy incentives to assist Iran and several other countries in acquiring weapons of mass destruction and ballistic missile technology.

The absence of export control barriers to scientific and industrial equipment relevant to weapons of mass destruction and ballistic missile development has made this equipment widely available.

North Korea's successful development of long-range missiles and weapons of mass destruction has made its program one of the engines of proliferation. Its dispersion of manufacturing technology to other countries has contributed to making proliferation largely self sustaining.

The creation of large-scale weapons of mass destruction and ballistic missile manufacturing facilities in North Korea, Iran, Iraq, and Pakistan, has several profound effects for the long-term outlook for proliferation.

First, this infrastructure will soon make these nations largely independent of access to technologies from nations such as China and Russia, who are now the primary suppliers. The major proliferators have insisted on a substantial measure of autarchy in WMD and missile production. They are not simply buying missiles off the shelf. They will be producers.

Proliferation is now on the verge of being self-sustaining.

Second, the size of the infrastructure in place creates incentives for producers to also become exporters. National requirements will be met by a few years of production from the local industrial base. To sustain production, these nations will be obliged to seek export markets. Acquiring ballistic missiles is the least cost approach to regional power status, an opportunity many nations may seize with very negative consequences for regional stability and peace.

Third, the impact of large manufacturing infrastructures for WMD and ballistic missiles changes the scale of the problem from a few ballistic missiles to hundreds in the next decade, and perhaps thousands after 2010. Several proliferators are profoundly hostile to the United States and its allies.

Bearing the nature of this proliferation problem in mind, there are a few observations I would like to make specifically with respect to Iran.

Iran is well suited to acquire a very substantial WMD and ballistic missile force. Its acquisition of SCUD series missile from North Korea during the 1980–88 Iran-Iraq conflict helped finance North Korea's development of longer range systems, including what is now known as the SCUD–C, which has a 700 kilometer range, No Dong, which has a 1,300 kilometer range, and the Taepo Dong–I and Taepo Dong–II, with an intercontinental range with characteristics that depend on the weight of the payload.

North Korea sold its No Dong missile to Iran, where it has been upgraded with Russian assistance. The missile was launched in July 1998 and will be deployed later this year.

At a September 25, 1998 military parade in Tehran, President Khatami praised Russia for the assistance it provided to Iran's missile program. The weapon can deliver a nuclear, chemical, or biological or conventional payload to targets throughout the Middle East and can reach targets throughout Europe with a biological weapons payload.

Moreover, because the missile is mounted on a mobile transporter-erector-launcher, it can be readily launched covertly from a merchant ship. This technology is hardly new. The United States

launched a Polaris missile from a merchant ship in 1962. The former Soviet Union also launched SCUD short-range missiles from surface ships. The technique is well understood.

Surface ship launch appears to be a likely alternative option for several emerging WMD and ballistic missile States.

More recently, the Financial Times reported on April 16 on the Pakistani Shaheen-1 missile, which was launched the previous day, that the missile may be intended for sea launch.

The missile, with a 1 metric ton—that is, 2,200 pound—payload, may be developed so that Pakistan can have a similar capability to that which is deployed by India or that will soon be deployed by India, which is a surface ship launched ballistic missile.

The modern commercial technology, such as the INMARSAT telecommunications satellite and the global positioning system satellites diminishes the significance of the primary operational limitations of sea-based ballistic missile systems in the past—that is, communications with the ship and positional accuracy.

The use of surface ship launched missiles may be especially attractive to Iran. Iran tends to employ non-Iranian nationals for some of its international terrorist operations. Iran has used personnel from several States in the Middle East region to diminish the risk of accountability for its support of international terrorist operations.

The recent terrorist activities, including the Khobar Towers bombing in Saudi Arabia and the East African embassy bombings last year, were done without any country claiming responsibility for these.

The option of a covert launch provides another alternative for Iran to extend the geographic reach of its ballistic missile force while diminishing the risk of retaliation against its own territory.

Iran is developing longer-range ballistic missiles as well. Iran has acquired rocket engines and advisory support from Russia that will permit it to develop intercontinental range missiles able to reach the United States from Iranian territory. The technology is mature since it is based on the German World War II V–2 liquid fuel technology. So little testing is required.

This phenomenon of little testing was reflected in North Korea's development of the No Dong missile. The missile was successfully flown in May 1993 and has been in series production since then.

Large numbers have been produced and, based on observed evidence, it is quite reliable. The No Dong is used as the first stage in North Korea's Taepo Dong–I missile, which was successfully launched in a trajectory over Japan in 1998. The Taepo Dong–I is capable of reaching U.S. territory with a biological weapons payload. The Taepo Dong–II will be able to reach the United States with a nuclear payload.

Iran has the components for the Taepo Dong system already in its inventory in that the second stage of the Taepo Dong missile is a SCUD missile. The first stage would be the No Dong.

Iran will begin its deployment of its variant of the No Dong missile later this year, the Shahab 3. This will augment its inventory of SCUD missiles. The missile is not accurate enough to be usefully employed effectively with conventional warheads. Thus, it is likely

that it will use an unconventional warhead—biological, chemical, or nuclear.

The details of the weapons program are not known. But as the deployment of the Shahab 3 is imminent, it is likely that Iranian authorities have already identified the missile's warhead.

Iran has previously employed missile delivered lethal chemical agents in 1980 to 1998 in its conflict with Iraq. Even without foreign assistance, Iran is capable of a missile delivery of anthrax or smallpox derived biological weapons in bulk form.

A more effective mode of biological agent delivery using submunitions may also be available to Iran. This submunition technology for biological agents is at least four decades old. Submunition systems for biological agents were developed in the 1950's.

Missile delivered submunitions filled with biological agents were extensively developed and produced by the former Soviet Union and continue to be available in Russia today.

Access to nuclear weapons is dependent on Iran's ability to acquire special nuclear material. Foreign acquisition of such material is unlikely to be observed by the United States.

We learned from experience in the 1980's that Pakistan obtained a tested nuclear weapon design and a significant quantity of special nuclear materials, in this case highly enriched uranium from China.

This development permitted Pakistan to acquire a nuclear capability without the necessity to conduct a nuclear test, although it did so for apparently political reasons in response to India's nuclear testing.

The Shahab 3 poses a threat to U.S. forces and allies deployed in the Middle East region and to Europe, as well, if a biological weapons payload is employed.

If the Shahab 3 is covertly deployed on a merchant ship, it can then be employed against U.S. territory. Provisions of the ABM Treaty prevent the United States from deploying missile defenses against this threat. The proposed national missile defense system is designed to have no capability to intercept ballistic missiles with a range of less than 2,000 miles. This is so to comply with provisions of the treaty.

The treaty prevents the use of theater missile defenses in a national missile defense mode. Hence, it precludes deploying our own theater missile defenses against a sea based threat. Such defenses as the Patriot system would not be permitted under the existing terms of the ABM Treaty.

Iran's missile force is poised for rapid growth. Russian assistance to Iran has intensified since 1998. Iran's production of the No Dong completes the building blocks for multi-stage missiles.

It is likely that Iran will continue development of multi-staged missiles, although some of these may be disguised as space launch vehicles. The option is attractive for Iran and may help preserve the ambiguity of its ballistic missile programs.

In the case of space launched vehicles, only software and payload changes are required to shift from a civil space launch to a military missile. Moreover, any missile with sufficient energy to deploy a payload into orbit around the earth also has the capability to de-

liver payload to a target on the surface of the earth at intercontinental range.

Finally, in this regard, a new channel of proliferation may soon emerge if Russia obtains relief from existing arms control limitations on the number of space launch sites it can create outside of its own territory. Most of the ICBM's it developed, manufactured, and deployed are used in modified form for space launch application. The proliferation of such activities could create yet another path for the proliferation of long-range missiles.

The ABM Treaty in its present form poses an obstacle to an important policy objective of the United States, deterring Iran from making further investments in long-range missiles.

Further, the provisions of the treaty prevent the United States from deploying missiles against the two most plausible forms of ballistic missile threats now available or that will soon be available to Iran—covert, sea launch missiles and land-based ICBM's.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Schneider follows:]

PREPARED STATEMENT OF HON. WILLIAM SCHNEIDER, JR.

IRAN'S ACTIVITIES RELATING TO BALLISTIC MISSILES AND WEAPONS OF MASS DESTRUCTION

Mr. Chairman and distinguished Members of the Committee:

It is a privilege to have an opportunity to appear before this committee. I previously served as Under Secretary of State (1982–86), and as Chairman of the General Advisory Committee on Arms Control and Disarmament. More recently, I served as a Member of the Commission to Assess the Ballistic Missile Threat to the United States (the Rumsfeld Commission) that delivered its report to the Congress in July, 1998.

The question of proliferation can no longer be thought of as an isolated and far-off potential threat to the United States. The burden of evidence available to the United States government was reviewed by the Rumsfeld Commission and presented to the Congress in July 1998. Among the major conclusions of this Congressionally mandated study are these.

> The threat to the U.S. posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been reported in estimates and reports by the Intelligence community.
>
> The warning times the U.S. can expect of new, threatening ballistic missile deployments are being reduced. Under some plausible scenarios—including re-basing or transfer of operational missiles, sea or air-launch options, shortened development programs that might include testing in a third country, or some combination of these—the U.S. might well have little or no warning before operational deployment.

Proliferation-related developments can no longer be thought of as an isolated or far-off threat that is of no immediate consequence to U.S. security interests. The surge in the proliferation of ballistic missiles and weapons of mass destruction during the 1990's has created proliferation as an environmental fact for U.S. national security policy for the next quarter century or more. Moreover, the nature of contemporary WMD and ballistic missile proliferation challenges many of the underlying assumptions of policy including abstention from the defense of U.S. territory from long-range ballistic missile attack. This posture is currently required under the provisions of the Anti-Ballistic Missile (ABM) Treaty of 1972. My testimony today will focus on proliferation-related developments in Iran and assess the implications of these developments for U.S. security.

The Post-Cold War Proliferation Process

The process of proliferation since the end of the Cold War is qualitatively different from the process of proliferation prior to the end of the Cold War in 1991. Before the end of the Cold War, Russia was an effective party to the non-proliferation regimes in place. Its interests resided in containing rather than facilitating the spread of the technology of weapons of mass destruction. Multilateral export controls lim-

ited the access of potential proliferators to scientific and industrial technology and equipment pertinent to the development and manufacture of ballistic missiles and WMD. The United States and most other governments (apart from China) restricted access to information relating to WMD and ballistic missile technology.

The end of the Cold War brought about stark changes in Russia and its incentives relating to nonproliferation compliance. Export controls—especially multilateral controls largely disappeared as an effective counter-proliferation instrument. Regional rivalries and an interest by regional powers in deterring outside intervention in regional disputes have stimulated an effort to acquire WMD and ballistic missiles.

The existing non-proliferation regime has proven to be ill-suited to the manner in which post-Cold War proliferation has taken place. Proliferators have focused on obsolescent, but functional WMD and ballistic missile technology. Russia has economic and policy incentives to assist Iran and several other countries in acquiring WMD and ballistic missile technology. The absence of export control barriers to scientific and industrial equipment relevant to WMD and ballistic missile development has made such equipment widely available. North Korea's successful development of long-range missiles and WMD has made its program one of the engines of proliferation. Its dispersion of manufacturing knowledge to other nations contributed to making proliferation largely self-sustaining.

The creation of large scale WMD and ballistic missile manufacturing facilities in North Korea, Iran, Iraq, and Pakistan has had several profound effects on the long-term outlook for proliferation.

First, this infrastructure will soon make these nations largely independent of access to technologies from nations such as China and Russia who are now primary suppliers. The major proliferators have insisted on a substantial measure of autarky in WMD and missile production. They are not simply buying WMD and missiles "off the shelf"—they are or will be producers. Proliferation is now on the verge of being a self-sustaining phenomenon.

Second, the size of the infrastructure in place creates an incentive for producers to become exporters. National requirements will be met by a few years of production from the local industrial base. To sustain production, these nations will be obliged to seek export markets. Acquiring ballistic missiles is the least-cost approach to regional power status—an opportunity many nations may seize with very negative confidence for regional peace and stability.

Third, the impact of large manufacturing infrastructures for WMD and ballistic missiles change the scale of the problem from a "few" ballistic missile to hundreds in the next decade, and perhaps thousands after 2010. Several proliferators are profoundly hostile to the United States and its allies.

Proliferation Developments in Iran

Iran is well situated to acquire a very substantial WMD and ballistic missile force. Iran's acquisition of SCUD-series ballistic missiles from North Korea during the 1980–88 Iran-Iraq conflict helped finance North Korea's development of longer range systems including what is now known as the SCUD–C (700 km. range), the No Dong (1,300-km. range), and the Taepo-dong 1 and 2 (intercontinental range).

North Korea sold its No Dong missile to Iran where it has been upgraded with Russian assistance. The missile was launched in July 1998 and will be deployed later this year. At a 25 September 1998 military parade in Tehran, President Khatami praised Russia for the assistance it provided to Iran's ballistic missile program. The weapon can deliver a nuclear, chemical, biological, or conventional payload to targets throughout the Middle East, and can reach targets throughout Europe with a biological weapons payload. Moreover, because the missile is mounted on a mobile transporter-erector-launcher (TEL), it can also be readily launched covertly from a merchant ship. The U.S. launched a Polaris missile from a merchant ship in 1962. The former Soviet Union also launched short-range SCUD missiles from surface ships. The Financial Times (April l6, 1999) reported on the first launch of Pakistan's Shaheen–1 (600-km range) ballistic missile on April 15th. The technique is well understood. Surface ship launch appears likely to be an alternative launch option for several emerging WMD and ballistic missile states.

The Financial Times noted that the Shaheen–1, with a one metric ton (2,200 lbs.) payload "could be launched from a naval vessel." Such a development may reflect Pakistan's effort to develop a counterpart capability to India's surface ship-launched ballistic missile program. Modem commercial technology (e.g. INMARSAT telecommunications and Global Positioning System navigation satellites) diminishes the significance of the primary operational limitations of sea based ballistic missile systems in the past—communications with the ship and positional accuracy.

The use of surface ship launched ballistic missiles may be especially attractive to Iran. Iran tends to employ non-Iranian nationals for some of its international ter-

rorist operations. For example, Iran has often used personnel from several states in the Middle East region to diminish the risk of accountability for supporting international terrorist operations. The option of a covert launch provides another alternative for Iran to both extend the geographic reach of its ballistic missile force while diminishing the risk of retaliation against its own territory.

Iran continues to develop long-range ballistic missiles as well. Iran has acquired rocket engines and advisory support from Russia that will permit it to develop intercontinental range missiles able to reach the United States from Iran. As the technology for these systems is mature (the liquid fuel propulsion system is derived from the Germany's World War II V–2 program), little testing is required. This phenomenon was reflected in North Korea's development of the No Dong missile. The missile was successfully flown in May 1993, and has been in series production since then. Large numbers have been produced, and based on observed evidence, is quite reliable. The No Dong is used as the first stage in North Korea's Taepo-dong 1 missile—successfully launched in a trajectory over Japan in August 1998. The Taepo-dong 1 missile is capable of reaching U.S. territory with a biological weapons payload; the Taepo-dong 2 will be able to reach the United States with a nuclear payload. North Korea has stated publicly that it intends to export its ballistic missile systems. Iran, as a buyer of its SCUD-series missiles as well as the No Dong missile is a plausible candidate for the Taepo-dong missile system as well.

Implications of Iran's Ballistic Missile Program for the U.S.

Iran will begin deployment of its variant of the No Dong medium range ballistic missile, the Shahab 3 later this year, and will augment its inventory of SCUD missiles. As the missile is not accurate enough to be usefully employed with a conventional warhead, it is likely that it will be used with an unconventional warhead—biological, chemical, and nuclear.

The details of its weapons program are not known, but as deployment of the Shahab 3 is imminent, it is likely that Iranian authorities have already identified the missile's warhead(s). Iran employed missile delivered lethal chemical agents in its 1980–88 conflict with Iraq. Even without foreign assistance, Iran is capable of missile delivery of anthrax or smallpox-derived biological weapon payloads in bulk form. A more effective mode of biological agent delivery using sub-munitions may also be available to Iran. The technology for sub-munition delivery of biological agents is at least four decades old. A sub-munition system for biological agents was developed by the United States in the late 1950's. Missile-delivered sub-munitions filled with biological agents were extensively developed and produced by the former Soviet Union, and continue to be available today in Russia. Access to nuclear weapons is dependent on Iran's ability to acquire special nuclear material. Foreign acquisition of such material is unlikely to be observed by the United States. We learned from experience in the 1980's that Pakistan obtained a tested nuclear weapon design and a significant quantity of special nuclear material (highly enriched uranium) from China. This development permitted Pakistan to acquire a nuclear capability without a necessity to conduct a nuclear test (though Pakistan did so in 1998 in response to India's nuclear testing).

The Shahab 3 poses a threat to U.S. forces and allies deployed in the Middle East region and to Europe if a biological weapons payload is used. If the Shahab 3 is covertly deployed on a merchant ship, it can then be employed against U.S. territory. Provisions of the ABM Treaty prevent the United States from deploying missile defenses against this threat. The proposed National Missile Defense system is designed to have no capability to intercept ballistic missiles with a range of less than 2,000 miles to comply with the Treaty. Treaty provisions preventing the use of theater missile defenses in a national missile defense mode preclude theater missile defenses (such as Patriot).

Iran's ballistic missile force is poised for rapid growth. Russian assistance to Iran has intensified since mid-1998. Iran's production of the No Dong completes the building blocks for multi-stage long-range missiles. Iran possesses the SCUD missile—the second stage of the Taepo-dong 1 ballistic missile. The Taepo-dong 1 ballistic missile has intercontinental capabilities with a biological weapons payload. North Korea has successfully demonstrated that it is able to implement missile stage separation—the enabling capability for intercontinental-range missile development. If it shares this technology with Iran—perhaps North Korea's largest and most loyal customer—the range of targets Iran could hold at risk will grow significantly.

It is likely that Iran will continue long-range multi-stage ballistic missile development, although some missile flights will be disguised as "space launches." This option is attractive for Iran in creating ambiguity about its military missile development program. Only software and payload changes are required to shift from a civil

"space" launch to a military missile. Moreover, any missile with sufficient energy to deploy a payload into an orbit around the earth has a capability to deliver a payload to a target on the surface of the earth at intercontinental range.

In this regard, a new channel for proliferation may soon emerge if Russia obtains relief from existing arms control limitations on the number of space launch sites it can create outside of its own territory. Most of the ICBM's developed, manufactured, and deployed by the former Soviet Union are used in modified form for space launch applications. The proliferation of such activities could create yet another path for the proliferation of long-range ballistic missiles.

The ABM Treaty in its present form poses an obstacle to an important policy objective of the United States—deterring Iran from making further investments in long-range ballistic missiles. Further, the provisions of the Treaty prevent the United States from deploying missile defenses against the two most plausible forms of ballistic missile threats available now or will soon be available to Iran—covert sea-launched missiles, and land-based ICBM's.

Senator HAGEL. Mr. Secretary, thank you.

Ambassador Lilley.

STATEMENT OF HON. JAMES R. LILLEY, FORMER U.S. AMBASSADOR TO CHINA, THE AMERICAN ENTERPRISE INSTITUTE, WASHINGTON, DC

Ambassador LILLEY. Thank you, Mr. Chairman.

I have four caveats as I proceed. First, others have well defined the strategy of missiles and the missile defense, so I am not going to get into that. I have been asked to have a narrow focus on a very large and complex subject, Chinese intentions and the role of missiles in this.

I have gone back in time because this is the only way we can begin to understand what the Chinese might be up to. Bear with me as I deal with the rhetoric because there are millions of words spoken. So I must be selective.

Having said that, I think, first of all, as for Chinese intentions, what have they actually said? I chose their February 1992 law passed by the Standing Committee of the National People's Congress, which stands today, I think, as a singular statement of what the Chinese are up to. The scope of this is defined as the first island chain around China. It goes from the Senkaku Islands off Japan, it goes down to Taiwan, and it takes over the South China Sea, claiming exclusive jurisdiction over the Spratlys.

What this law means, of course, is that it puts China into potential confrontation with Japan over the Senkakus because Japan claims them, too, and we have a security treaty with Japan which the Japanese say includes the Senkaku Islands.

Second, as for Taiwan, we have the guarantees in the Taiwan Relations Act. China has said this is their own territory. They claim it is theirs and that we are interfering in their internal affairs when we sell weapons or support Taiwan.

Finally, in the Spratly Islands, they contest Vietnam, Malaysia, Brunei, the Philippines and Taiwan, all of whom claim them. The Chinese say these are simply ours. They have also reserved in this piece of law the right to use hot pursuit and military means to deal with foreign powers that challenge them.

I will make one caveat on this, actually, the U.S. has said that the sea lanes through the Spratlys were of critical interest to the United States. In a statement in 1995, ASEAN, the Association of Southeast Asian Nations, politically complained to China about its

predatory moves down there, and the Chinese have backed off to a degree because the power of the Seventh Fleet, along with ASEAN's political power, were sufficient to deter them. I think this is an important precedent to keep in mind as you go through this analysis.

Second, this is not words. Statements in their law and other statements the Chinese have since made to support their law are important but we must also look at their acquisitions. Their acquisitions back this up, whether it is the Sukhoi–27 from Russia, a state-of-the-art fighter/bomber—they will probably have 200 of them in the next 5 years—their kilo class submarine and their 100 SRBM's, short-range ballistic missiles, which are alleged now to be deployed along the Fujien coast opposite Taiwan.

They have conducted in July 1995 and March 1996 live fire exercises, which have demonstrated their DF–15 or M–9 nuclear capable missile off the north and south coasts of Taiwan. Certainly what emerged from this particular exercise, by the exercises, I should say, was that China's amphibious force, its use of aircraft, its use of naval forces, its tri-service coordination were weak. The one powerful instrument they had were missiles. They recognize that the missiles not only caused economic dislocations in Taiwan, but also they claim intimidated the Seventh Fleet carrier battle groups that came off the east coast from going through the Taiwan Strait.

This is a claim the Chinese made.

I then deal with the Chinese sizing up of the American war-fighting psychology. They have come to the conclusion—and this is amply demonstrated in Michael Pillsbury's book—which is based on Chinese documents and Chinese view of future warfare—they make the proposition quite clear that the United States will not take losses. They look at Somalia, they look at Kosovo, and they look at other countries where we have engaged our forces. We go for hi-tech and no losses. Therefore, this gives them a distinct advantage in dealing with the United States.

Hence, they give you the veiled warning that the United States would not sacrifice Los Angeles for Taiwan. And now that we know they have the capability to reach Los Angeles, we have to take this seriously.

Then I indulge briefly in a sketchy walk-through history, because I think we have to look at the way they fought their wars since 1949, to try to get a look into their mentality—what checks them, what works, what does and does not work for them. I think you start off with Korea in 1950 as instructive.

Certainly, in the first stages of that war there was surprise, overwhelming force, favorable terrain and they scored great victories. They drove the 8th Army and the 1st Marine Division out.

The second lesson of the war was when they got into positional warfare against an enemy with better weapons, they lost. Matthew Ridgeway gave them a very punishing lesson, that they could not stand up to. Then they compromised in a major way in the Korean War. I think that is a lesson.

Again, I think in the Taiwan Strait they have consistently tried to use bluff and bluster first to achieve their ends. They were able to do this in 1954. They failed in 1958 and they failed in 1995 and

1996. It did not work. It was a particularly egregious failure in 1958, when they had to back off from a threat to Taiwan, mainly because the Seventh Fleet moved in and the Taiwan Air Force shot them out of the air. It was something like 35 planes to 1. They were no match for the Sabre Jet with the air-to-air Sidewinder missile.

So they backed off. They undertook on-day/off-day artillery firing to save face. But people know that it did not work.

Again, I say in 1995–96, when the *Nimitz* went through in December 1995 and when the two carriers came in 1996, the Chinese got the message. They were no match for the Seventh Fleet.

So they backed off from this and they planned the next steps.

If you look at 1969 and the way they faced the Soviet Union, they were driven by the passionate nationalism of the Cultural Revolution. They conducted military operations against the Soviet Union which were, in many ways, almost bizarre. But the point is they got their clock cleaned. The Russians had superior force, they beat up on them, they drove the Chinese back. What did the Chinese do? They turned to us for a strategic partnership with us against the Soviet Union. And we took it up immediately for the opening to China.

I think 1974 is interesting, January 1974, because it was the kind of operation you have to look out for these days. They seized the Paracels in a lightening attack. They moved in amphibious forces, Hainan class gunboats. They took the Paracels and their timing was perfect.

The United States was pulling out of a collapsing Vietnam, the Soviet Union had not moved in yet, and they had a window of opportunity. They struck quickly, decisively, and won. They took over the Paracels. Now they are building airstrips there.

They again punished the Vietnamese in 1988 in the Spratlys and they started to buildup, as you know, a People's Liberation Army facility on Mischief Reef down in the Spratlys.

So we see them moving from a surprising success, pushing forward for the next step. However, in 1979, it was instructive. They took on the Vietnamese in a clumsily executed land war. The battle tested, hardened Vietnamese military inflicted heavy casualties. The Chinese retreated. They said they gave the Vietnamese a bloody nose, delivered a message, and then pulled back. And they found their army was lazy, fat, poorly trained, and their use of command and control was poor.

What emerges from all this is that China tries to know its own strength and its opponent's weaknesses. It can adjust very quickly when it faces superior forces and the enemy has a strong will. But it also moves quickly and decisively when the opportunities arise.

I think we have to keep this in mind in Taiwan.

Then I get briefly to the role of missiles. First, the Chinese see definitely an ally in the anti-missile defense people in the United States. They try to link up with them.

I think since 1995, they have been trying to shape the debate on missiles. They have said the problem is not our missiles, it is our missile defense system. They have been able to divert the Americans into focusing on that. Look at the argument we are having today on ABM.

It is not so much for Chinese missile deployments as it is our reaction to it. The Chinese have been rather successful because we have heard a chorus of voices sounding off against missile defense directed against the Chinese. The Chinese quickly follow this with a very effective device. They say if you deploy theater missile defense, this is a make or break issue in the Chinese-American relationship. That's it—you have gone back on the commitments you made in 1971–72, Nixon-Kissinger, that you would not work with Japan and Taiwan to form a defense system against us, and that is precisely what you are doing. This is intolerable to us. You said you would not do this. We affirmed this in the three communiques. This is intolerable American intervention which will only increase the chances for Taiwan independence and will cause China to perfect and expand its own missile forces. That is their argument.

Third, the Chinese have taken direct aim at national missile defense and theater missile defense by insisting that the Anti-Ballistic Missile Treaty, which they have not signed, be maintained and strengthened. This is a means to curtail our ability to deploy weapons against them.

I notice that the Carnegie Endowment for International Peace distributed Sha Zukang's statement on this in February of this year. It is a clear, tough, hard statement which says don't deploy antimissile defense.

It is instructive, when you look back briefly in history, you see that one of the successful efforts that the Chinese made with their collaborators in the United States was to block the FX for Taiwan in 1981. They marshalled forces. They said at that time that the sale of an F–16 or an F–5G to Taiwan would, in fact, break the relationship.

Hysterical memos came out of our bureaucratic establishment and we backed off. We did not get new fighter planes sold to Taiwan for another 10 years. And they did not really complain then.

It is interesting that it was at a time in 1992, when the Chinese needed us. They had seen the results of Desert Storm. They wanted to make contact with our military. They were willing to accept the F–16 sale because it was more important, as Deng said, to have the American relationship than to fight over a single issue.

So it is a question of how we handle this. There is also another aspect of the way they manage the U.S. relationship. It is the old adage—when capable, feign incapacity. Put the word out—China's defense budget is only $9 billion, it is much smaller than Japan's, Taiwan's, Korea's, ours. Ours is at $250 billion and China only at $9 billion.

But, of course, they are dissembling. We know their budget is at least four times as large. At the same time, the argument is used—and President Clinton used this on April 7 in his press conference in the Mayflower—we have 7,000 nuclear weapons, they have 24, what is the problem?

There is no problem. We overwhelm them. Why are we arguing about our threat? There is no threat.

So we dismiss the threat as minimal. What it does not take into consideration is the way they look at weapons. They don't look at them the way we do. They are not trying to match us missile for missile. They have a concept of asymmetrical warfare.

They hit our vulnerabilities. They know that our cities are vulnerable. They have used this against the Russians—force de frappe in the 1970's. The U.S. has many more than China does, but the USSR would never lose Irkutsk or Vladivostok.

This is a psychological ploy that puts one on the defensive quite effectively.

The Chinese also have documented that they are willing to take huge population losses in any kind of war.

They have said, as Mao is alleged to have said, we can lose 300,000 million people in a war with Russia; or, we know, for instance, that in the Great Leap Forward, 30 million Chinese died of starvation because of Mao's social engineering.

We have to take this seriously.

I just might add on Kosovo, Kosovo is instructive in one way for us on this. If we let Milosevic know that we are not going to use ground forces in Kosovo in advance, he is going to take much more decisive action. If we let the Chinese know that there is no missile defense out there, their missiles will be built up because it will give them leverage to force Taiwan to the negotiating table on their terms.

Again, I say in my epilogue that China is a great civilization of culture and art. It should be a country that goes by international rules of trade, the rule of law across the board, that expands its electoral base, that opens up its system and that deals with its problems on its periphery in a peaceful way. I think this is what we should aim for.

There is the clear emphasis on economic priorities now in China. This is being challenged because of the economic turn-down. Some Chinese propose turning to military means. But there is a very powerful force in China that wants to be in the World Trade Organization. In Premier Zhu Rong-ji's visit here the whole strategic-military arrangement was downplayed in favor of economics.

Even our own President neglected to use the words constructive strategic partnership in both his press conference in the Mayflower and his joint press conference with Zhu. Anybody knows that a strategic partnership does not exist. It is just a word game.

The Chinese are against NATO expansion, they are against our position in Kosovo, they are against the Japanese-American Security Treaty, which is the cornerstone of our strategy in Asia, they are against our position on Taiwan, and they sometimes have not been helpful in our position on North Korea.

So, I end up with the old Sunzi adage that the real strategy is to win every battle without fighting. Those who simply win every battle are not really skillful. Those who render other armies helpless without fighting are the best of all. The best victory is when the opponent surrenders of his own accord, before there are any actual hostilities.

It seems to me, when I read your S. 693 on enhanced security cooperation with Taiwan, there was one element in there that I think was particularly important. I think, as Secretary Schlesinger said, to get into a real contest with the Chinese right now on TMD is not worth our attention.

But it seems to me that it is clearly spelled out in that piece of draft legislation that the software concerning communications,

planning, education, and training, are very important to establish now.

These are not make or break issues.

When we sent our carriers in there in March 1996, we had really no contact with Taiwan. This could have led to a disaster. It seems to me it is essential to establish an understanding with Taiwan about future contingencies and planning to deal with those contingencies. This is the sort of thing which you can carry out, I think, without really challenging the PRC relationship.

What we do about Aegis class destroyers built into a THAAD system to defend Taiwan, whether we sell Taiwanese the destroyers to do it themselves it seems to me is a decision that is way down the road and only after there is actually an antimissile system that works.

Thank you.

[The prepared statement of Ambassador Lilley follows:]

PREPARED STATEMENT OF HON. JAMES R. LILLEY

THE CHINESE CHALLENGE AND THE ROLE OF MISSILES

First, what is the Chinese challenge? Does the United States have a genuine "constructive strategic relationship" with China? How modern are Chinese strategic rocket forces and how does China intend to use them? Is to consider China any kind of a threat a self-fulfilling prophecy? Are American strategic forces so overwhelming that we do not have to worry about China? Is Taiwan a flash point or a model for positive change?

1. *Chinese intentions:* Let us look at what the Chinese themselves say authoritatively and publicly:

The Law of the People's Republic of China (PRC) on the Territorial Sea and Its Contiguous Zone adopted at the 24th Meeting of the Standing Committee of the Seventh National People's Congress on February 25, 1992 explicitly states.

> Article 2
>
> The territorial sea of the People's Republic of China is the sea belt adjacent to the land territory and the internal waters of the People's Republic of China. The land territory of the People's Republic of China includes the mainland of the People's Republic of China and its coastal islands; *Taiwan* and all islands appertaining thereto including the *Diaoyu Islands* the Penghu Islands; the Dongsha Islands; the Xisha Islands; the Zhongsha Islands and the *Nansha Islands;* as well as all the other islands belonging to the People's Republic of China. The waters on the landward side of the baselines of the territorial sea of the People's Republic of China constitute the internal waters of the People's Republic of China.
>
> Article 5
>
> The sovereignty of the People's Republic of China over its territorial sea extends to the air space over the territorial sea as well as to the bed and subsoil of the territorial sea.
>
> Article 6
>
> Foreign ships for non-military purposes shall enjoy the right of innocent passage through the territorial sea of the People's Republic of China in accordance with the law. Foreign ships for military purposes shall be subject to approval by the Government of the People's Republic of China for entering the territorial sea of the People's Republic of China.

What this law means is the Spratly Islands (also claimed by Vietnam, Taiwan, Malaysia, and Brunei) belong to the PRC. Taiwan, which has security guarantees in the Taiwan Relations Act, belongs to the PRC. The Diaoyu or Senkaku Islands which are also claimed by Japan belong to the PRC. China has thus staked out claims on the first island chain surrounding its most valuable east coastal area from Tianjin to Guangzhou which puts it into potential confrontations with ASEAN, the U.S., and Japan.

Article 3 establishes PRC sovereignty over the territorial sea and air space, and establishes procedures for foreign navy ships to pass through its territorial waters.

Article 8 says the PRC "has the right to take all necessary measures to prevent and stop non-innocent passage," and in Article 14 this includes the "right of hot pursuit against foreign ships." It specifically states this includes "for military purposes."

Prior to 1985, Chinese strategy was defensive, against a single superior force to its north, the Soviet Union, and this required a temporary partnership with the U.S. In 1985 the Chinese switched its strategy to hi-tech warfare against states on its periphery. It has since given first priority to its strategic rocket forces, its navy, its air force, and its Rapid Reaction Units. This was to support its objective of extending its sovereignty over contiguous areas to its east and was done for both offensive and defensive reasons. Offensively, the PRC seeks to undermine the American bilateral alliance system stretching from Korea in the north to Australia in the south by labeling it an anachronism left over from the Cold War. The Chinese characterize these alliances as a series of arrows aimed at China which will spur on the arms race and destabilize the area. China also seeks to neutralize the military bases of this U.S. alliance system by tactics of naval warfare. As Captain Shen Zhong Chang in his article on 21st Century Naval Warfare puts it, "long-range precision strikes by warships, carrier based aircraft and missiles are needed. Submarines will make missile attacks on air targets. Long-range combat, missile combat, and air force cover will be crucial." In 1996 PLA General Ding Henggao stated that precision guided missiles (conventional and nuclear armed) were the most important single system in China's future defense posture.

Chinese procurement and production reflects its priorities. Sukhoi–27, long-range strike aircraft procured from Russia are state of the art—200 will become available in the next five years. Kilo class submarines, Sovremennyy class destroyers with the deadly Sunbeam torpedoes, air refueling, and of course ICBM, MRBM, SRBM, and cruise missiles. Over 100 SRMBs (DF–15 or M–9s) are deployed opposite Taiwan, according to the latest media reports. The number could reach over 650 missiles by 2005 according to what some newspapers say is a classified DOD study on TMD. The July 1995 and March 1996 Chinese live fire exercises in the Taiwan Strait area proved that Chinese aircraft performance, tri-service exercise, amphibious attempts were primitive and non-competitive. The Chinese trump card emerged as its missiles. They were accurate, threatening, and were the main cause of economic dislocations in Taiwan. If the threat could be increased 50 fold, the potential for intimidation would also be increased. The presence of a large number of missiles opposite Taiwan—especially if some were fired into the sea-lanes off Taiwan—would represent leverage to get Taiwan to the bargaining table on PRC terms. The missiles would not even have to impact on Taiwan itself.

The Chinese also had to raise the stakes for the United States. This would be done in two ways. A launch of Chinese missiles could have the potential to destroy a U.S. carrier battle group—the capability to do this would oblige the Americans to re-calculate the costs of close-in intervention. In March 1996, the PRC claimed its threat of missile attack kept our carriers out of the Taiwan Strait. Second, a long-range "force de frappe" would have the potential of taking out an American city. This strategy was used on the Soviet Union by the PRC in the 1970s. Although the USSR had many times the number of missiles China had, the Soviets would have to think hard before sacrificing the city of Irkutsk to Chinese nuclear attack. So much more for the Americans who have demonstrated their fear of casualties (for instance, in Iraq in Desert Fox, in Somalia with our pullout, and now in Kosovo). The Chinese raised this question in 1996: Would the Americans sacrifice Los Angeles over a long distance turmoil off Taiwan?

The Chinese have also systematically improved their monitoring of U.S. naval movements in the Pacific by setting up a major PLA space tracking station in Kiribati Islands (Tarawa, to World War II buffs).

PRC historical war fighting—many battles on the periphery: A quick review of Chinese combat history bears out the strategy spelled out in 1985 of wars on the periphery. China has fought often, sometimes clinically sometimes passionately, with mixed results of both success and failure.

- In 1950 in Korea, Chinese used surprise, overwhelming force and favorable terrain to achieve remarkable victories over the U.S. in the initial stages. Later, when faced with superior weaponry and positional warfare China seriously compromised its position and settled for half a loaf.
- In the Taiwan Strait crises at Tachen, at Quemoy, and North and South of Taiwan, the PRC achieved some success by bluff and posturing at Tachen in 1954. In 1958, however, it retreated in Quemoy when faced with U.S. naval power and a Taiwan Airforce that shot their planes out of the sky. In 1995 and 1996 the PRC discovered missiles as its most potent weapon of attack and coercion, but it figured it needed 10 more years of build-up and preparation. China also focused more on developing asymmetrical warfare to deal with U.S. power. This

meant to disrupt U.S. command and control and intelligence systems dependent on reconnaissance and communication satellites and thus exploit U.S. vulnerabilities, not to confront its strengths.

- In India in 1962, PRC demonstrated again that it could use surprise, superior force and favorable terrain to decisively defeat a weaker foe on its periphery over a matter of sovereign territory.
- In 1969, in contrast the PRC faced a superior force on its northern and western borders in the Soviet Union. China was driven at the time by the impassioned nationalism of the Cultural Revolution. China was frequently defeated by the Soviets in numerous border clashes, so it turned to its former enemy, the U.S., to offset its weaknesses against the USSR and to assure its survival against a more powerful enemy.
- In January 1974, in a brilliant but limited amphibious operation PRC seized the Paracel Islands in the mid South China Sea. This was carefully planned and executed against South Vietnamese units with perfect timing—the U.S. was pulling out of Vietnam and the Soviets were not in yet. The South Vietnamese were weak and unprepared. The Chinese have now just expanded a major airstrip on these islands clearly aimed at bolstering their position against the Spratlys further south. In a preliminary test of military power on the sea, the Chinese navy defeated the Vietnamese in the Spratlys in 1988. It is currently building up the PLA's presence on Mischief Reef in defiance of the weaker Philippines.
- In 1979, the Chinese failed against Vietnam in a clumsily executed land war. A hardened battle tested Vietnamese military inflicted heavy casualties and the Chinese withdrew after "delivering a message". In a wake up call, the Chinese discovered their army was lazy, fat, poorly trained, and their use of command and control very poor.

What lessons emerge from this history is a China that tries to know its strengths and its opponent's weaknesses. China can adjust quickly when it faces superior forces and has a strong will. But it also moves quickly and decisively when opportunities arise.

In the 1980s Chinese politics were given over to economic development, the military was cut back so China could establish a strong and growing economic base. The military emphasis was placed on getting foreign military technology, one way or another, to build a modern hi-tech military—this resulted in the massive transfers of technology from the U.S. (including from Los Alamos as well as many other acquisitions), from Europe and Japan. Beginning in 1991, a massive transfer took place from the former Soviet Union which was both vulnerable and broke but which had a huge military machine up for sale.

Desert Storm was also a wake-up call. Deng Xiaoping, the paramount ruler, and his old colleague at the time Yang Shangkun watched the U.S. performance on TV from Shanghai in February 1991. They were impressed, as were their military leaders. The U.S. was both an opportunity and a danger. China decided it was essential to get with the U.S. military—to understand its revolution in military affairs, to study its logistics, master its hi-tech war fighting capabilities, and to probe its psychology of fighting. The PRC also recognized the need to deny the U.S. access to forward-based facilities and to hold U.S. naval power projection capabilities at risk. The PRC in the interim decided it had to accept the sale of F–16s to Taiwan and would settle for a poor deal on its longstanding FMS case left over from Tianamen sanctions. The PRC was not ready to take on the U.S. and in fact in the short term needed the U.S.

The U.S. leapt at the opportunity to re-engage China in a military relationship and by 1994, the U.S. and China were setting up a cozy collaboration with numerous exchanges covering many of the areas where the Chinese needed our help. This reached an all-time high in 1999 when the U.S. and China agreed on over 80 exchanges including logistics, training, visits to air-drop exercises, U.S. nuclear submarines and aircraft carriers.

THE ROLE OF MISSILES

It is against this backdrop, sckechily presented, that missile politics can be viewed.

First, the Chinese see an ally in the anti-missile defense policies of the Clinton Administration. An administrative cable sent as recently as March 19 this year spells out how our diplomats should soft pedal the TMD issue and even how the Administration is blocking its development and deployment. In fact, since 1995 the Chinese have tried to shape the debate here in the U.S. by focussing attention away

from its developments and deployment of missiles to the divisive aspects of missile defenses where it has U.S. supporters.

Second, the PRC works with its supporters in the U.S. to drive home the point that missile defense is a make-or-break issue in Sino-American relations. The Chinese repeat that for the U.S. to work with Japan and Taiwan to establish a missile defense system basically undermines the premises of the new China-U.S. relationship established in 1971–72 and reaffirmed by the 3 communiques signed between the two countries. The Chinese describe this as an intolerable American intervention which will not only increase the chances for Taiwan independence, but will cause China to perfect and expand its own missile forces.

In this explanation, the Chinese seem to ignore the fact that Taiwan already has an anti-missile defense system in its advanced Patriots (PAC 2) and that the PRC's own missiles and nuclear modernization have proceeded rapidly without the existence of TMD, and incidentally, with the assistance, sometimes open sometimes stolen, of the U.S.

Third, the Chinese have taken direct aim at NMD and TMD by insisting that the Anti-Ballistic Missile Treaty (ABM) be "maintained and strengthened," according to Sha Zukang, China's top arms control and disarmament official. China has not signed the AMB but feels free to comment on it. It is interesting to note that Sha's views were given credibility by The Carnegie Endowment for International Peace which widely distributed them in a February 1999 memorandum. It is clearly in China's interest to use any means at its disposal to denude the U.S. and its friends of defense against China's growing missile capability. Sha claims China will be "forced to develop more advanced offensive missiles by TMD. This will give rise to a new round of the arms race." What Sha chooses to ignore is China is already building up and deploying its missiles now while NMD and TMD are still only in the testing stages. In this case, history is instructive. In 1981, the PRC and its supporters in the U.S. ran a pre-emptive political strike to block the sale of FX fighters for Taiwan, and despite Reagan's election, this attempt worked largely because of well focused academic and business support and numerous sympathizers among the American bureaucrats. The lesson was, if the stakes are raised early, the chances of blocking TMD will be improved.

The Chinese have also used the old Sunzi adage—"When capable feign incapacity" to lull the U.S. Even our Administration has picked up on this. The Chinese say they have just a few long-range missiles, and the U.S. has 7,000, so what is the problem? The U.S. could overwhelm China in a flash. As Sunzi said, "Use humility to make them haughty." So the U.S. thus dismisses the Chinese threat as minimal. President Clinton himself did this in his statement of April 7, 1999 in which he said the nuclear balance is with us—the Chinese have only two dozen weapons while we have 7,000. The PRC has also consistently dissembled on its military budget, citing very low figures which do not conform with reality, while still admitting to double digit growth but from a factually inaccurate low base figure.

Underneath this soporific, the Chinese say the U.S. won't take losses—the Chinese will, because this is a matter of their sacred sovereignty. A nationalistic frenzy is in fact being whipped up constantly in China on Taiwan as Chinese territory, and on U.S. flagrant interference in Chinese internal affairs. The PRC is aware that its own record of sacrificing its civilian population is well documented. The Great Leap Forward of 1958–60 probably cost 30 million Chinese lives to Chairman Mao's lunatic social engineering. Mao is widely quoted as saying China could afford to lose 300 million people in a war with Russia.

There is also a parallel here to Kosovo. The U.S. has ruled out the use of ground forces early on and telegraphed this to Milosevic. He took heart and moved decisively against the Albanians. If we rule out TMD for Taiwan early on, the Chinese will also take heart and will note that the chances for their coercive missile diplomacy working have improved. They will then be tempted to increase their leverage over Taiwan by increasing the missile threat.

EPILOGUE

China is a great civilization, a great people and a potential friend and partner of ours. Once it abides by International rules of trade, introduces the rule of law across the board, expands its electoral base, and opens up its system, the problems on its periphery, including those with Taiwan, will be manageable, if not solvable. China's great achievements in its monuments, its civilization, art, and culture are the envy of the world. But we are also aware of the brutalities in building the monuments such as the Great Wall and Grand Canal, and more recently the madness of the Great Leap Forward and Cultural Revolution. There are those in China who seek military solutions, and missiles have become the instruments of choice. There

are also those, and the Premier could be one of them, who see China's role primarily as an economic competitor and as more benign. So it is these economic forces to which we must appeal. The recent Chinese economic slow down however may have diminished the leaderships economic legitimacy, and forced them to rely marginally more on the military.

Despite this, it is still in our interest to stress the economic aspects of the relationship. It makes little sense and is misleading to label our current relationship a "constructive strategic partnership," It is no such thing—China is against the expansion of NATO, against our policy in Kosovo. It has regaled against the cornerstone of our Asian policy, the U.S.-Japan security alliance. It is against nuclear inspections in North Korea, and at least publicly has supported the North Korean missile shots of 1998. It is against our policy of guaranteeing Taiwan's security by defensive arm sales, and it refuses to rule out use of force. China has challenged us constantly on our policy of curbing the proliferation of weapons of mass destruction. But still, what the Chinese say and do has to be taken seriously—China is a nuclear power, has ICBMs, a long track record of military combat and willingness to take losses. It also often uses rhetoric effectively in disarming its opponents.

There are many ways we should and can engage China. This has been our policy since 1972 and it has largely worked when we have defended our interests with skill and persistence. It has not worked when we have vacillated, caved in, apologized and blustered.

> Sunzi said, "Therefore those who win every battle are not really skillful—those who render other armies helpless without fighting are the best of all. The best victory is when the opponent surrenders of his own accord before there are any actual hostilities."

This is a large part of China's strategy towards the U.S. and Taiwan today. Military intimidation and gong-banging (if you will) are important ingredients. The Chinese are counting on a reduced U.S. military presence in Asia over time while they improve their own comparative advantage. A strong element of political and psychological warfare is present and is increasingly focused on NMD and TMD. The very fact of this focus telegraphs these vulnerabilities. S. 693 comes to grips with some of these vulnerabilities. Our response is especially important when improving our software cooperation with Taiwan. This is spelled out in (b) Plan: concerning communication, planning, education and training. This has been our greatest shortcoming to date.

Senator HAGEL. Mr. Ambassador, thank you, and Mr. Secretary, thank you again.

I am going to leave here in a few minutes and Senator Frist is going to jump in and complete the hearing. But before I go, I would like again to thank you both.

Mr. Ambassador, I would like to direct a general question to you, following along with your testimony. Should we be connecting trade, WTO, and other such relationships more directly to the Chinese in our overall relationship as to how it embroiders around the completeness of that relationship, especially in light of some of the military-strategic issues that we have with them?

Ambassador LILLEY. Frankly, Mr. Chairman, I think that the World Trade Organization entrance of China should be handled on the merits of commercial arrangements. I think that it is very important for us to establish tough requirements for China to enter and be able to carry out those requirements after it enters.

I think, if you bring human rights, proliferation, or other issues into this, that it would be destructive. I realize it is very hard to separate these things in our minds. It has a very high psychological impact, what the Chinese have done in human rights and the way they deploy their missiles off Taiwan. But I think we can handle that in other ways.

The trading arrangement is something that is good for us and good for them and I think we should proceed with it on its own merits.

Senator HAGEL. What about the relationship between the Chinese and the North Koreans? Should we be asking the Chinese to do more in that relationship?

Ambassador LILLEY. I think we have.

In my experience, particularly in the 1991–92 period, the Chinese were helpful in getting both Koreas into the United Nations. They played a crucial role in that.

They had been the major supplier to North Korea of food, oil, coking coal.

We have indications that the Chinese have gone to the North Koreans and said to them quietly don't fire another missile or there goes KEDO. This also gives the Japanese a card to play on theater missile defense. This is directly against China's interests. Don't do it.

But publicly they have said we have no business talking about it to the North Koreans because it is a sovereign right for them to launch satellites.

But, you know, there is a bizarre aspect of this which I think gives you insight into what the North Koreans are like. Do you know that the North Koreans actually claim that that satellite is up there and that it has gone around the world 1,000 times, that it transmits messages?

So when we sit down with them and say that it was a failed shot, they say you're wrong, it succeeded.

So you sort of walk through the looking glass when you begin to deal with these people on issues like this.

But I think the Chinese have gone through this for many years. They have that sort of frozen smile on their face when they deal with the North Koreans. But I am sure they get some quid pro quo for what they give the North Koreans. I think it is in their interests not to let the North Koreans have weapons of mass destruction.

Senator HAGEL. Thank you.

Mr. Secretary, you heard Secretary Schlesinger's testimony during the question and answer period. Is there anything that you disagree with from what you heard in Secretary Schlesinger's answer to how we deal with the Russians, specifically, on moving forward on amending the ABM Treaty?

Dr. SCHNEIDER. It is not so much a disagreement as an amplification.

Abrogation is not the only alternative in dealing with the treaty, apart from renegotiating it. The treaty contains a provision for withdrawal under "supreme national interest," which permits either party to withdraw from the treaty without necessitating the act of abrogation.

I think that it may be possible to renegotiate the treaty. But I think we need to be focusing on making sure that our response is threat compliant, as distinct from treaty compliant; that is, the nature of the threat is driving the contours of what is required for U.S. authorities to produce an effective ballistic missile defense. In amplifying the Secretary's point, the idea of getting only a single, small change to accommodate the proposed NMD is probably not going to be adequate for our needs.

Senator HAGEL. Would you care to offer your opinion in regard to how we are handling Kosovo?

The Ambassador, I thought, framed it up rather well in the sense of other nations taking some measure of our will and our commitment. He spoke specifically of the Chinese. Is there anything you would like to add to what the Ambassador said, as well as Secretary Schlesinger, as to how we are handling this now and the kind of consequences our actions will have on these very specific, dangerous issues, such as missile proliferation?

Dr. SCHNEIDER. I believe that how we handle the situation in Kosovo will be seen as a very informative characterization of how the United States will react to future security crises. So, even though the facts in the Kosovo case are not likely to be replicated precisely in other theaters, how we respond to it is going to be extremely important. The specter of incremental application of force at relatively low levels, the relatively modest amounts of air attacks that were undertaken—initially, only about 50 sorties per day, which does not provide the kind of shock to the system that would have affected expectations—now that these have clearly not worked, the incremental application of attack helicopters, absent other measures, is likely to prove ineffective as well.

I think the stakes are very high, and this is an occasion where I think the Congress has a constructive opportunity to try to help identify a national purpose in this intervention and to identify the means necessary to implement that so that we do not replicate other policy failures in the use of force that we have seen to our distress, unfortunately, on a number of other occasions.

Senator HAGEL. Thank you.

Senator Frist.

Senator FRIST [presiding]. Thank you, Mr. Chairman.

Secretary Schneider, I was particularly interested to hear your comments that Iran might pose a ship-based short-range missile threat to the United States in the near-term.

I guess I would ask you to elaborate on that. Do you believe that any national missile defense deployed by the United States should be able to neutralize this threat?

Dr. SCHNEIDER. Thank you, Senator.

First, with respect to Iran's ability to do so, I believe Iran has the ability to do so now. It can be done with SCUD missiles which are deployed on mobile transporter-erector-launchers. These devices can be simply picked up by a conventional cargo crane and the entire apparatus dropped in the hole of a ship. With the hatch closed, it would not be possible by national technical means to identify the cargo in that ship.

When Iran deploys the Shahab 3, which is likely later this year, it is also deployed on a mobile transporter-erector-launcher and could similarly be deployed. Iran is particularly troublesome in this regard because, as I said, of its history of being able to use non-Iranian nationals for activities for which it chose not to accept responsibility.

Hence the possibility of this I think needs to be taken seriously.

I mentioned in my response to Chairman Hagel's question that our architecture of theater missile defense needs to be threat com-

pliant rather than treaty compliant; or at least the threat needs to drive the way in which we perceive the architectural requirements.

Because the nature of the threat is both short-range missiles launched from, say, surface ships clandestinely, as well as long-range ICBM's, the architecture of our national missile defense needs to reflect that. So we have to have a component that is able to intercept the missiles not only coming from relatively short range, which means they have a low altitude trajectory, as well as those that come from a long range, which have a relatively high altitude trajectory.

The short-range systems will also be capable of being launched from virtually any azimuth, as Secretary Schlesinger suggested.

Therefore, I believe the architectural proposals, whether they are made by the administration or the Congress, should be subjected to a criteria that asks whether it is responsive to the threat.

Senator FRIST. Thank you.

Ambassador Lilley, should the United States be concerned over continuing reports that China may be pursuing multiple independently targetable re-entry vehicles?

Ambassador LILLEY. I think we should be concerned, but I don't think there is anything we can do about it except tighten our security at Los Alamos and various other places.

They have been after MIRV for a long time. They tried to get the SS–18 from the Soviet Union intact. I think Secretary Perry mentioned this some time ago, that they may have succeeded.

That is a solid fuel missile with MIRV capability. They are determined to get MIRV.

I think one of the most specious arguments that is made is that theater missile defense will force them to get MIRV. You hear this from the Chinese apologists. They are going that way anyway. It is in their national interest. They could use theater missile defense as an excuse and have Americans run around parroting their line. But they are after it.

Unless we get into extensive missile talks with them, which certainly have not happened yet—they have put out the word, for instance, among a lot of the Chinese-Americans in the academic community that they have not deployed the missiles, that they are not there, that we are wrong. They say it is too expensive, we don't have the engineers, we don't have the underground sites, it is an American fallacy. Or, as somebody put it, it's an Arabian Nights story.

It is this particular disconnect you have with them when they deny it flatly—did you commit espionage in the States? Did you hear the response that the premier made? "It is our government policy not to do this. Nobody told me we did it. I asked the military and they didn't know anything about it."

But did he ever deny it?

So I think that the evidence is overwhelming that they are engaged in this. But they deny it. They deny illegal campaign funding. "We don't do it." Well, how about Liu Hun Ching's daughter and Johnny Chung's money? "Oh, that didn't happen."

So when you get into the missiles, you have to get into some pretty hard ground, as we did with the Russians. The way you do that, of course, is to make it really difficult for them by having a

capability to deal with their coercive missile diplomacy. That is where I think the Americans have shown some vacillation.

I think they see a window of opportunity in the next 24 months to press very hard to get us to commit ourselves.

Senator FRIST. Thank you.

Mr. Secretary, I am on another committee—not the Foreign Relations Committee—where I serve as chairman of the Subcommittee on Science, Technology, and Space. I have a real interest in dual use technologies. With the increasing availability of dual use technologies, particularly through the space launch programs, we see this enhancing of the ability of countries to produce ballistic missiles and reentry vehicles.

Now, because of limitations contained in the START Treaty, Russia has been constrained in its ability to set up space launch facilities in foreign countries, such as Iran and China.

But the Clinton administration has offered to change the START Treaty and give Russia the opportunity to locate as many as three new space launch facilities outside of its territory. But when asked by Chairman Helms to make its offer conditional upon a formal Russian agreement that it would not put facilities in any country that is pursuing ballistic missiles, the administration refused.

Do you know if it is wise for the administration to make such an offer to Russia at this time without obtaining the commitment I have described? What would be the impact of a Russian space launch program in a country like China or Iran?

Dr. SCHNEIDER. I think it would be a high risk to U.S. proliferation objectives for the United States to acquiesce in an expansion of the number of launch sites, especially in countries that are ballistic missile proliferation risks.

As I mentioned in my testimony, most of the Russian space ICBM's have also been modified for space launch purposes. One that is being marketed now is a variant of the SS–25, which is a mobile solid fuel ICBM. The amount of technology transfer that is associated with the conduct of space launch activities makes it inevitable that military ballistic missile technology would be transferred to a recipient.

Hence, the proliferation objectives of the United States would be frustrated by such a course. So I would urge that the U.S. Government abstain from liberalizing this regime.

Senator FRIST. Mr. Ambassador, do you have any comment on that issue, that of space launch or the Russian space launch program in a country like China or Iran?

Ambassador LILLEY. Again, I think China is going to proceed with a space launch capability. We think they are going to have a man in space, perhaps for the 50th anniversary of the October Revolution.

They see clearly and their own writings reflect their fascination with the use of satellites to direct warfare. And certainly their military has been directed as a high priority to work on taking out our satellites, putting out our eyes.

So they are thinking very much along these lines. I don't think they will be inhibited by any international agreements that are reached. I think this is a matter of national defense and they will proceed as they must.

Senator FRIST. Mr. Secretary, I agree that we should move ahead quickly to deploy a missile defense. Do you believe that we should negotiate with Russia to allow for such a defense within the confines of a revised ABM Treaty, or should we move forward on deployment and invite Russia to join us on the more cooperative measures?

Dr. SCHNEIDER. I share Secretary Schlesinger's concern about the fragility of politics in Russia and especially bilateral relations. However, the rapidity with which the threat has matured to the United States makes this an urgent matter of national security. The requirements for liberalization in the ABM Treaty extend far beyond those that are required to support the proposed national missile defense.

I mentioned some of those during my testimony.

So, unless you can get a very far-reaching revision of the terms of the treaty, then I think we should take advantage of the provisions of the treaty that allow for withdrawal from the treaty upon 6 months notice and proceed to produce a missile defense system that addresses the threat we face.

Senator FRIST. Thank you.

I want to shift gears again a bit, away from both of your oral presentations, to South Africa. South Africa became a nuclear power even in the face of what was supposed to be political, economic, military, and geographic isolation. Different factors than those in the former Soviet Union have led to what some term a brain drain among South African whites, but on a much smaller scale.

Certainly, disaffected elements of South Africa's military have achieved notoriety or infamy as extremely effective military assets out there for hire.

With that potential outflow of knowledge and talent from a functioning number of weapons and missile technology program, I wanted to ask you to help me address several issues for me to gain a better understanding of the potential proliferation issues that this represents.

I guess, first, have we seen a brain drain of nuclear weapons talent or technology from South Africa, either to specific programs, or to specific countries, or to the open market to the extent that it may exist?

Dr. SCHNEIDER. The South African nuclear program was a clandestine program. It was not an announced program. So the identification of the players in that program have been fairly limited. But I think it is important to appreciate that modern technology does not require the kind of labor mobility that would have been required even a decade ago.

Now a lot of the pertinent data is readily available through networked computers, that is, the Internet, as well as substantial means of electronic communication.

The fact that some individuals from South Africa may be traveling to other parts of the world is certainly a possibility, as is the case with Chinese, Russian, North Korean, Pakistani, Indians and so forth people.

The mechanism for the diffusion of knowledge about these is so substantial that it is probably beyond control now.

There are a couple of Internet web sites that have precise industrial engineering detail for the manufacturer of first and second generation fission weapons. So the need for extensive clandestine contact with experts is much diminished over what it would have been a few years ago.

Senator FRIST. How important is the current South African Government's treatment of what is left of the country's discontinued and disbanded nuclear weapons program? How important is that—or of any ballistic missile program today?

Dr. SCHNEIDER. South Africa has a substantial reservoir of expertise that it developed based on its national requirement for autarchy. I believe the U.S. Government has had a very favorable response from the South African Government concerning the protection of sensitive technologies. South Africa has enacted a statute and, as far as I understand it, has been quite successful in complying with the statute with respect to the protection of sensitive technologies and avoid their export.

So I think, at least at this stage, the reaction has been quite good and I think we have some basis for optimism that South Africa sees it as in its interest to avoid the export of sensitive technologies.

Senator FRIST. It sounds as if your level of confidence in our defense and intelligence communities' understanding of what's left of these programs is pretty good?

Dr. SCHNEIDER. Well, in this case we have a fairly high level of cooperation from the South African authorities, supported by a statutory regime, in which we have some access and continued contact. It makes it possible for us to have higher confidence in what we do know about South Africa.

This, of course, contrasts sharply with some of the other countries where we do not have such access, where clandestine WMD and ballistic missile programs are well underway.

Senator FRIST. Thank you.

Ambassador Lilley, given your assessment of China's intentions, which you outlined very well, for acquiring missiles, do you favor our deploying a national missile defense?

Ambassador LILLEY. No question, sir. We should.

May I just add something to your last question? I think a much more serious problem in terms of proliferation of weapons of mass destruction is the former Soviet Union and the degree to which it is involved in China. We get indications that it is enormous. It is not just the weapon systems I talk about here, but it is the Russian nuclear engineers, it's Russian propulsion engineers, it's Russian jet engineers building up a Chinese military capability.

It's the outflow of experts. As far as I know, we have been able to monitor some of it, but not enough of it.

The other thing I would say is that we have been more successful in curbing nuclear missile programs with our friends. We stopped one in Taiwan and in South Korea; whereas both China and North Korea have proceeded with nuclear programs when we have bottled up the programs in Taiwan and South Korea.

You can think about the strategic implications of that. Whether we did the right thing, we did it and we did it successfully. We stopped those programs of our friends.

What is unfortunate in all of this is I do think our North Korean deal and the agreed framework undercuts our position. I think Secretary Schlesinger mentioned this. We are selling them two 1,000 megawatt reactors for shutting a known nuclear facility in Yongbyon. It's a country with 11,000 caves and an absolute determination to get nuclear weapons and long-range missiles. Their survival depends on it and they are not going to commit suicide. It is built into their psyche.

So we have a problem here, certainly in convincing the Chinese that it is in our common interest to curb North Korean ambitions. This has succeeded to a limited extent.

Other areas we have to work on include we have to think about carefully how we manage a Chinese missile threat. What are the stages that we have? Do we go from a theater missile defense to an ability to knock down a token number of missiles in an exercise to an alternate ability to disrupt their system through electronic warfare? Or do you have an ability to take out their launching sites after a first launch? Or, in a final determination, do you consider massive retaliation? There is a whole series, it seems to me, of counter missile measures that have to be thought through when we deal with a major missile threat.

Senator FRIST. With deploying a national missile defense, as you went through China's motivation for acquiring missiles, would a failure to deploy a national missile defense just reenforce Chinese views that missiles are a critical military equalizer vis-a-vis the United States?

Ambassador LILLEY. That certainly has been the evidence so far. When we look at their tactics, we see that they have clearly spelled out missiles as their first priority. I mention in my testimony that one of their leading defense generals made this statement flat out, that this is what we're after.

We look through their writings and this is what they're going to do. We see it in terms of watching the work of their institutes, the engineers and scientists they select for this priority work, the money that goes into it. It is clearly a first priority.

How do you deal with this? That is our question. They made up their mind as to what they are going to do. I don't think there is very much question about that.

Senator FRIST. Thank you.

Mr. Secretary, the Rumsfeld Commission, of which you were a member, determined that North Korea, Iran, and Iraq would, and I quote, "be able to inflict major destruction on the U.S. within 5 years of a decision to acquire such a capability, 10 years in the case of Iran."

What are your views on whether that decision has been taken or not by North Korea and Iran?

Dr. SCHNEIDER. That is one of the areas that is virtually impossible to tell. We will not know when a decision like this has been made.

We do know that in States that have clandestine WMD and ballistic missile programs, they take extraordinary measures to protect the secrecy of their decision processes. In the case of Iran, for example, it has a parallel system of government—one government led by President Khatami, which is the civil government, and a

separate and parallel government led by Islamic authorities. It is the Islamic authorities that are running the WMD and ballistic missile programs.

The Iranian constitutional system permits this sort of thing to flourish and we are likely never to know when they have decided to go ahead with the deployment of a ballistic missile program. We will only know after we begin to see them in the field.

Senator FRIST. Thank you.

The Clinton administration has negotiated an agreement with Russia, Ukraine, Kazakhstan, and Belarus to formally reconstitute the ABM Treaty, which dissolved along with the Soviet Union.

Is this a sensible approach to take?

Dr. SCHNEIDER. No, I don't believe so because, as Secretary Schlesinger said, simply in diplomatic terms it would be difficult to negotiate an agreement with additional parties. And, in fact, the burden of the discussion we have been having in the United States, even within the administration, has been to look to ways to liberalize the treaty rather than to make it more difficult.

Senator FRIST. Do you recommend the Senate approve an agreement to reestablish the treaty with these four new partners?

Dr. SCHNEIDER. No, I do not.

Senator FRIST. I have one final question. Many recent intelligence assessments have not paid a great deal of attention to the possibility of an accidental or unauthorized launch from the former Soviet Union. Do you believe that the danger of such a launch has increased, decreased, or remained substantially the same over, say, the last 5 years?

Dr. SCHNEIDER. There are several reasons to suggest that the danger has increased. One example of this relates to how Russian authorities react during the period of a crisis, even a brief one.

There was a launch of a Norwegian sounding rocket in 1995, and this launch was misinterpreted, at least briefly misinterpreted, by the Russian early warning system. This led to a rapid escalation up the decision ladder in Russia.

The problem was quickly diagnosed and the crisis was brought to an end. But if you examine what has happened to the integrity of the strategic rocket forces subsequent to the dissolution of the former Soviet Union, the inability to maintain a substantial fraction of their command and control system in a modernized state is causing a problem, the most recent being the evidence that the Y2K program, the computer glitch, associated with the change from the end of 1999 to the start of 2000, may severely affect aspects of Russia's early warning system.

That has stimulated what I think is a very constructive program of consultation between the United States and Russia on this particular problem. But I think it underscores the fact that, in a crisis, the Russian system may be prone to failure.

Senator FRIST. Thank you.

Ambassador, I have one final question.

Should the United States begin a robust program of cooperation on theater missile defenses with our allies in Asia as a way of offsetting China's missile strategy?

Ambassador LILLEY. I think this has really already started with Japan. The cost of the Chinese missile shots in 1995 and 1996 are beginning to ratchet up.

Those shots have given great stimulus to the Japan-U.S. security treaty and its new guidelines, which frankly is an anathema to the Chinese. They have given impetus to theater missile defense cooperation with Japan, which is moving ahead better than it ever had before.

They have increased Taiwan hostility toward China and Taiwan has a reluctance to go back and work with them in constructive ways. And I think also they could possibly have affected technology transfer to China on dual technology that would affect missile development.

So I guess what I am trying to say is that we should proceed with Japan because I gather from Premier Zhu Rong-ji's trip, he began to separate out our theater missile defense for Taiwan from Japan. I think Japan is almost being accepted as an inevitability—although the Chinese threw a tantrum about it earlier-on and threatened the Japanese.

They seem to be backing off on that because they can see that the Japanese nationalism is increasing, particularly after President Jiang Zemin's trip last year. That trip bombed.

The Japanese were lectured by Jiang on historic massacres, crimes, and war criminal acts.

The Japanese did these acts but they don't like to be told constantly about it.

The Chinese have set in motion counter activities which they now find rather hard to deal with. So it seems to me—and I have laid out the logic for this in my paper—that we have no choice but to proceed on missile defense in view of the selection the Chinese have made.

Senator FRIST. And would you add South Korea and Taiwan?

Ambassador LILLEY. Well, I'll tell you, South Korea does not want it. South Korea has so far been very reluctant to take it for a number of reasons—first, because China is necessary to them for their policy in North Korea. And I know from my own experiences and close relationship with their leaders that the South Koreans do not want to offend China on this issue, and that China has indicated they will be very offended.

Second, they see that theater missile defense does not do much good for them. The North Koreans are poised up there on the 38th parallel with these long-range rockets that could decimate Seoul. There is nothing they could do about it, or about North Korean SCUD missiles coming in en masse.

So they have really sort of bowed out of it.

As for Taiwan, that gets into a highly tricky political subject. Again, I agree with Secretary Schlesinger. You don't want to confront this one at this time. The Chinese have laid down the marker, as I've explained. But it seems to me we move ahead on this.

I said you start with the software because this is the least objectionable aspect of it. Then, when once you get a workable system, then you can make your decision of how you want to use and deploy it.

If the Chinese do keep up their missile diplomacy, then you look at the TMD as an integral part of an overall anti-missile system that we can develop in that area.

Senator FRIST. Thank you both very much.

Mr. Ambassador and Mr. Secretary, thank you for being with us and for your very enlightening testimony and the question and answer period.

Dr. SCHNEIDER. Thank you.

Ambassador LILLEY. Thank you, Mr. Chairman.

Senator FRIST. With that, we stand adjourned.

[The following statement was submitted for inclusion in the record.]

PREPARED STATEMENT OF ROBERT D. WALPOLE, NATIONAL INTELLIGENCE OFFICER FOR STRATEGIC AND NUCLEAR PROGRAMS, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES—DECEMBER 8, 1998

NORTH KOREA'S TAEPO DONG LAUNCH AND SOME IMPLICATIONS ON THE BALLISTIC MISSILE THREAT TO THE UNITED STATES

Good morning. I welcome the opportunity to be here today to talk about the recent North Korean Taepo Dong launch, and more broadly the ballistic missile threat to the United States. Assessing and defining the threat to our homeland and to our interests worldwide is one of the most important intelligence missions in the post-Cold War world. At the outset, I want to underscore that the Intelligence Community considers foreign assistance to be fundamental to that threat, not merely an incidental aspect of the problem. The threat is real, serious, and growing. In fact, Congress has mandated that we provide annual Community reports on the threat. But the threat is also dynamic. Since our March 1998 annual report to Congress on foreign missile developments, the Pakistani Ghauri, Iranian Shahab 3, and North Korean Taepo Dong–1 missiles/launch vehicles have all been tested. In light of the latter, we published a classified update memorandum in October on the North Korean Taepo Dong missiles and some potential implications for the future.

Taepo Dong–1 Launch

Let me begin with the August 31 Taepo Dong–1 satellite launch attempt. While the system's third stage failed, the launch confirmed Intelligence Community concerns the past several years regarding North Korea's efforts to acquire an ICBM capability; the launch also demonstrated some unanticipated developments.

We have been following North Korea's ICBM progress since the early 1990s, most notably, its efforts to develop what we called the Taepo Dong–1 medium-range missile and the Taepo Dong–2 ICBM, both of which we had assessed were two-stage missiles. The fact that we have been following these efforts for many years is significant:

- First, it indicates that North Korea has taken about ten years since it made the decision to acquire an ICBM capability to conduct a flight test, and deployment has not yet begun. Projections of missile development and deployment need to be country- and program-specific; we cannot follow a single template for the world.
- Second, it means that we have been reporting on and making projections about these developments for years. In some cases, our projections overestimated North Korean capabilities; for example, some projected that the Taepo Dong–2 would have flown by now. In any event, our reports over the years relate to questions about current and future Intelligence Community abilities to warn about ICBM programs and developments.

The August launch used what we had called the Taepo Dong–1 medium-range missile, but it had an unanticipated third stage. Although the North Koreans failed to place their satellite into orbit, they tested some important aspects of ICBM development and flight, such as multiple stage separation, roughly on the timetable we expected, but using a vehicle configuration we had not anticipated.

The existence of the third stage concerns us. First, we had not included it in our earlier projections; neither had outside experts looking at our intelligence. Second, it and potentially larger third stages have significant implications for the Taepo Dong–2. Third, it raises many proliferation concerns. We are continuing to conduct

more analysis on it, trying to identify more about it, including its capabilities and why it failed.

Our update memorandum assesses the North Korean capabilities demonstrated by this launch and the threat implications of the Taepo Dong missiles. The memorandum notes, for example, that the first and second stages performed to North Korean expectations, providing what amounts to a successful flight test of a two-stage Taepo Dong–1 medium-range missile. With an ability to deliver several hundred-kilogram payloads about two thousand kilometers, the system poses a threat to U.S. allies and interests in the region.

We also assess that after the North Koreans resolve some important technical issues, including assessing why the third stage failed, they would be able to use the three-stage configuration as a ballistic missile, albeit with great inaccuracy, to deliver small payloads to ICBM ranges; that is, ranges in excess of 5,500 km—the smaller the payload, the longer the range.

Taking note of that relationship between payloads and ranges, the update looks at the implications of lighter payloads for the Taepo Dong–2, which we had assessed in the mid-1990's could deliver larger payloads—several hundred to a thousand kilograms—4,000 to 6,000 kilometers. At the upper end of that range, the Taepo Dong–2 could reach mainland Alaska and the Hawaiian Islands with these heavy payloads. Simple physics tells us the lighter payloads could go further. The update memorandum also looks at the implications of the third stage on the Taepo Dong–2; with the stage demonstrated in August, the Taepo Dong–2, again with significant inaccuracy, could probably reach the rest of the United States, depending on the size of its payload.

We also discussed proliferation and transfer implications of the missiles to countries such as Pakistan, Iran, and Iraq (if unrestrained). Finally, the update discusses our assessments of these countries' biological, chemical, and nuclear weapons programs.

We have learned that we need to be much more explicit in our warnings about missile developments—not just indicating that a country has an ICBM program, that it could flight test and deploy an ICBM in given years, all of which are important messages. We also need to include clearer language and more details about how we might and might not be able to warn about other specific milestones in an ICBM development effort, judgments that will likely vary by country. We have determined that concepts like "deployment" vary by country; in some cases, for example, deployment may not require dedicated, long-term missile basing facilities.

The Taepo Dong launch demonstrated—in a way that words alone cannot—only one of the emerging threats facing the U.S. interests. Our March 1998 annual report was prepared as our first response to a request by Congress for a yearly update of that threat assessment. Under the DCI's direction, the 1998 report responded to criticisms levied at a 1995 National Intelligence Estimate. It also incorporated the recommendations of outside experts who reviewed the 1995 estimate. As a result, the 1998 report addresses concerns regarding how we discuss foreign assistance, alternatives to increasing a missile's range, and approaches to circumvent development. Work is already underway on the 1999 report, and we are looking differently at how we characterize uncertainties, alternative scenarios, and warnings as a result of our interaction with outside experts since the March report was published. With the continued involvement of outside experts, I expect successive reports to be better, addressing additional questions as they are asked.

Our 1998 Report

This morning I would also like to outline the March 1998 report; discuss areas where the substantive conclusions might agree or disagree with those of other experts; and discuss what we are doing differently for our 1999 report. While I wish you all could read our March 1998 report, which gives a full appreciation for our views and concerns about this growing threat, it remains classified, and therefore cannot be released to the public. But, I can give you a feel for what the report says.

Let me first make four points on our methodology.

- One: we do not expect countries to follow any specific pattern for ICBM development. In fact, the United States, the former Soviet Union, and China all took different approaches. We frequently caution ourselves against any mirror-imaging. Just because a country took a certain amount of time—long or short—to develop and deploy an ICBM does not mean another country will.
- Two: we recognize that foreign countries can hide many activities from us. These countries are generally increasing their security measures and are learning from each other and from open reporting of our capabilities. Hence, while I am able to share somewhat with you today, I will not go beyond limits that will help them hide even more from us.

- Three: with limited data, we are forced somewhat to use input and output methodologies to evaluate the threat. In addition, the Intelligence Community must attach likelihood judgments to its projections; thus, we project scenarios we judge to be most likely and include other scenarios with likelihood judgments attached. Let me repeat, we agree with others that many scenarios are possible, with varying degrees of likelihood. Indeed, we have looked at many of these rapid-development scenarios, including outright sales, which could get a country from a decision to "deployment" in a matter of months, weeks, or even days, depending on one's scenario.
- Four: we do not consider the "absence of evidence" to be "the evidence of absence." Quite the contrary, intelligence analysts routinely face gaps and make analytical judgments to project plausible scenarios. Working with limited evidence and making judgments is central to our job, as long as we underscore when we have little or no evidence. Analysts did so in the case of the critical threats some of the missiles pose. We also have noted that successful missile tests would give countries an emergency launch capability with any missiles in their inventory, even without evidence of deployment.

In the report, we underscore the significant role foreign assistance has played and continues to play—indeed throughout the report are several major discussions of technology transfer. For example, the report begins with several pages discussing the extent of foreign assistance from numerous suppliers to even more recipients. It also notes how foreign assistance has helped specific missile programs, such as assistance with Iran's Shahab 3 missile. The report underlines the immediate threat posed by medium-range missiles, our continuing concern about existing and emerging ICBM's, and the increasing danger that comes from the proliferation activities of countries that possess or are developing such systems. We and the Rumsfeld Commission—using the available evidence, group debate, and outside expert review—came to some different conclusions about some of the timelines for ICBM development. Nevertheless, where evidence is limited and the stakes are high, we all need to keep challenging our assumptions—a role we will perform on this issue at least annually.

I'll now summarize the body of the report, which focuses on the threat through 2010:

Theater-range missiles already in hostile hands pose an immediate and increasing threat to U.S. interests, military forces, and allies. More countries are acquiring ballistic missiles with ranges up to 1,000 km, and more importantly, with ranges between 1,000 km and 3,000 km. As Iran's flight test of its Shahab 3 medium-range missile demonstrates, this is not hypothetical; it is a reality that has to be dealt with now. With a range of 1,300 km, the Shahab 3 significantly alters the military equation in the Middle East by giving Tehran the capability to strike targets in Israel, Saudi Arabia, and most of Turkey. The Pakistani Ghauri, also tested this year, allows targeting of Saudi Arabia, Kuwait, and the Gulf, in addition to increasing Pakistan's coverage of India.

Foreign assistance is fundamental to the growing theater missile threat. As we describe in the 1998 report, for example, Iran received important foreign assistance in developing its Shahab 3. Moreover, countries are seeking the capability to build these missiles independently of foreign suppliers. The growth in the sharing of technology among the aspiring missile powers is also of concern.

While we project that Russia's strategic forces will shrink, they continue to be modernized and will remain formidable. China has about 20 CSS–4 ICBM's, in addition to shorter-range missiles. Most of the CSS–4's are targeted against the United States, and modernization efforts will likely increase the number of Chinese warheads aimed at the United States. Our report further noted that we judge that an unauthorized or accidental launch of a Russian or Chinese strategic missile is highly unlikely, as long as current security procedures and systems are in place. Russia employs an extensive array of technical and procedural safeguards and China keeps its missiles unfueled and without warheads mated.

Among those countries seeking longer-range missiles, the report noted that North Korea is the most advanced, a judgment underscored by the recent launch. The report noted that North Korea could flight test the Taepo Dong–2 missile this year (with only a few weeks left of the year, this is likely another overestimation on our part) and that it could be deployed in a few years. Beyond the North Korean Taepo Dong–2, the March report judged it *unlikely,* despite the extensive transfer of theater missile technology, that other countries (except Russia and China as just mentioned) will *develop, produce, and deploy* an ICBM capable of reaching any part of the United States over the next decade.

Of course, the key words here were *develop, produce, and deploy.* As the report also noted, the purchase of a missile, either complete or as components of a kit, is

a different matter. In fact, we identified several alternative scenarios for a country to acquire an ICBM capable of reaching the United States *sooner than* 2010, without having to develop, produce, and deploy one. These included buying an ICBM, a space launch vehicle (SLV) to convert into an ICBM, or a complete production facility for either. The report judged that the current policies of Russia and China make sales-related scenarios unlikely, given potential political repercussions, the creation of a self-inflicted threat, and China's own military needs. Our report also pointed out that we cannot be certain that this will remain true over the long term. Indeed, the further into the future we project the politico-economic environment, the less certain we would be that the "value" of the sale would not outweigh these factors in foreign thinking. And, as North Korea develops its Taepo Dong missiles, sales become an increasing concern.

But ICBM's are not the only emerging missile threats to the United States. A number of countries have the technological wherewithal to develop the capability to launch ballistic (or cruise) missiles from a forward-based platform, such as a surface ship. Forward-basing from dedicated vessels or from freighters could pose a threat to the United States in the near term—well before 2010.

Our abilities to warn about the above-mentioned threats and postulated concerns vary. The 1998 report assessed that:

- We could provide *five years warning before deployment* that a potentially hostile country was *trying to develop and deploy* an ICBM capable of hitting the United Slates, *unless* that country purchased an ICBM or SLV (including having another country develop the system for them); had an indigenous SLV; or purchased a turnkey production facility. The comments I made earlier about our reporting over the years on North Korean ICBM development efforts underscore that warning ability.
- We could not count on providing much warning of either the sale of an ICBM or the sale and conversion of an SLV (conversion could occur in as little as two years). Nevertheless, if a hostile country acquired an SLV, we would warn that the country had an inherent ICBM capability. I note, however, that both the United States and the Soviet Union used systems we did not consider as ICBM's to place their first satellites into orbit. The satellite we orbited weighed only 14 kg.

These two warning capabilities must be understood in tandem. Unfortunately, the warning related to *sales* may dominate in the near term. As North Korea proceeds with its Taepo Dong developments, we assess that they will follow their current path and market them; at a minimum, aspiring recipients will try to buy them.

- We probably would obtain indications of the construction of a turnkey facility before it was completed, providing several years' warning.
- If a country had an SLV, it could probably convert it into an ICBM in a few years, significantly reducing warning time.
- Adapting missiles for launch from a commercial ship could be accomplished covertly and probably with little or no warning.

Finally, our report noted that *non-missile* delivery of weapons of mass destruction—biological, chemical, nuclear and radiological weapons—poses a serious, immediate threat to U.S. interests at home and abroad.

Outside Views of March 1998 Report

The tests of several medium-range missiles since that report was published underscored our theater concerns expressed in March. The three-stage Taepo Dong–1's ability to deliver small payloads to intercontinental ranges underscored our concerns about the possibility of a North Korean ICBM test this year. Since our March report was published, the Rumsfeld Commission and others have also commented upon the threat. There is broad agreement on several points:

- The threat is real and growing.
- Foreign assistance and proliferation are the fundamental reasons for the growing threat.
- Foreign denial and deception and resource constraints are making our job more difficult.
- There are plausible scenarios that could result in an increased missile threat to the United States with little or no warning.

Since information is limited, we also have some areas of disagreement. Our projections for North Korea, Iran, and Iraq differ from the 5-year general statement made by the Rumsfeld Commission. We project each country's programs individually, taking into account collaboration and foreign assistance:

- Thus, we were able to illustrate our view that North Korea is ahead of the others and could have an ICBM sooner, primarily because we believed that North Korea probably made the decision to acquire an ICBM at least a decade ago.
- The recently tested Iranian Shahab 3 is based on the North Korean No Dong and followed North Korea's test, even with foreign assistance, by several years. Nevertheless, Iran will continue to seek longer range missiles. If Iran follows a pattern similar to the Shahab 3 time frame, it would take them many years to develop a 10,000 km range ICBM to reach the United States. On the other hand, if they purchased an ICBM from North Korea or elsewhere or followed the approach North Korea recently demonstrated of placing a third stage on its boosters, it would be quicker. If they bought an ICBM with a sufficient range and payload capability, further development might be a moot point.
- When the Commission published its report in July, it considered Iraq to be behind North Korea and Iran relative to ballistic missile technology, assessing it would take Iraq 10 years from decision to deployment for an ICBM. Two months later, the Commission revised that judgment before the Senate Armed Services Committee, dropping the timeline to 5 years along with North Korea and Iran. We consider Iraq to have some advantages over other countries. Iraq was ahead of Iran before the Gulf war, and it has not lost the technological expertise and creativity. If sanctions were lifted, it would take them several years to develop a 9,000 km range ICBM to reach the United States. As with Iran, if Iraq purchased an ICBM, or followed the approach North Korea recently demonstrated, it would be quicker. If they bought an ICBM with a sufficient range and payload capability, further development might be a moot point.

1999 Report

We are already working on the 1999 annual report and are planning to include significant additional outside expertise and red teaming:

- Private-sector contractors are helping us identify alternative development paths that future ballistic missiles could take, including specific technologies and potential hurdles involved. These efforts include assessments of the effects of increased foreign assistance.
- We have scheduled a conference with the Center for Strategic and International Studies to have academia and others postulate future politico-economic environments that foster missile sales and increasing foreign assistance.
- This summer, the Intelligence Community published a classified paper that postulated ways a country could demonstrate an ICBM capability with an SLV, and examined various ways it could convert its SLV's into ICBM's. This work will also feed into the 1999 report as a generic look at some alternative approaches.
- Finally, drafting is underway on a paper that examines how countries could push Scud technology beyond perceived limits. Scientists and nonscientists are involved. Sometimes, those already outside the box can think outside the box more readily.

We also intend in the 1999 report—after discussing our projected timelines for likely missile developments and deployments, as well as our concerns for ICBM sales—to postulate and evaluate many alternative scenarios, including those mentioned above. Finally, we will be much more explicit and detailed in our discussions about warning. All these evaluations will be made through the lens of potential denial and deception efforts, to ensure that as our task gets more difficult, we provide our policy makers with a clear representation of what we know, what we don't know, what we can't know, and finally what we judge based on evidence, the lack thereof, and expertise from inside and outside the government.

Conclusion

In conclusion, I'll state that we, the Rumsfeld Commission, and some other outside experts agree that the missile threat confronts the Intelligence Community with an array of complicated problems that require innovative solutions. I would also emphasize how appreciative we are of the Commission's work. I particularly like the fact that they received approval to publish a relatively detailed unclassified report on the threat. We gave the Commission access to all the available intelligence information, regardless of classification.

Finally, the Commission made a number of excellent recommendations for how we can improve collection and analysis on foreign missile developments. Indeed, its report reinforces the DCI's call for a stronger investment in analysis and more aggressive use of outside expertise. Incorporating the Commission's ideas will strengthen our work. The missile threat is a serious and complex issue, one of many others that the Intelligence Community is working. We use many vehicles, including estimates,

briefings, and annual reports, to convey our analyses and warnings to policy makers and Congress. We will continue to do so on this and other issues.

[Whereupon, at 11:28 a.m., the committee adjourned, to reconvene at 10 a.m., May 4, 1999.]

BALLISTIC MISSILE DEFENSE TECHNOLOGY: IS THE UNITED STATES READY FOR A DECISION TO DEPLOY?

TUESDAY, MAY 4, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 10 a.m., in room SD–562, Dirksen Senate Office Building, the Hon. Jesse Helms (chairman of the committee) presiding.

Present: Senators Helms, Biden and Lugar.

The CHAIRMAN. Today's hearing is the third hearing in the Foreign Relations Committee's series on the 1972 Anti-Ballistic Missile Treaty. Today the committee will move from an examination of the missile threat to a discussion of the technological feasibility of missile defense.

We are privileged to have with us today to open this hearing the very distinguished chairman of the Senate Select Committee on Intelligence, Senator Richard Shelby.

As chairman of the Intelligence Committee, Senator Shelby knows the urgency of the missile threat better than anyone else, certainly anyone else in the Senate. As the senior Senator from Alabama, home of the Ballistic Missile Defense Organization of the Department of Defense, he knows the programmatic aspects of national missile defense inside and out, and if you want to find out how much he knows, engage him in a conversation. I do that occasionally, and I learn more from Richard Shelby than anybody in this general field.

Following Chairman Shelby, we will hear from several other distinguished experts: Dr. Bill Graham, former Director of the White House Office of Science and Technology Policy, and General John Piotrowski, former Commander in Chief of Space Command. If I have mispronounced your name, I am sorry. We also welcome Dr. Richard L. Garwin, a fellow at the Council on Foreign Relations, and Dr. David Wright, a fellow at MIT.

As I noted, this hearing is devoted to an examination of the technological feasibility of national missile defense, and I am convinced that after years of investment in the SDI Program, a national missile defense is eminently doable. The United States has proven that missiles can be intercepted with other missiles, but the task now is to do it consistently and reliably. The task is also to make certain that we can consistently strike incoming reentry vehicles even as other countries take countermeasures to penetrate our defenses.

The technological path our NMD program is taking, since it was first initiated by Dr. Graham under SDI, is the natural course for all technological developments. Consider, for example, the effort to break the sound barrier, and so forth and so on.

In the interest of time, I am going to ask unanimous consent, and I think I will get it, that the balance of my statement be made a part of the record. Senator Shelby, we welcome you and appreciate you coming.

[The prepared statement of Senator Helms follows:]

PREPARED STATEMENT OF SENATOR JESSE HELMS

Today's hearing is the third hearing in the Foreign Relations Committee's series on the 1972 Antiballistic Missile Treaty. Today the committee will move from an examination of the missile threat to a discussion of the technological feasibility of missile defense.

We are privileged to have with us today, to open this hearing, the very distinguished chairman of the Senate Select Committee on Intelligence, Senator Shelby. As chairman of the Intelligence Committee, Senator Shelby knows the urgency of the missile threat better than anyone else. And as the senior Senator from Alabama—home of the Ballistic Missile Defense Organization of the Department of Defense (BMDO)—he knows the programmatic aspects of national missile defense inside and out.

Following Chairman Shelby, we will hear from several other distinguished experts: Dr. Bill Graham, former Director of the White House Office of Science and Technology Policy, and General John Piotrowski, former Commander in Chief of Space Command. We also welcome Dr. Richard L. Garwin, a fellow at the Council on Foreign Relations, and Dr. David Wright, a fellow at MIT.

As I noted, this hearing is devoted to an examination of the technological feasibility of national missile defense. I am convinced that, after years of investment in the SDI program, a national missile defense is eminently "doable;" in fact, the United States has proven that missiles can be intercepted with other missiles. But the task now is to do it consistently and reliably. And the task is to make certain that we can consistently strike incoming reentry vehicles (RV's) even as other countries take counter-measures to penetrate our defenses.

The technological path our NMD program is taking, since first initiated by Dr. Graham under SDI, is the natural course for all technological developments. Consider, for example, the effort to break the sound barrier. Even as of the late 1940's, many scientists thought this technically impossible. Yet we ultimately succeeded despite the dangers, and failures, and—in this case—the tragic loss of life. Now the sound barrier is broken routinely, day in and day out, by passenger airplanes flying the Atlantic.

No doubt, we may hear today from scientists who don't think that a national missile defense can be done successfully. But as we consider these matters, I hope that the American people will recognize that the fact that the U.S. is defenseless today has nothing to do with technological issues. Instead, it has everything to do with political willpower and adherence to a ludicrous arms control treaty.

The NMD program has had notable successes despite dramatic funding cuts by the Clinton administration. Successes also have occurred in theater missile defense programs which demonstrate the feasibility of the same basic principles over 130 launches from 1960–1972.

So I must conclude that some who oppose NMD would have concluded at the turn of the century that, given the early failures of Samuel Langley and the Wright brothers, efforts to build an airplane should be shelved.

Now, before we turn to our first witness, I want to address the matter of "countermeasures." Some have begun putting forward the argument that any NMD built can be defeated easily by countermeasures. I must caution, however, that countermeasures are not a reality simply because someone draws a picture of one.

I am confident that a good many scientists can draw equally as compelling pictures of things to counter the counter-measures. But we need not get into an "art contest" at this hearing. I hope we can confine our discussion to the realm of the possible and not allow flights of fancy to lead us to predict either that missile defenses can do nothing to protect our country, or that they will be perfect in affording such protection.

STATEMENT OF HON. RICHARD C. SHELBY, U.S. SENATOR FROM ALABAMA

Senator SHELBY. Thank you, Mr. Chairman. Mr. Chairman. I ask that my complete statement be made part of the record in its entirety.

The CHAIRMAN. Without objection.

Senator SHELBY. Mr. Chairman, it is a pleasure to appear before the Committee on Foreign Relations as you continue your series of hearings on missile defense. I believe that this Nation needs a national missile defense system, and Mr. Chairman, we need it now. The threat is real and can no longer be ignored.

As this Nation formulates a national security strategy for the uncertainty of the post-cold war world, one key assumption which must be considered is that our future adversaries will plan to attack the United States where we are most vulnerable. Today the United States stands vulnerable to a ballistic missile attack. Until recently, this fact was downplayed by this administration.

There was a presumption, and perhaps a hope, that no real threat existed. As recently as 1995, intelligence estimates were predicting that no credible ballistic missile threat from other than the major declared nuclear powers would likely appear before the year 2010.

However, last year the bipartisan Ballistic Missile Threat Commission, lead by former Secretary of Defense, Donald Rumsfeld, reached a very different conclusion. The commission concluded that long-range missile threats to the United States might materialize much earlier than had been predicted. The report stated that within 5 years of a decision to do so, North Korea and Iran might be able to deploy missiles of sufficient range to strike parts of the continental United States, and that Iraq may be able to do so within 10 years.

The Rumsfeld Commission also determined that countries may be able to conceal ballistic missile development programs from our intelligence assets until shortly before deployment. This concealment will give the United States little or no warning of an imminent threat, Mr. Chairman.

The events of the past year appear to validate the findings of the Rumsfeld Commission and reinforce my belief that the threat is real. This past July, Mr. Chairman, Iran launched a 900-mile range missile capable of striking Israel.

In August, North Korea fired a three-stage ballistic missile over Japan that was estimated to have a maximum range of 3,700 miles. If perfected, this missile could reach Hawaii and Alaska, and just 10 days ago India and Pakistan each tested intermediate-range ballistic missiles with ranges of over 1,200 miles.

Additionally, Communist China has developed a force of ballistic missiles capable of striking the continental United States, and as we are learning, China has been persistent in its efforts to acquire advanced missile technology.

Mr. Chairman, how do we counter this threat? I recommend two courses of action. The first was completed when the Senate passed the National Missile Defense Act of 1999. This historic yet simple piece of legislation, along with a similar measure passed in the House, will make it the policy of the United States to deploy as

soon as it is technologically possible an effective national missile defense system capable of defending the territory of the United States against limited ballistic missile attack.

The second course of action, Mr. Chairman, is to continue our efforts to develop such a system. I support, as does a recent report by the Kado Institute, the deployment of a limited ground-based national missile system. If we continue our investment in advanced technologies, an effective ground-based system will soon be a reality.

Mr. Chairman, some opponents of the national missile defense have argued that treaties and superior intelligence gathering will protect this Nation from a future ballistic missile attack. I do not agree.

A treaty must add to a nation's security, not limit it, and as chairman of the Committee on Intelligence I can assure you that although our intelligence gathering is very good, it is not perfect by any means. I believe that the security of the American people should not depend solely on our ability to negotiate treaties or to conduct reconnaissance. We must have the ability, I believe, Mr. Chairman, to defend ourselves from the growing threat. The deployment of a limited ground-based national missile defense system would provide that ability.

Mr. Chairman, I appreciate what you are doing, and I appreciate your time and your courtesy here today. Thank you.

[The prepared statement of Senator Shelby follows:]

PREPARED STATEMENT OF SENATOR RICHARD SHELBY

Good morning Mr. Chairman, Senator Biden and members of the committee. It is a pleasure to appear before the Committee on Foreign Relations as you continue your series of hearings on missile defense. I believe that this Nation needs a national missile defense system and we need it now. The threat is real and can no longer be ignored.

As this Nation formulates a national security strategy for the uncertainty of the post-Cold War world, one key assumption which must be considered is that our future adversaries will plan to attack the United States where we are most vulnerable. Today, the United States stands vulnerable to a ballistic missile attack. Until recently, this fact was downplayed by the Administration. There was a presumption and a hope that no real threat existed. As recently as 1995, intelligence estimates were predicting that no credible ballistic missile threat, from other than the major declared nuclear powers, would likely appear before the year 2010. However, last year the bipartisan Ballistic Missile Threat Commission, led by former Secretary of Defense Donald Rumsfeld, reached a different conclusion. The commission concluded that long-range missile threats to the United States might materialize much earlier than had been predicted. The report stated that within five years of a decision to do so, North Korea and Iran might be able to deploy missiles of sufficient range to strike parts of the continental United States, and that Iraq may be able to do so within ten years. The Rumsfeld Commission also determined that countries may be able to conceal ballistic missile development programs from our intelligence assets until shortly before deployment. This concealment will give the United States little or no warning of an imminent threat.

The events of the past year appear to validate the findings of the Rumsfeld Commission and reinforce my belief that the threat is real. This past July, Iran launched the Shahab–3, a 900 mile range missile capable of striking Israel. In August, North Korea fired a three stage ballistic missile over Japan that was estimated to have a maximum range of 3,700 miles. When perfected, this missile could reach Hawaii and Alaska. And just ten days ago, India and Pakistan each tested intermediate range ballistic missiles with ranges of over 1,200 miles. Additionally, Communist China has developed a force of ballistic missiles capable of striking the continental United States. And as we are learning, China has been persistent in its efforts to acquire advanced missile technology.

Mr. Chairman, how do we counter this threat? I recommend two courses of action. The first was completed last month when the Senate passed the National Missile Defense Act of 1999. This historic yet simple piece of legislation, along with a similar measure passed in the House, will make it the policy of the United States to deploy, as soon as is technologically possible, an effective national missile defense system capable of defending the territory of the United States against limited ballistic missile attack.

The second course of action is to continue our efforts to develop such a system. I support, as does a recent report by the CATO Institute, the deployment of a limited ground based national missile defense system. If we continue our investment in advanced technologies, an effective ground based system will soon be a reality.

Mr. Chairman, some opponents of National Missile Defense have argued that treaties and superior intelligence gathering will protect this Nation from a future ballistic missile attack. I do not agree. A treaty must add to a nation's security, not limit it. And as Chairman of the Senate's Select Committee on Intelligence, I can assure you that although our intelligence gathering is very good, it is not perfect. I believe that the security of the American people should not depend solely on our ability to negotiate treaties or conduct reconnaissance. We must have the ability to defend ourselves from the growing threat. The deployment of a limited ground based national missile defense system provides that ability.

The CHAIRMAN. Senator, I thank you and the committee thanks you, and the Senate and the American people ought to be mighty grateful to you for what you are doing. What you have done in your statement today is what badly needs doing, and that is to underscore how little time we have to deploy a missile defense, and if we do not get ready, when a missile comes, it will be too late, will it not?

Senator SHELBY. It will be.

The CHAIRMAN. I am not going to question you further, but I am going to ask the staff to circulate your statement very widely, because I think the American people ought to know what you have said.

Senator SHELBY. Thank you, sir.

The CHAIRMAN. Thank you for being with us. Now then, I have already identified panel No. 2. Dr. Graham, the former Director of the White House Office of Science and Technology Policy. We have a lot of brain power here this morning, and I am equally grateful to each of you for coming here.

I usually do not start on the left, as policy, but I am going to do it this morning.

I call you the father of all this, Dr. Graham, and we will hear from you first.

STATEMENT OF DR. WILLIAM R. GRAHAM, FORMER DIRECTOR OF THE WHITE HOUSE OFFICE OF SCIENCE AND TECHNOLOGY POLICY

Dr. GRAHAM. Well, thank you, Mr. Chairman, and thank you for the opportunity to testify this morning. I would particularly like to address briefly the status of technology and some of the history of our experience in providing for the defense of the United States against ballistic missiles, and also the defense of our forces, allies, and friends in the world today.

Of course, much has happened in the world since March 23, 1983, when President Reagan first proposed that the United States address the protection of these interests against ballistic missile attack, and I would like to say a few words in my oral statement, and then ask that my written comments be made available for you.

The technologies and systems of both offensive ballistic missiles and the defenses against them have undergone much change over the last 30 years. As the threats evolve, the technical challenges and capabilities for defensive systems also have evolved.

During each era the challenges were formidable, only to be overcome and replaced by new challenges; however, during this evolution, the balance of the offense/defense capabilities has gradually been moving from the offense having the advantage to the defense having the advantage, and to place the use of ballistic missile defense technology in perspective, my written testimony reviews the challenges that confronted ballistic missile defense in each of the last three decades, and identifies the technologies that played key roles in overcoming those challenges.

Nonetheless, the U.S. is today at a substantial disadvantage compared with where we could be had we pursued ballistic missile defense in a more vigorous manner. The U.S. has not built an ABM system since the early 1970's, and, in fact, beginning in the late eighties the U.S. has downsized the defense industrial base very substantially by over half.

That downsizing accelerated in the first half of this decade, and in the process of downsizing, the U.S. lost many of the most knowledgeable and experienced technologists that we had in the fields of rocketry, sensing, and other related fields that are key to building viable defense systems.

Many of the problems that we have experienced in the THAAD flight test program to date, in fact, are typical of the development of the new technology, only in this case we have many new technologists who are learning to do advanced designs, so we are making the entry-level mistakes and learning from them.

We are paying the price of that downsizing and the loss of many of the lead engineers and senior technicians that we have been able to draw on in the past.

Second, on the negative side of the ledger, the ABM Treaty has had since 1972 a pervasive chilling effect on the U.S.'s ability to make full use of its technological capability to provide for our defense. Many examples exist, but I will give you one. There is a process and a group in the government, and it has been there for many years, called the Compliance Review Group, that examines systems and design for their compliance with the ABM Treaty.

It is composed primarily of lawyers, and they try to make legal interpretations of this diplomatically negotiated ABM Treaty. However, they do not review preliminary design concepts, they refuse to look at those. They insist on having a fully fleshed out design before they take a look at it. That in itself is a multi-year process just to get to the Compliance Review Group, and then the Compliance Review Group takes a substantial part of a year to conduct its review.

The fact is that you are down the road a few years before you get the word from the Compliance Review Group as to whether you have a design that you can proceed with or not.

Well, the message that sends to the engineers and technologists is stay away from anything that might be viewed as a limitation by the ABM Treaty, and we treat the ABM Treaty as a third rail in technical design processes, and that places a very severe con-

straint on us using our full technical potential for designing ABM systems.

An example of this is the fact that today the ABM system design that is being pursued by the administration suggests that we put our ballistic missile interceptors in Alaska, but among other things, use them to defend Miami, FL. This is a long way, and it takes an enormous amount of technical performance that is unnecessary if we built more interceptors and placed them in more locations either on shore or off shore around the country.

One more comment, and that is the lack of the now 24 years of experience since we deactivated the safeguard ABM system means that on both the operational front and on the technical design front there is a big gap in our experience in dealing with ABM systems, in building them, designing them, testing them, and operating them, and we are today trying to recover from that lack, but it will be several years before we make up for the education and the continuous learning that we did not obtain during the last 24 years when we could have been operating at least a rudimentary ABM system and chose not to.

Admiral Crowell used to make the case that it was against the U.S. interest to abandon the ABM Treaty, because the Russians, the Soviets, in that case, had gained so much more experience by operating their ABM system continuously since the early seventies, compared to us, that they could break out faster than we could.

I think he was right, at least in part, that we did lose a lot of experience during that time and we have to make it up now.

On the positive side, the advantage in the perpetual contest between offense and defense has over the last two decades, as I mentioned, been shifting toward the defense, at least in the technologies underlying our ballistic missile defense capability.

To mention some of the areas where the advantage is shifted, certainly, the capabilities of our radar systems have improved substantially, both in the transmit-receive function and also in the data processing, which I will come to in a moment.

Miniaturized spacecraft and spacecraft optical systems have made great progress in the last two decades, as have spacecraft infrared, visible, and ultraviolet sensors. Lasers, based on aircraft and satellite platforms have made enormous progress, and that progress is being used both in the airborne laser program being pursued by the Air Force today and in the space-based laser that is being pursued by the Ballistic Missile Defense Organization.

Small rocket propulsion, which is used, among other things, for maneuvering and diverting kinetic interceptors, or rocket-based interceptors, has improved greatly, and we can now build small thrusters with the thrust-to-weight ratio of over a thousand, but most important, our capability in computing has increased both by the decrease in the size of computers, but also simultaneously in the increase in their capability. In fact, these are related, and we have gone from an era when we had computers weighing several tons in the early 1960's or mid-1960's, like the Control Data–6600, and able to perform 10 million operations per second, to computers built on a single chip, which weighs a small fraction of an ounce, and are able to perform hundreds of millions of operations per second, and, in fact, when connected properly in groups and operated

with the appropriate software, they can now do hundreds of billions and in some cases even thousands of billions of operations per second.

Nothing has advanced like the speed and memory capacity of our computers in this last 20 years, and that is one of the key areas that benefits the defense far more than it benefits the offense. So in summary I would say the technology balance, while it will be an eternal challenge, and one can always invent an offense that will overcome a given defense, and one can always conceive of a defense that will overcome a given offense, the technology balance is moving toward the defense, and the U.S. should be taking full advantage of that. Today we are taking advantage of it under the serious constraints of the ABM Treaty. Thank you.

[The prepared statement of Dr. Graham follows:]

PREPARED STATEMENT OF DR. WILLIAM R. GRAHAM

THE STATUS OF TECHNOLOGY FOR DEFENSE OF THE UNITED STATES, ITS FORCES, AND ITS INTERESTS AGAINST BALLISTIC MISSILE ATTACK

Mr. Chairman and distinguished members of the committee, thank you for the opportunity to testify on the status of technology for defense of the United States, its forces, its allies and friends, and its interests throughout the world today, against ballistic missile attack

Much has happened in the world since March 23, 1983, when President Reagan first proposed that the United States address the protection of our vital interests against the threat of ballistic missile attack. I would like to address the results of the investment that our country has made in the technology of ballistic missile defense through the Strategic Defense Initiative and its successor, the Ballistic Missile Defense Organization.

RESULTS OF THE U.S. INVESTMENT IN BALLISTIC MISSILE DEFENSES

The technologies and systems of both offensive ballistic missiles and defenses against them have undergone dynamic change over the last thirty years. As the threats evolved, the technical challenges and capabilities for defense systems also evolved. During its own era, each of the challenges was formidable, only to be overcome and replaced by new challenges. However, during this evolution, the balance of capability has gradually been moving from the offense to the defense. To place the use of ballistic missile defense technology in perspective, this testimony reviews the challenges that confronted missile defense in each of the last three decades, and identifies the technologies that played critical roles in overcoming those challenges.

The 1950s

In the post-World War II era, the first strategic threat to the continental U.S. arose from Soviet long-range bombers carrying nuclear weapons. Defenses against aircraft—particularly bombers—had undergone extensive development as a matter of necessity in World War II, when allied forces in Europe employed a combination of radar for early warning, aircraft for high-altitude and standoff interception, and barrage balloons and ground-based anti-aircraft guns for local defense, all integrated using point-to-point voice communications over telephone and radio links.

As the strategic aircraft threat to the U.S. developed in the 1950s, the need grew for higher performance, more integrated air defenses. Air defense performance was improved through the development of several generations of jet interceptor aircraft of progressively greater speed, better armament for these aircraft including air-to-air missiles, and surface-to-air missiles. These latter missiles were usually tracked along with the target aircraft and command-guided to intercept by ground-based radars that were usually co-located with the missile launchers. The guidance loop went from the radar to the target and the interceptor missile, back to the radar, through an electrical analog computer, and to the interceptor missile with guidance commands. The systems were not sufficiently accurate to rely on a hit-to-kill intercept, so the interceptor missile carried either a proximity-fused high explosive warhead or a small nuclear warhead. The NIKE series of surface-to-air missiles, developed under the leadership of Bell Laboratories and deployed widely in the U.S. during this era, were examples of this technical approach. Countermeasures that had to be overcome included chaff jammers, and both passive and active decoys.

The 1960s

By the beginning of the 1960s, the progress that the Soviet Union was making in the development of long-range ballistic missiles, along with their ability to make large-yield thermonuclear weapons as demonstrated in their atmospheric tests, stimulated serious consideration in the U.S. of a national missile defense. The point of departure for such a system was the NIKE anti-aircraft system, which by that time had evolved through several generations of design and deployment. Bell Laboratories redirected its anti-aircraft work to the ABM problem, and drew upon its extensive experience to develop what became the NIKE X and then the SAFEGUARD ABM system that was deployed at a single site near Grand Forks, North Dakota, in 1975.

The SAFEGUARD ABM system consisted of a long-range surveillance Perimeter Acquisition Radar (PAR), a shorter range but more precise Missile Site Radar (MSR), ground-based digital computers, ground-based SPARTAN missiles for exo-atmospheric intercepts, and Sprint missiles for endo-atmospheric intercepts. Both missiles carried nuclear warheads, although of quite different types, with each optimized to be most effective in its altitude range of operation. The overall interceptor control loop was the same as it had been for earlier air defense missiles, other than the change from analog to large digital computers to solve the fire control equations and guide the interceptor to the vicinity of its target.

The SAFEGUARD system was linked to the Ballistic Missile Early Warning System (BMEWS) of radars and communications that had been established in the 1960s to monitor Soviet ballistic missile and space launches. It was interconnected by commercial long-line telephone carriers and military surface-to-surface microwave links, and was interconnected and controlled from the NORAD facilities inside Cheyenne Mountain near Colorado Springs, Colorado.

The SAFEGUARD system faced three major technical challenges. The first of these was traffic capacity. In the 1960s, digital computers were built from discrete components: individual transistors, resistors, etc. This form of electronics technology produced several inherent limitations on the speed of computation, and also imposed what by today's computer standards are severe practical limitations on the memory and processor size of the computer. These limitations in 1960s computer technology translated mid limitations in the ability of the SAFEGUARD system to handle multiple ballistic missiles and other objects such as chaff, jammers, or decoys simultaneously, which in turn gave rise to the possibility of defeating its defensive capabilities by saturating its processors with a barrage or countermeasure attack.

However, such an attack had drawbacks for the attacker. To produce a high-traffic attack, the offense would have to coordinate its launches so that the offensive missiles would arrive in the battle space of the radar and its associated computers nearly simultaneously. This degree of synchronization of the attack not only would place an additional requirement on the offense, but would also subject the offensive missiles to various forms of fratricide—the destruction or disabling of one offensive missile warhead by another.

To avoid multiple intercepts from a single defensive missile, the attacking warheads would have to be spaced sufficiently far apart so that one interceptor could not destroy more than one offensive warhead, and if the offensive warheads were fused to detonate when attacked, sometimes referred to as salvage fusing, the spacing would have to be sufficiently large that the salvage explosion of one offensive warhead would not kill another in the attack. Even if a following warhead were not killed, the anomalous aerodynamic conditions within the fireball created by either an offensive or defensive nuclear explosion could induce a substantial error in the targeting accuracy of a latter warhead—a particularly significant effect when the attack was directed against hardencd targets such as missile silos that required considerable offensive warhead accuracy to kill. Finally, crater ejecta from earlier warheads would still be airborne when later warheads arrived and that debris could be struck by rapidly moving incoming warheads, causing them to pre-detonate or even to be destroyed.

Countermeasures had always been a problem for radar-guided anti-aircraft. As Soviet missile defenses came into operation, U.S. strategic missiles began to incorporate similar countermeasures, and there was a concern that Soviet missiles might do the same. Some countermeasures, such as lightweight chaff, would only be effective outside the atmosphere, but others, such as replica decoys, could be designed to look somewhat like offensive warheads from deployment until they began penetrating the upper atmosphere and could quickly add still more traffic to the defended battlespace. To overcome such countermeasures, the performance of both the radar and the computers had to be sufficiently accurate to distinguish between the signatures and the trajectories and other dynamics of the decoys and the actual

warheads. This, in turn, put additional requirements on the defensive hardware and software capabilities.

Blackout and other nuclear explosion-induced radar propagation problems were another technical challenge. Blackout is caused by the ionization created by an atmospheric or exo-atmospheric nuclear explosion. That ionization can absorb or distort the radar signal as it passes through the region around the explosion, and result in either no return signal or a signal improperly directed back to the radar. Blackout and related effects would be caused by the explosion of a nuclear interceptor warhead, and could be caused by the offensive warhead as well if it were salvage-fused. To overcome these problems, the defensive system had to maintain a good model of the battlespace and the events occurring in it, and had to be able to correct for problems less than a total blackout of the radar signal. These phenomena imposed additional loads on the radar and its computers.

Finally, while not solely a technology problem, the siting issues associated with SAFEGUARD became a major impediment to its deployment in some areas. Missile and radar range limitations of the SAFEGUARD system necessitated the deployment of several radar/computer/missile installations around the country to protect the entire continental U.S. The most stressful threats in terms of battlespace available were not the Soviet ICBMs, but rather their sub-launched ballistic missiles—SLBMs. SLBMs could be fired from only a few hundred kilometers off the U. S. coastline, and could have flight times of ten minutes or less to the population centers along the coasts, and to the bomber bases and other military facilities inland. However, deploying any systems armed with nuclear warheads close to coastal population centers met with public and political resistance in some areas.

The 1970s

In February 1976, after ten months of operation at the Grand Forks site, the SAFEGUARD system was deactivated by Act of Congress. For the next seven years, ballistic missile defense activities were focused on R&D carried out primarily by the Army's Redstone Arsenal at Huntsville, Alabama; the organization that had directed the development of the SAFEGUARD system. During that time, substantial progress was made in the development of high-powered laser systems suitable for weapons applications and multi-spectral space-based sensors by the Defense Department's Advanced Research Projects Agency (ARPA), and by the Air Force.

During this era, great progress was also made first by the military and then by commercial initiatives in computer hardware technology. ARPA and other organizations carried out initiatives to develop large-scale, high-speed integrated digital circuits, which took the technology from a few tens of transistors on a single semiconductor chip in 1970 to tens of thousands in 1980 to numbers approaching ten million today. Equally impressive were the gains made in computer speeds. In the early 1960s, the world's foremost supercomputer—the Control Data Corporation's 6600—had a clock speed of ten million operations per second. By the late 1980s, personal computer microprocessors had reached this speed, and have continued to advance to today's speeds of 500 million operations per second, with good prospects for still higher speeds in the near future. Special purpose computers have recently been built that operate at speeds of hundreds of billions to trillions of operations per second. Integrated circuit semiconductor memories have experienced similar advances in capacity and speed.

The enormous progress made in computers during this era resolved several of the challenges encountered in the 1970s in the design and development of ballistic missile defense systems, including traffic handling capacity, nuclear effects modeling, and more countermeasure discrimination.

The 1980s

The establishment of the Strategic Defense Initiative by President Reagan in 1983 was a seminal event in the development of ballistic missile defense technology. Diverse activities that could contribute to missile defense were brought together from many Defense Department organizations, and focused in the Strategic Defense Initiative Office. With a new infusion of national interest and funding, rapid progress began to be made in the development of lightweight, high-powered laser systems and neutral particle beam devices. Early successes included the destruction of a TITAN booster structure in a static test stand by the Mid-Infrared Advanced Chemical Laser in 1985 and the first test in space of a neutral particle beam accelerator—the Beam Experiment Aboard Rocket (BEAR) in 1989.

In the 1960s and '70s, the limitations of ground-based radar tracking, relatively slow ground-based computing, and ground-based command guidance of the interceptors made it technically impractical for the interceptors to be maneuvered with sufficient accuracy to actually hit high speed offensive ballistic missile warheads. This

situation was overcome in the SAFEGUARD system by using nuclear explosives on the interceptors to extend their lethal range by at least a factor of a thousand over non-nuclear interceptors.

In June, 1984, the Army demonstrated the feasibility of a hit-to-kill ballistic missile interceptor with its Homing Overlay Experiment. This experiment used pre-SDI technology, resulting in a kill vehicle mass on the order of 1000 kg. The first formative reductions in component miniaturization gave rise to the highly successful Delta series (Delta 180–183). This sequence of experiments established the feasibility of the fundamental operations necessary to enable the space-based operation of a ballistic missile defense system. Operations ranging from target detection and acquisition to space based intercept were conducted. The mass of the kill vehicle used in the Delta series was of the order of a few hundred kilograms. The combination of miniaturized high-performance components, the large amount of computer power that could now be placed on a small interceptor, and the ability to integrate advanced components into a semiautonomous hit-to-kill interceptor made it possible for the first time to consider deploying a ballistic missile defense system composed of interceptors that could function with sufficient autonomy and precision so that each could intercept a warhead using only its on-board sensors, thrusters, and computers once it had been given the battlespace it was to defend and the authority to act.

The miniaturization of sensors, propulsion systems, and computers also progressed rapidly; for example, small rocket engines well suited for maneuvering either ground-based interceptors or satellites into hit-to-kill trajectories were developed that had thrust-to-weight ratios of one thousand. Advances in these technologies represented major progress, and opened significant new opportunities in the design of interceptors and space systems. This progress has been so profound that it is revolutionizing the design of both military and non-military space systems, and has already strongly influenced the plans, designs, and hardware of commercial, NASA, and military satellites.

The drastic reduction in the size and weight of the components which make up hit-to-kill interceptors has enabled new families of endoatmospheric and exoatmospheric kinetic kill vehicles. Taken together, this family of vehicles is known as LEAP (Lightweight ExoAtmospheric Projectile). The mass of these vehicles is as low as 10 kg in a package roughly the size of a coffee can. These vehicles are fully self-contained units which include the seeker, processor, guidance, and divert propulsion system—in short, a fully integrated projectile with enough computational capability to perform intercepts autonomously. Under other technology programs, liquid and solid axial engines have been developed which are specifically designed to propel the kill vehicles into the target.

The emergence of the LEAP capability has created the opportunity to leverage the AEGIS air defense weapon system currently deployed aboard dozens of Navy ships. This approach uses existing investments in hardware, infrastructure and training to provide a range of potentially near-term ballistic missile defense options.

A notable example of the ingenious use of SDI technologies was the design of the Brilliant Pebbles space-based interceptor in 1987. Brilliant Pebbles had been preceded by Project BAMBI, an Air Force concept of the early 1960s using space-based ABM kill vehicles that would guide themselves to intercept boosting ballistic missiles. But it would take another twenty-five years of technical development to make BAMBI feasible as Brilliant Pebbles. The BAMBI concept was reborn as Brilliant Pebbles of necessity in response to the projected cost of the first phase of deployment of a strategic defense system. The cost of this system was dominated by the space segment and was driven by survivability considerations and the use of technology proven in the Delta series. Brilliant Pebbles enabled a drastic reduction in the cost of the space segment while meeting all requirements. Brilliant Pebbles achieved survivability through proliferation, thereby distributing the intercept function across a number of elements. This approach obviated the need for expensive measures designed to ensure that every individual space-based asset be capable of surviving a direct attack. The proliferated nature of the Brilliant Pebbles concept enabled a production line approach, allowing dramatic cost reductions through economies-of-scale.

The difference between the earlier space-based interceptor and Brilliant Pebbles is akin to the difference between the MILSTAR and IRIDIUM communications systems. The Brilliant Pebbles interceptor was designed to weigh about 50 kilograms, and be deployed in a constellation of a few thousand satellites that, when commanded, could conduct autonomous hit-to-kill intercepts of offensive missiles and warheads. While the Brilliant Pebbles system was designed to operate exo-atmospherically as a defense against longer range missiles, it could also intercept missiles with ranges as short as 1000 kilometers. Unfortunately, the development of the sys-

tem was terminated in 1993, at the direction of the Administration that took office that year.

While the production and deployment of Brilliant Pebbles was never undertaken, the technology continued to be developed, and was ultimately proven with a space system called Clementine. The Clementine satellite was composed of all the components of a Brilliant Pebble and assembled into a configuration designed to demonstrate surveillance and interception for missile defense applications as well as a variety of civil space applications. The Clementine satellite was the first satellite to orbit the moon since the Apollo program over 25 years ago. Using SDI-developed sensors, Clementine produced the first complete photographic map of the surface of the moon, and it did so at a variety of visible and infrared wavebands. It also found the first indications of ice at the south pole of the moon.

Beginning concurrently with the Brilliant Pebbles development and continuing through the present, the Army has pursued development of miniature ground-based hit-to-kill interceptors and associated ground-based radars, designed to use cueing from space-based sensors for both theater ballistic missile defense and national missile defense. These interceptors would have a range of from tens to hundreds of kilometers depending on their booster velocity at burnout and—most importantly—the external sensor and command and control capabilities of the system. The Navy also began development of miniaturized ship-based interceptors that could be integrated into the AEGIS air defense system and used in conjunction with its shipborne SPY–1 radars, their advanced battle management system, and space-based sensors.

To a much greater degree than the space-based interceptor systems, the ground and sea-based systems have radar range and horizon limitations that in turn limit the performance of interceptors to ranges substantially less than the kinematic range of the interceptor itself. However, this limitation can be offset to a limited extent by using forward based early warning radars and to a large extent by using space-based sensors. Drawing from the technological advantages exploited by Brilliant Pebbles, the MSTI satellite series (MSTI I—MSTI III) demonstrated the feasibility and practicality of such an approach, gathered key background data, and demonstrated all the key sensor functions—such as target detection, acquisition and tracking. The "footprint" or defended area of surface-based systems depends very strongly on the availability and use of external sensing and tracking of offensive missiles.

Following the conceptual development of the Brilliant Pebbles interceptors, and in view of the rapid progress being made in the development of small, lightweight sensors and satellites, Dr. Gregory Canavan proposed the development and deployment of a constellation of about twenty to forty surveillance, tracking, and attack assessment satellites, communicating through satellite-to-satellite links with downlinks to ground stations from any satellite within line of site, in orbits about 1000 kilometers in altitude. The system was called Brilliant Eyes, since it used much of the same technology as the Brilliant Pebbles interceptor satellites. The Brilliant Eyes system is currently being addressed in an Air Force program called the Space and Missile Tracking System (SMTS). Unfortunately, that program has recently been started for the third time and is proceeding slowly if at all.

The importance of Brilliant Eyes, or SMTS, can hardly be overestimated. For example, Figure 1 shows the ratio of the areas that could potentially be defended by the THAAD ground-based theater defense missile limited only by the kinematics of the missile compared with the area defended using only the planned ground-based radar located with the missile launcher. For offensive missiles of over about 1,500 kilometers range, the ratio of defended areas is more than a factor of 10.

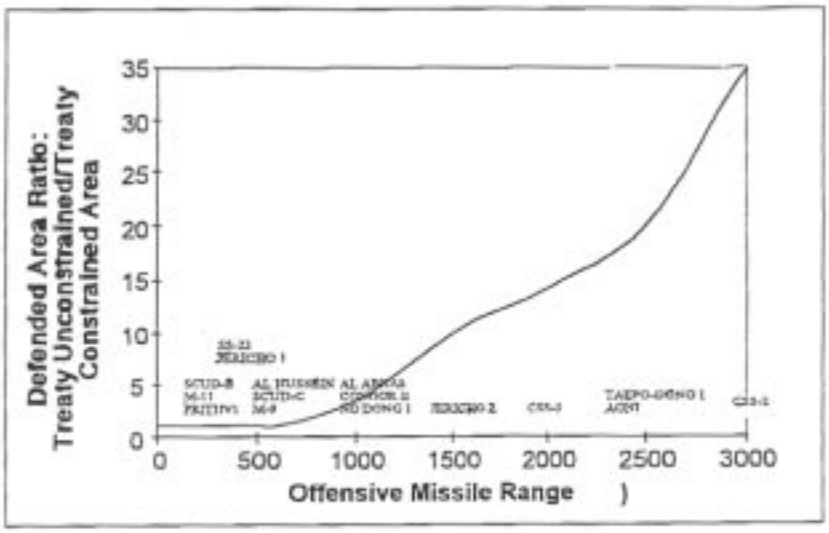

Figure 1: Cost of the ABM Treaty to THAAD in Ratio of Unconstrained vs. Constrained Area Defenses

The significance of space-based sensing such as Brilliant Eyes becomes even clearer when the benefits are characterized in terms of relative dollar costs to obtain an equal capability. In the case mentioned above, the area that a surface-based interceptor system can defend using only its co-located radar is one-tenth the area that the same interceptor can defend using space-based sensing. Therefore, to defend the same area without space-based sensing, ten times as many missile/radar systems would have to be deployed, at a cost that would be approximately ten times as much as the same capability using space-based sensing to its fullest potential.

The shift in emphasis from the multi-thousand warhead threat that could be deployed by the Soviet Union (or its successor, Russia) to a much smaller threat that could be deployed today by China, and in the near future by other states, has shifted the ballistic missile defense focus to smaller scale deployments. A change begun with the Global Protection Against Limited Strikes (GPALS) in January 1992, and continued through May 1993. With the increase in computer power and the absence of nuclear explosives on the interceptors, together with the advances in multi-spectral infra-red, optical, and ultraviolet sensors, problems of traffic management, discrimination, and blackout have been substantially reduced and in some cases eliminated.

Recent Technical Challenges

Soon after the Strategic Defense Initiative was begun, a new problem was put forward as a potential fundamental limitation to the capability of strategic missile defenses. Since the time available for operator intervention during an attack would be minimal, the potential problem was software—the underlying logical instructions that govern the operation of the system's computers, and therefore the system itself. Some asserted that it would be infeasible to construct software of tens of millions of instructions without introducing errors that would only appear during attack and would render the missile defense ineffective. However, over the last decade, computer software technology has also advanced at a rapid rate, and the ability to test software has kept pace, so that today it is routine for people not expert in software to install and operate reliable programs of tens of millions of instructions on personal computers.

The cost of missile defenses is periodically raised as another barrier to the deployment of effective systems. Fortunately, the use of the SDI's miniaturization technologies had a very significant effect on reducing systems cost. At the same time that the Brilliant Pebbles system was proposed, another military organization proposed a space-based system using earlier technologies. Cost estimates of the latter system indicated that it would be prohibitively expensive, and raised the prospect

of terminating space-based interceptor systems. However, initial cost estimates of the Brilliant Pebbles system indicated that it would have a much lower cost than the system using more conventional technology.

For chemical and biological offensive warheads, submunitions remain a concern. They can be dealt with most directly by intercepting the offensive missile while it is still in boosted flight, before it can deploy the submunitions. Such defensive systems are referred to as boost phase interceptors. Since powered flight of an offensive missile usually extends through the first one to five minutes of its trajectory, only that amount of time is available for performing a boost phase intercept. Intercepting an offensive missile in such a short time after launch requires both a close proximity and rapid response for a rocket-propelled kinetic interceptor. While such a capability is technically feasible, for many situations of interest to the U.S., kinetic boost-phase interceptors are not being pursued as a system development program.

The Air Force is pursuing another approach to boost phase intercept. Building on the progress that has been made in high power laser systems, it is developing a system that can be carried in a large aircraft and uses a laser beam to destroy missiles in boost phase at distances greater than can be achieved with kinetic interceptors. Rapid progress has been made in compensating for beam imperfections and atmospheric propagation effects, both of which can limit the effective range of such a system.

The U.S. missile defense program has successfully overcome a series of formidable technological and systemic challenges. Major hardware and software obstacles have been resolved, and miniaturization of sensor, propulsion system, and computer technologies have greatly reduced cost issues. The diminished size of the anticipated missile threat also has significantly facilitated the resolution of technological and operational problems. The principal challenge today is not in the technology, which has made great progress and continues to advance, but in the national commitment to proceed with deploying effective missile defenses, and to do so in an efficient and expeditious manner.

The substantial accomplishments of the Strategic Defense Initiative and its successor Ballistic Missile Defense Organization have brought about revolutionary advances in other areas of military space capabilities and in scientific and commercial space enterprises as well. For example, in the military area, the development of small, inexpensive, highly capable satellites has given the U.S. the opportunity to move away from dependence upon the infrequent coverage of specific ground areas by a few large satellites for weather observation, reconnaissance, and other functions, and toward nearly continuous coverage of all ground areas by constellations of small satellites.

In the scientific exploration and exploitation of space, SDI technology has changed the paradigm for spacecraft systems. Before SDI, scientific spacecraft built by NASA and other organizations typically weighed thousands to tens of thousands of pounds and cost in the range of a billion dollars. Today, both deep space and earth-orbiting scientific satellites typically weigh in the hundreds of pounds and cost about 10% of their predecessors. Clementine, the first U.S. spacecraft to orbit the moon in 25 years, and made the initial discovery that ice might be present at the lunar southern pole, could not have been built without SDI technology. Future scientific spacecraft will be even smaller, less expensive, and deployed in greater numbers than Clementine and its peers.

The recent progress in commercial spacecraft and their applications is also the result of SDI technology. The constellations of small, low-orbit communications satellites such as the Iridium and Teledesic systems depend upon highly capable, inexpensive, miniaturized, autonomous spacecraft for their commercial feasibility. Today, billions of dollars are being invested in these systems, and many billions of dollars will be earned over their lifetimes.

The CHAIRMAN. Thank you very much.

General, is it "Piotrowski"——

General PIOTROWSKI. Sir, you pronounced it exactly correct.

The CHAIRMAN. Did I?

General PIOTROWSKI. Yes, sir.

The CHAIRMAN. General, it is a pleasure to have you. Thank you very much for coming. You may proceed.

STATEMENT OF GEN. JOHN PIOTROWSKI, FORMER COMMANDER IN CHIEF, SPACE COMMAND, COLORADO SPRINGS, CO

General PIOTROWSKI. Mr. Chairman, thank you so much for asking me.

I would like to draw a historical perspective. My background is operational and programmatic, and as you are well aware, Mr. Chairman, program success is often largely dependent on the goals established, the motivation behind the program, and where it sits in the national priorities.

For example, if President Kennedy in the decade of the sixties had said, "It may be necessary to go to the moon, I am not sure, but what I would like to do is develop the technology, and by the end of the decade I will review it, and if I find the need, then I will make a decision to go to the moon."

The greatest technological achievement, certainly in my lifetime, was the Apollo program. It was not structured that way. It was a top national priority. There was an instate, put a man on the moon by the end of the decade and bring him back to earth, and it was properly funded. I have something the NASA administrator used about a month ago in a presentation, and it shows that in year 2000 dollars the Saturn rocket alone was $48 billion. At the same time, the lunar escape module cost the Nation about $16 billion in current year dollars.

As the Senators will remember, that was a time when we were building the Great Society, we were fighting a major war in Vietnam with a million or so people on the ground, and modernizing our weapon systems at a rapid rate. This Nation can do daunting technological programs and do them well if they are prioritized, if there is an instate, and if we are motivated. The motivation is there. As panel one and Senator Shelby stated, there is a threat.

From an operational perspective, I am absolutely convinced as an operator that our senior military leaders today, if given the tools, can defend America. There is another operational advantage to having a ballistic missile defense, whether it is national, theater, or global. It devalues ballistic missiles. Today they are immutable.

They are very attractive, because they cannot be stopped, but if we could stop them, it would, first, devalue ballistic missiles at all levels, and second, open up other operational avenues to pursue. For example, if North Korea decided to blackmail the United States by threatening Oahu or Los Angeles, if we had a ballistic missile defense, the Nation's leaders could take a decision to preempt, knowing that if some escaped or if some were launched out from under attack, they could be defeated, and we could eliminate that scourge permanently.

Now, again, I would like to end by saying I am convinced that our military leaders of today can do this job, do it right, make the right decisions and defend America, if given the tools.

Thank you, sir.

The CHAIRMAN. Before Dr. Garwin proceeds, I would like to ask the distinguished ranking member of the committee, Senator Biden, if he has an opening statement, and I hope he does.

Senator BIDEN. Mr. Chairman, I do, and I appreciate your graciousness, I apologize for being late, I was still on the floor in the

aftermath of the last vote, and I will wait with your permission until the rest of the panel——

The CHAIRMAN. Very well.

Senator BIDEN [continuing]. Goes and then make my statement.

The CHAIRMAN. You may proceed.

Senator BIDEN. Thank you.

STATEMENT OF DR. RICHARD L. GARWIN, PHILIP D. REED SENIOR FELLOW FOR SCIENCE AND TECHNOLOGY, COUNCIL ON FOREIGN RELATIONS, NEW YORK, NY

Dr. GARWIN. Thank you for the opportunity to appear before you. I request that my written testimony be included in the record, and I'll summarize it.

The CHAIRMAN. Without objection.

Dr. GARWIN. Thank you. Senator Shelby indicated that an enemy would attack the United States where it is most vulnerable, and presumably where they can achieve such an attack, but unlike Russia, these countries that we are talking about today, North Korea, Iran, Iraq, have no capability to destroy the United States as a whole. They can nibble around the edges, where it is easiest for them, and most difficult for us to defend.

So given a will to damage the United States and our geography, Hawaii would be struck by North Korea with short-range cruise missiles or ballistic missiles from ships, Los Angeles, San Francisco, New York, Washington, Seattle, San Diego, are all vulnerable, and we have absolutely no defense, and no proposal to defend against these cruise missiles or short-range ballistic missiles, or nuclear weapons detonated in harbors.

So my problem with the national missile defense is that it defends against a threat which is most difficult for the other side to prepare, and as I will indicate, does not do that at all either.

Now, with Dr. Graham, I was a member of the Rumsfeld Commission, and with the other eight members, we unanimously endorsed the threat that could appear within 5 years by these three stated countries, joining the thousands of ballistic missile nuclear warheads present in Russia and the ten or twenty in China, and, of course, the hundreds available to the French and the British. A few other countries could do the same, but they are not classed as enemies.

Rather than give my view of the history of the national missile defense program, I want to render a judgment. In the early stages of the program it is contemplated that 75 ground-based interceptors would be built, and about 25 deployed to counter a relatively few warheads. The system specifications require an extremely high confidence that not a single warhead penetrate to U.S. soil. In my opinion, no system thus far proposed could achieve such confidence even against cooperating warheads.

Senator BIDEN. I am sorry. What kind of warheads?

Dr. GARWIN. Cooperating warheads.

Senator BIDEN. Cooperating warheads.

Dr. GARWIN. Warheads that would be launched like puppy dogs——

Senator BIDEN. I got it.

Dr. GARWIN [continuing]. Wagging their tails, and wanting to be slapped with hit-to-kill interceptors. But the problem with the national missile defense is not simply that it would not fulfill the stated requirement, but that it would have essentially no capability against a long-range missile system that would be deployed by North Korea, Iraq, or Iran to strike the United States with biological weapons or with nuclear weapons.

The problem is really simple. Consider the use of biological weapons, a country could put a payload of a hundred kilograms or a ton of anthrax or other germs into a reentry vehicle, have it come down in the middle of Washington, (or upwind would be better), strike the ground, and deliver all of these germs.

The result would be a very narrow plume carried by the breeze, which would kill most of the people in its path, but would leave those outside the plume untouched, except in the case of extremely contagious germs, such as small pox, where one carrier could cause an epidemic.

But a country would make much better use of their payload capacity by packaging the biological weapon in the form of individual bomblets that would be released just after boost, when the ICBM would reach its full velocity, and these would fall through space and reenter individually with a limited amount of heat shield protection against the reentry heat, and after the heat of reentry the shield would be shed, as was the case with the reentry of the film capsule in the first U.S. strategic reconnaissance system, CORONA; the bomblets would fall to earth, where a thoroughly tested device would expel the biological agents. Given this approach to increased military effectiveness, the planned national missile defense system has no possibility of making its intercept so early in the trajectory.

Now, let us look at nuclear warheads. You cannot break up nuclear warheads into one-kilogram bomblets, but there is something else that could be done against these hit-to-kill interceptors which would be equally effective. That is for the offense to arrange for the nuclear warhead to be enclosed in a balloon, a large balloon made of plastic Mylar, coated with aluminum foil, a balloon that could be almost the size of this room, and a warhead somewhat bigger than me would be hidden in there someplace.

Everything would work according to plan, the launch would be seen by the defense support program, DSP satellites; an alert would be sent to the upgraded early warning radars; they would see eventually this big balloon containing the warhead or not; the interceptors would be launched; an interceptor would strike the balloon, it would not strike the warhead, because the balloon is so much bigger. It might even, we do not know, because of the shock of the collision of the thin balloon against the interceptor, it might create enough gas really to blow the whole balloon away, but another balloon could have been shrunk down on the reentry vehicle and now deployed within a second or so, and once again, hide the warhead from further intercept.

If they did not like that particular approach—and people often do not use my ideas until 20 or 30 years later, but eventually they often do, as with the global positioning system, or the cruise missiles, or the laser-guided bomb that we pushed so hard in the

1960's—if they do not like that particular approach, they could do another countermeasure which would be different, using smaller balloons, not much bigger than the warhead, so striking the balloon might strike the warhead, if the balloon contained a warhead. But in this case they could have perhaps ten or twenty balloons made of the same plastic, coated with aluminum.

The purpose of the aluminum is to keep the radar from looking in the interior and to keep the infrared or the visible from seeing through the balloon. But the reentry vehicle has a lot of heat, because it is an object at room temperature, and it would be radiating to the balloon, so this balloon would be warmer than the other balloons, the decoys, that would have no reentry vehicles. No problem.

You go to your local store, you buy a one-pound lithium battery, it might cost you $50, and you put it in these other balloons so that they are being warmed just as the reentry vehicle warms its balloons.

Now, we have always from the very beginning "spun up" our warheads so that they reenter more accurately, but other countries have not done that. If you are going to discriminate a warhead which is spinning from decoys that are not, well, that is an easy thing to do; but if you do not spin your warhead, if you have antisimulation, that is, you make the warhead easier to simulate, because it is coated with a lumpy aluminum-covered balloon rather than showing its beautiful machined surface, then these decoys become much more feasible.

So the national missile defense would have no capability against bomblets carrying biological agents dispersed on ascent, or against a nuclear weapon in a large enclosing balloon; nor would it discriminate a warhead in a small balloon, properly done, from perhaps ten empty decoy small balloons; it would neither see nor be able to intercept short-range ballistic missiles launched from ships near U.S. shores; and it would neither see nor be able to intercept short-range cruise missiles launched from ships. Nevertheless, it is still possible to protect the United States against attack by long-range ballistic missiles.

Now, first, we have to really believe and attend to our deterrent, that is, to ensure that people who strike the United States realize that they will be struck back. They may even be struck preemptively, as General Piotrowski says, and that is something that I would favor under many circumstances.

Even so, they might build a limited ICBM capability for political reasons, despite the insecurity that it would pose to them. In addition to devaluing ballistic missiles, building a defense against them actually values them, it shows you take them seriously. So it is not clear to me which of these arguments outweighs the other.

But if you want to intercept an ICBM, you can do it in boost phase. That will handle this nuclear weapon inside its enclosing balloon; That would handle the biological weapons before they are disseminated, and the task of a homing interceptor is a lot easier in boost phase, because it sees the rocket plume rather than having to see the——

Senator BIDEN. Dr. Garwin, may I ask a question. How long is boost phase? When you say boost phase, most people are not tech-

nically proficient. I assume it means just at the moment it is lifting off the pad. Is that all it is, or to what height is——

Dr. GARWIN. Thank you. The boost phase typically extends for 4 or 5 minutes for an ICBM, because there are three stages or so, and the ICBM cannot go too fast in the lower portions of the atmosphere, so that is a pretty good number. It is possible—we have considered making ICBM's that would reach their full speed in 100 seconds.

They go quite a ways down range, maybe several hundred miles, before they reach their full speed, and that is the key to the intercept, because the interceptor can launch more rapidly, get up to its full speed—the same speed as an ICBM—in 100 seconds; and that means that it has this extra 150 seconds or so to catch up with it if it is launched from behind, but if it is launched from the side, then it can be launched down range a thousand miles or so, and intercept from any region, which might be a thousand miles or more in diameter.

So there is a vast area from which interceptors could be deployed, and still make an intercept of a North Korean-launched ICBM, launched north, as they must be, against the United States, in boost phase.

We could even, if the Russians cooperate, make a joint ABM test range south of Vladivostok, really close. We could use, in fact, much simpler interceptors from there, but we could also do it from ships or other places in a vast range of neighborhoods there.

VC-based capabilities might be useful for defense of Japan, against boost phase, against theater-range missiles launched from North Korea. We already have an agreement with Russia and three other countries, of September 26, 1997, which I hope will be ratified soon, a provision by which the parties to the ABM Treaty of 1972 accept the deployment of ballistic missile defenses that do not, quote, "Pose a realistic threat to the strategic nuclear force of another party."

That is "another party" to the 1972 ABM Treaty; but North Korea is not a party, there is no reason why we should not have a defense against North Korea. China is not a party, but China raises different questions.

So in conclusion, we should not deploy the proposed national missile defense unless it is proved capable of handling the countermeasures that can realistically be employed by the potential adversary, and I really do mean these countermeasures of enclosing balloons, and anti-simulation, and biological weapons dispersed on ascent.

Furthermore, the evaluation of national missile defense should start from scratch, not to prove that the thing that we have proposed will work, because it will not; to start with scratch with the use of ground-based or ship-based interceptors that will destroy the offensive missiles in boost phase before they can release bomblets or separate a warhead that could then provide itself with an enclosing balloon.

Finally, there is no reason to abandon the protection of the ABM Treaty that constrains Russian defenses and thus allows the United States to deter Russia with modest numbers of nuclear

weapons, thus facilitating great reductions in the only nuclear threat to the survival of the United States. Thank you.

[The prepared statement of Dr. Garwin follows:]

PREPARED STATEMENT OF DR. RICHARD L. GARWIN

INTRODUCTION

This Committee knows well the characteristics of the threat facing the United States, which were reviewed in part by the Rumsfeld Commission in 1998. As one of the nine members of that Commission, I concurred in the unanimous report published July 15, 1998, which assessed the ballistic missile threat to the United States.

In brief, we considered both nuclear weapons and biological weapon payloads as strategic threats. We noted the thousands of warheads still available and deliverable by long-range missile from Russia; the 10 to 20 ICBMs available to China, armed with nuclear weapons; and the possibility that any of three additional nations with which the United States is not on friendly terms—North Korea, Iran, or Iraq—could within five years of a decision to do so have an ICBM that could strike some of the 50 United States. This judgment was based on the assumption of a concerted program, well funded and given priority, with due attention to denial and deception, as it has been increasingly practiced by countries that wish to hide the scope of their activities from U.S. intelligence.

Of course, other nations have much greater capabilities than these three; for instance, Britain or France could deliver hundreds of nuclear warheads against the United States, but we have no fear that they would do so. With its space launch vehicle, India could also deliver a nuclear weapon, and Israel has apparently quite a few nuclear or thermonuclear weapons, but they are also not classed as threats to the United States.

The Rumsfeld Commission further noted that short-range ballistic missiles based on ships and armed with nuclear or biological payloads would constitute a threat more readily available than ICBMs to North Korea, Iran, or Iraq; and that ship-launched cruise missiles available commercially would add to that threat. The Rumsfeld Commission did not consider as a group the vulnerability of the U.S. to BW attack from ships off shore, from cars or trucks disseminating BW, from unmanned helicopter crop dusters, or from smuggled nuclear weapons or nuclear weapons detonated in a U.S. harbor while still in a shipping container on a cargo ship; but these capabilities are more easily acquired and more reliable than are ICBMs.

In January 1999, Secretary of Defense William Cohen announced that a decision to deploy a National Missile Defense would be considered in summer of the year 2000, based on the existence of the threat and the technological readiness of an NMD system to counter it. He modified the Administration's "3 + 3" program which had promised that within three years (by the year 2000) an NMD would be developed capable of deployment within the following three years (2003), so that deployment would now take place in 2005 in case of a favorable decision in summer, 2000.

The "3 + 3" program had intended that development would continue in the case that deployment was not authorized, so that year by year what could be deployed within three years of a decision to do so would be increasingly capable. A decision to deploy would need to freeze the technology in order to build a system within three (or five years).

NATIONAL MISSILE DEFENSE

Rather than recount my view of the history of the NMD program, let me just give a judgment on the program as it is now defined. It is contemplated that to counter a relatively few warheads, 75 ground-based interceptors (GBI) would be built, and some 20 deployed. The system specifications require extremely high confidence that not a single warhead penetrate to U.S. soil. In my opinion, no system thus far proposed could achieve such confidence, even against cooperating warheads.

Nevertheless, the problem with the NMD system is not simply that it could not fulfill its stated requirement, but that it would have essentially no capability against a long-range missile system deployed by North Korea, Iraq, or Iran to strike the United States with biological weapons or with nuclear weapons.

I make this judgment on the basis of a substantial knowledge of the NMD system as it is proposed, of previous efforts to develop a system of missile defense of the nation (and of Theater Missile Defense), and of a close look over the decades at countermeasures that are feasible to defeat missile defenses.

The problem is a simple one. Begin, for instance, with North Korea. If North Korea wished to maximize its capability to cause death or damage in the United States by the launch of a first-generation ICBM, it would not use a so-called unitary payload of BW, which would perhaps deliver tens or hundreds of kilograms of anthrax or other infectious or even contagious microbe on some city. The result would be a very narrow plume carried by the breeze, which would kill most of the people in its path, but would leave those outside the plume untouched, except in the case of extremely contagious germs such as smallpox.

Rather, a country could make much better use of a limited payload capacity by packaging the BW agent in the form of individual bomblets that would weigh a kilogram or so, and that would be released by the missile just as soon as it had reached its full velocity on ascent. That is, just after boost phase. The bomblets would fall separately through the arc of the trajectory to their target, and would reenter the atmosphere without incident, having been provided with a thin ablative reentry shield. After the heat of reentry, the shield could be shed, as was the case with the reentry of the film buckets of the first U.S. strategic reconnaissance system—CORONA, and the bomblets would fall to Earth, where a thoroughly tested device would expel the BW agent. This could be a mild explosive burster charge or some other mechanism.

Given this approach to increased military effectiveness, the planned National Missile Defense system has no possibility of making an intercept so early in the trajectory.

If the adversary has a nuclear weapon that can be delivered by ICBM, it can evidently not break it up into 1-kg bomblets. A first-generation nuclear weapon would probably have a yield of 10 to 20 kilotons (like those U.S. nuclear weapons that devastated Hiroshima and Nagasaki in August 1945). So the NMD system would have a chance to observe the flight—first the DSP satellites would see the booster flame (as in the case of BW as well); then the upgraded early warning radars would see the warhead in mid-course, together with whatever simple countermeasures might have been used (and the spent final-stage fuel tank); and X-band radars would perhaps help to discriminate the real warhead from decoys or junk. A sufficient number of ground-based interceptors would be launched to obtain (in principle) the desired damage expectancy by their hit-to-kill intercept against the incoming nuclear warhead. If the interceptors were based at Grand Forks, ND, there would in general not be time to observe the success of an intercept before launching a second GBI. If the interceptors were based in Alaska, a launch from North Korea would provide some time for such shoot-look-shoot. To my mind, there is no significant difference between the protection of the country offered by interceptors based in Alaska compared with those based in North Dakota. Protection would be negligible in either case. The reason is that a simple countermeasure would defeat the system as planned.

Depending on the preferences of the adversary, this countermeasure could take the form of a large enclosing balloon around the reentry vehicle that contains the nuclear warhead. Immediately after achieving full velocity, the warhead would separate from the final stage of the missile, and a simple gas generator containing a few grams of material (like that in every airbag in modern automobiles) would gently inflate a metallized plastic balloon that had been crumpled down onto the warhead by a simple vacuum cleaner exhausting most of the air. Or inflation could be done simply by compressed gas. A warhead that might be five feet long could be enclosed in a balloon 30 ft. in diameter, so that it would be perfectly well visible to the radars and to the hit-to-kill homing vehicle of the ground-based interceptor. But the homing vehicle which would strike the balloon (if all goes according to plan) would have very little probability of striking the warhead contained within. A thin aluminum coat on the plastic is opaque to radar and also to infrared invisible light, which are the means by which the homing kill vehicle (HKV) is expected to strike its target.

Depending upon the characteristics of an isolated target, such intercept might take place in principle with an accuracy of one foot or less, providing high probability of kill (if the equipment and software is reliable—which it is not yet). But with the aimpoint hidden, the chance of striking the warhead would be tiny, considering its small size compared with the enclosing balloon.

One might imagine that the collision of the warhead with the balloon would generate sufficient gas from the very high velocity impact of the thin balloon on the interceptor as it is going by, to blow away most of the remainder of the balloon and thus to expose the warhead, bare, to the other interceptors that may follow. This is a possibility, and the United States would no doubt wish to test this prospect (following the best analysis we can do), but unfortunately for the effectiveness of the defense, this approach is readily defeated by the offense, without testing in space.

The offense could have several such balloons shrunk down one over the other, and independently expanded when the outermost balloon is blown away.

It is not necessary to define the countermeasures that an adversary nation might use, but only to understand those that might work. They could choose among several others.

Another simple countermeasure that might have greater appeal to some, would be to use not a large balloon but a small one, not much bigger than the warhead itself. Then additional small balloons would serve as decoys, if the HKV could not tell them apart by means of its multi-spectral sensor. More than 30 years ago, the Strategic Military Panel of the President's Science Advisory Committee, of which I was a member, observed that an adversary would no doubt use "anti-simulation" rather than rely strictly on a decoy's simulating the characteristics of the warhead.

Thus, if the warhead were to be coasting bare through space, perhaps spinning in a stable fashion, decoys in order to be credible would need to be pretty much the same size and have the same spin. However, with anti-simulation, the idea is that the warhead would be modified or clothed, so as to make it easier to simulate. The warhead would simulate a cheap decoy, rather than the decoys being required to simulate an expensive and precise warhead.

An easy way to begin anti-simulation is to put the warhead in a small lumpy balloon. This would take care of the radar simulation quite well. It might be better also to have a warhead that is not spun up, as was the case with warheads of other countries for a long time. Spinning the warhead improves the reentry accuracy, because a displacement of the external reentry vehicle from the center of mass of the warhead otherwise leads to substantial error. But the first-generation ICBMs are so inaccurate that this will not be a significant impairment of their accuracy. In any case, it is entirely possible for a warhead to be spun up just as it begins to reenter and after all possibility of intercept by the NMD system has passed. When to spin is simply a design choice, and if spinup before reentry helps to penetrate an NMD system, it can readily be done.

The warhead itself has substantial mass (perhaps 500–1000 lbs.) and so does not cool appreciably in its passage through space. Thin empty balloons, on the other hand, have no such heat capacity. Nevertheless, it takes less than a pound of lithium battery within such a balloon to supply as much heat radiation to the interior of the balloon as the warhead itself would provide, if the warhead were shrouded in commercially available multi-layer insulation, widely used in refrigerators, transport of liquid nitrogen, and in space applications.

While the NMD

- would have no capability against bomblets carrying BW dispersed on ascent, or against a nuclear weapon in a large enclosing balloon,
- nor could it discriminate a warhead in a small balloon, properly done, from perhaps 10 empty small balloons,
- would neither see nor be able to intercept short-range ballistic missiles launched from ships near U.S. shores,
- would neither see nor be able to intercept short-range cruise missiles launched from ships near U.S. shores,

it is possible to protect the United States against the attack by long-range ballistic missiles.

The beginning of protection lies with deterrence of such attack, and even deterrence of building such a capability. Deterrence against use comes from the certainty of nuclear response to nuclear attack against the United States, and such a response would be overwhelming. Deterrence against building such a capability derives from its lack of utility, since its use is likely to be deterred by the threat of retaliation. Furthermore, a nation deploying an ICBM system to threaten the United States would surely feel vulnerable to preemptive attack, if the United States learned where the missiles were based.

Nevertheless, a limited ICBM capability might be built for political reasons, despite the insecurity that it would pose.

It is possible to intercept the ICBM in boost-phase—while the main rocket engines are still burning, so that the task of a homing interceptor is far simpler than that posed to the ground-based interceptor that must see a cool warhead at great distances in space. But such a system has essentially nothing in common with the National Missile Defense that is proposed. It would use the existing DSP satellites to determine the time and rough direction for launch of a ground or sea-based interceptor. But the fundamental characteristic of that interceptor is that it should reach ICBM velocity of 7 km/s and should do it in about 100 s rather than the 250 s of a typical ICBM. Under these circumstances, there is a vast area in which the interceptor could be deployed and still make the intercept in boost phase. Specifically,

against North Korea, such interceptors could be deployed at a joint U.S.-Russian test range south of Vladivostok (if Russia wished to cooperate with the United States in this regard) or, in principle, from military cargo ships in a vast range of ocean area.

Because such sea-based capabilities might be useful for defense of Japan, for instance, against theater-range missiles launched from North Korea, and because there is already in the September 26, 1997, "Agreement on Confidence-building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles" (signed but unratified) a provision by which the Parties to the ABM Treaty of 1972 accept the deployment of ballistic missile defenses that do not "pose a realistic threat to the strategic nuclear force of another Party," it is possible that Russia, Belarus, Kazakhstan, and Ukraine would agree specifically to a few large interceptors based on ships to carry out boost-phase intercept of missiles launched from North Korea—which is, after all, not a Party to the ABM Treaty.

CONCLUSION

- We should not deploy the proposed National Missile Defense unless it is proved capable of handling the countermeasures that can realistically be employed by the potential adversary.
- The evaluation of NMD should start from scratch with the use of ground-based or ship-based interceptors that will destroy the offensive missiles in boost phase—before they can release bomblets or separate a warhead that could then provide itself with an enclosing balloon.
- There is no reason to abandon the protection of the ABM Treaty, that constrains Russian defenses and thus allows the United States to deter Russia with modest numbers of nuclear weapons, thus facilitating further great reductions in the only nuclear threat to the survival of the United States.

The CHAIRMAN. Thank you very much.

Dr. WRIGHT.

STATEMENT OF DR. DAVID WRIGHT, RESEARCH FELLOW, SECURITY STUDIES PROGRAM, MASSACHUSETTS INSTITUTE OF TECHNOLOGY, CAMBRIDGE, MA

Dr. WRIGHT. It is a pleasure today to appear before the committee. I will summarize my written remarks, which I would ask would be put in the record.

Both the administration and the Senate have singled out technical readiness as the key criteria that will affect next year's decision on whether or not to begin deployment of the national missile defense system. Is the technology ready to deploy? I will argue the answer is no. Will it be ready to deploy by next summer, when the Deployment Readiness Review is schedule? Again, I will argue the answer is no.

I will then discuss what the United States needs to do to find out if the technology is ready to deploy at some point in the future.

When you develop a technology and want to know if it is ready for production, you need to do three things. First, you need to build a prototype and test it on the test range or in the lab under controlled conditions to determine if the basic technology is in hand and whether it will work in a benign environment.

Second, once you have demonstrated that the technology works under controlled conditions, you need to test it under conditions that approximate as closely as possible those you would expect to find in the real world, and to assess its operational effectiveness in the real world. Three, you need to do enough testing to assess the reliability of the technology.

Satisfying the first criteria is clearly important and necessary, but it does not demonstrate technical readiness to deploy. The other two criteria must be satisfied as well. In fact, satisfying the

first condition and demonstrating the basic technology may tell you essentially nothing about whether the second criteria will be met and how well the technology will do in the real world.

It is obviously important to test for operational effectiveness when developing a military technology which an adversary will be trying to defeat. Thus, for an NMD system, satisfying the second criteria would in part require making a best guess about the types of warheads that North Korea, Iran, and Iraq would be likely to use in their ballistic missiles, and then conducting tests against those types of targets.

Since the NMD system is in intended to counter ballistic missiles carrying weapons of mass destruction, satisfying the third criteria and demonstrating reliability is extremely important.

If the United States is going to count on its NMD system, it has to know how reliable the system is. Some argue it is important to employ an NMD system as soon as possible, and the United States should, therefore, be willing to take high risks by developing subsystems concurrently and using surrogate components and tests, but experience shows that this rarely works. In fact, by taking such risks, you are more likely to delay deployment than speed it up.

As the Welch report stated, "The virtually universal experience of the study group members has been that high technical risk is not likely to accelerate fielded capability. It is far more likely to cause program slips, increased costs, and even program failure."

No matter what development strategy is adopted, it is essential that the United States not cut corners on testing, because testing is the only way to find out if the technology is ready. The more urgent one believes NMD deployment is, the more one should support and insist on an adequate and complete test program that satisfies the three criteria outlined I have listed above.

Now, what is the current situation? Well, let us look first at whether the United States has satisfied my first criteria. There have been no intercept tests of the NMD system, but since 1982, the United States has conducted 16 intercept tests of exo-atmospheric hit-to-kill interceptors, which operate in a similar manner to the planned NMD interceptor.

To date only 2 of those 16 intercept tests have scored hits, a 13 percent success rate, and the test record is not getting better with time. The most recent successful high-altitude test occurred in January, 1991, and the last 11 such intercept tests have failed.

What this test record shows is that learning to do high-speed hit-to-kill, commonly called hitting a bullet with a bullet, is very hard. General Lyles testified in January that one thing that had changed in the previous year was an appreciation of "The reality of how difficult this job is, the reality of how tough it is to try and do missile defense, and how tough it is to try to get hit-to-kill technology."

Thus, as of today, the technology does not justify making a decision to begin deployment. Indeed, a year ago the Welch report stated, "After more than a dozen flight tests, we are still on step one in demonstrating and validating the hit-to-kill system." Mr. Welch's report appeared, two more flight tests of exo-atmospheric hit-to-kill intercepts have taken place, and both failed to hit their targets. Thus, the more recent tests only strengthen the Welch panel's conclusion.

What is the program status likely to be next summer when the Deployment Readiness Review is scheduled? The United States is planning to conduct four NMD intercept tests between now and then. Even if all four of these intercept tests take place between now and next June, and are successful, would that satisfy the first criteria?

It would certainly demonstrate the principle of hit-to-kill under test conditions, and would be a necessary first step for the testing program; however, it would still not indicate that the technology had fully satisfied the first criteria, because these tests will be performed using surrogate boosters and kill vehicles, and not prototypes of the components that would actually be deployed.

A full prototype of the interceptor technology that is intended for deployment will not be flight tested until fiscal year 2003. Thus, the tests planned for the next year will not assess the performance of two of the most important and least mature components of the system.

More importantly, the second criteria will not have been met, since apparently none of these tests will simulate real-world conditions.

As the fiscal year 1998 DOT&E report states, "The NMD test and evaluation program is building a target suite that, while an adequate representation of one or two reentry vehicles, may not be representative of threat penetration aids, booster or post-boost vehicles. Test targets of the current program do not represent the complete design-to threat space and are not representative of the full sensor requirements spectrum," that is, discrimination requirements.

It is quite possible for a technology to work well in tests and fail in the real world. For example, the Patriot system used in the Gulf war did phenomenally well in tests, it had a perfect 17 for 17 record in intercept tests prior to the Gulf war, yet the Army claims only a 61 percent success rate for the Patriot during the Gulf war, and independent assessments of its performance as well as statements by the Israeli officials indicate that the success rate was actually much lower.

One reason for the failure of the Patriot to destroy the Iraqi al Huseyn missiles is that the Iraqi missiles broke up on reentry, creating multiple targets that maneuvered as they fell to the ground. These proved to be very effective countermeasures, albeit inadvertent ones. Future missiles must be expected to incorporate intentional countermeasures to confuse or overwhelm the defense.

Let me make a couple of short points about countermeasures. Ultimately, the U.S. NMD system will succeed or fail, based on its ability to deal with countermeasures, so before deciding to deploy, the U.S. must understand whether the NMD system it is developing is likely to work against plausible real-world threats. Members of the Rumsfeld Commission have stressed that absence of evidence is not evidence of absence when considering ballistic missile development. This advice must also be heeded relative to countermeasure development for these missiles.

While some see the Iraqi use of ballistic missiles in the 1991 Gulf war as a wake-up call to the United States about the future ballistic missile threat, it was also no doubt a wake-up call to other

countries about the future deployment of U.S. missile defenses. Those countermeasures should not be thought of as an optional add-on that the country might or might not decide to put in its long-range missiles at the last minute.

A country that is developing or trying to acquire intercontinental ballistic missiles would no doubt see the parallel development or the purchase of countermeasures as an integral part of its missile program.

The bottom line is that none of the three criteria outlined above will have been fully satisfied by next summer. At best, the first criteria may be partially satisfied, and I think it is clear then that by next summer the technology will not justify making a decision to begin deployment, but in the longer term, what kind of test program would the United States need to deploy to determine whether its NMD system is technically ready to deploy?

First, the United States should not set an unrealistic time scale for its testing program. The testing schedules should not be predetermined, but should be set by the outcome of previous tests. There must be sufficient time between tests to assimilate the results of one test before conducting the next test.

Second, the United States should set up a red team, whose job it is to devise countermeasures using the kind of information and technology that is available to developing countries. Some of this is already being done, but it must become a top priority of the program.

Third, the NMD testing program should include flight tests of the interceptor against the best countermeasures potentially available to a threat nation, as devised by the red team, and the United States should not deploy an NMD system before it is proved effective against the countermeasures devised by the red team.

Fourth, the United States should conduct enough tests to assess the reliability of a system. The number of tests required will depend on both the system reliability requirements and the test record.

Finally, there should be an independent oversight of the overall NMD testing program, and in particular, there must be careful oversight to ensure that the red team is independent and adequately supported, and that its ideas are incorporated in tests.

Let me conclude by noting that national missile defense is a highly politicized issue, and there is great political pressure on decisionmakers to do something, but the political response must not get too far ahead of what the technology can deliver.

In January, 1999, General Lyles stated, when talking about the newly revised NMD program and test schedule, he said, "You will find no programs at all in the Department of Defense that have the limited amount of testing and the aggressive schedule that we have embarked upon here, even with this revised schedule."

If the United States is serious about deploying a defense against ballistic missiles launched to its territory, then it should be serious about finding out if the technology is ready. The only way to find that out is by a rigorous and realistic testing program. Thank you.

[The prepared statement of Dr. Wright follows:]

PREPARED STATEMENT OF DR. DAVID C. WRIGHT

Mr Chairman, distinguished Senators, it is a pleasure to appear before the Committee today.

Both the Administration and the Senate have singled out technical readiness as a key criteria that will affect the decision next year on whether or not to begin deployment of a national missile defense (NMD) system.

Is the technology ready to deploy? In this testimony, I will argue the answer is no. Will it be ready to deploy by next summer, when the Deployment Readiness Review (DRR) is scheduled? Again, I will argue the answer is no. I will then discuss what the United States needs to do to find out if the technology is ready to deploy at some point in the future.

Thus, I will consider three questions in turn. First, does the United States now know enough about the capability of the technology to make a commitment to deploy a national missile defense? Second, will the United States know enough by next summer? And finally, what will it take for the United States to know at any point beyond next summer? That is, what does the United States have to do to understand enough about the capability of the technology to be able to make a commitment to deploy an NMD system that it can expect to be effective?

"Fly before you buy" is an oft-heard dictum regarding the Pentagon's acquisition policy. It is important to be clear about what kind of flying the United States needs to do before buying NMD.

When you develop a technology—any technology—and want to know if it is ready for production, you need to do three things:

1. You need to build a prototype and test it on the test range or in the lab under controlled conditions to determine if the basic technology is in hand and whether it will work in a benign environment.
2. Once you have demonstrated that the technology works under controlled conditions, you need to test it under conditions that approximate as closely as possible those you expect to find in the real world. This is necessary to assess the operational effectiveness of the technology in the real world, which will not be a benign environment,
3. You need to do enough testing to assess the reliability of the technology.

Satisfying the first of these criteria is clearly important and necessary, but does not demonstrate technical readiness to deploy. It is necessary but not sufficient; the other two criteria must be satisfied as well. In fact, satisfying the first condition and demonstrating the basic technology may tell you essentially nothing about whether the second criteria will be met and how well the technology will do in the real world.

It should go without saying that it is especially important to test for operational effectiveness if the technology you are developing is a military technology, which an adversary will be trying to defeat. Thus, for an NMD system, satisfying the second criterion would in part require making a best guess about the types of warheads that North Korea, Iran and Iraq would be likely to use on their ballistic missiles, and then conducting tests against targets of those types. After all, one of the key things an NMD system is supposed to do is to defend the United States from long-range missiles launched by one of these countries.

Since the NMD system is intended to counter ballistic missiles carrying weapons of mass destruction, satisfying the third condition and demonstrating reliability is extremely important. If the United States is going to—in any sense of the word—count on its NMD system, it has to know that the system is reliable.

Some have argued that it is important that the United States deploy an NMD system as soon as possible, and that the United States should therefore be willing to take high risks by developing subsystems concurrently and using surrogate components in tests. But experience shows that this rarely works. In fact, by taking such risks, you are more likely to delay deployment than speed it up. As the Welch Report[1] stated "The virtually universal experience of the study group members has been that high technical risk is not likely to accelerate fielded capability. It is far more likely to cause program slips, increased costs, and even program failure." Similarly, in discussing the sense of urgency behind the THAAD program, the FY 1998 Report of the Director, Operational Testing & Evaluation (DOT&E)[2] stated that "The ultimate result, ironically, is a schedule slip of seven years."

No matter what development strategy is adopted, it is essential that the United States not cut corners on testing, because testing is the only way to find out if the

[1] Report of the Panel on Reducing Risk In Ballistic Missile Defense Flight Test Programs, 27 February 1998.

[2] FY98 Annual Report of the Director, Operational Test & Evaluation, submitted to Congress February 1999.

technology is ready. The more urgent one believes NMD deployment is, the more one should support and insist on an adequate and complete test program that satisfies the three criteria outlined above.

WHERE IS THE PROGRAM NOW?

What is the current situation? First, let's look at whether the United States has satisfied the first criteria.

There have been no intercept tests of the NMD system, but since 1982 the United States has conducted 16 intercept tests of exo-atmospheric hit-to-kill interceptors, which operate in a similar manner to the planned NMD interceptor. To date, the test record of such interceptors has been abysmal. Only 2 of these 16 intercept tests scored hits, for a 13 percent success rate. And the test record is not getting better with time; the most recent successful high-altitude test occurred in January 1991 and the last 11 such intercept tests have been failures.

What can we learn from this test record? What it shows is that learning to do high-speed hit-to-kill commonly dubbed "hitting a bullet with a bullet"—is very hard. Indeed, the Director of the Ballistic Missile Defense Organization, General Lyles, stated in his Senate testimony[3] in January 1999 that one thing that had changed in the previous year was an appreciation of "the reality of how difficult this job is . . . The reality of how tough it is to try to do missile defense and how tough it is to try to get hit-to-kill technology . . ."

It is clear that the technology has not satisfied even the first criteria listed above—demonstrating a capability against cooperative targets. Thus, as of today the technology does not exist to justify making a decision to begin deployment. Anyone asserting otherwise is basing their assertion on something other than the demonstrated facts.

Indeed, a year ago, the Welch Report[4] stated that "After more than a dozen flight tests . . . we are still on 'step one' in demonstrating and validating HTK [hit-to-kill] systems. . . . And even when this first step is achieved, these programs will have to go through steps two and three: demonstrating reliable HTK at a weapon system level and demonstrating reliable HTK against likely real-world targets."

Since the Welch Report appeared, two more flight tests of exo-atmospheric hit-to-kill interceptors have taken place,[5] and both failed to hit their target. Thus, the more recent tests only strengthen the Welch Panel's conclusion.

WHERE WILL THE PROGRAM BE NEXT SUMMER?

What is the program status likely to be next summer, when the Deployment Readiness Review is scheduled? The United States is planning to conduct four NMD intercept tests between now and then. However, the date of the first intercept test has recently slipped by several months, and it is not clear how many of these tests will actually take place by June 2000.

Even if all four of these intercept tests take place between now and next June, and are successful, would that satisfy the first criteria? It would certainly help demonstrate the principle of hit-to-kill under test conditions, which would be a necessary first step for the testing program.

However, it would still not indicate that the technology had satisfied the first criteria because these tests will be performed using surrogate boosters and kill vehicles and not prototypes of the components that would actually be deployed. Prototypes of the interceptor technology that is intended for deployment will not be tested until FY2003. (The first tests of the prototype interceptor booster and kill vehicle are planned for FY2001 and FY2003, respectively.)

Thus, the tests planned for the next year will not assess the performance of two of the most important components of the system. Yet, as General Lyles testified in February of this year, "The ground-based interceptor (GBI) weapon is the least mature element of the system and entails the highest technological development risks."[6]

More importantly, the second criteria will not have been met since apparently none of these four planned tests will simulate real-world conditions. According to the FY 1998 DOT&E Report. "The NMD T&E [testing and evaluation] program is building a target suite that, while an adequate representation of one or two reentry

[3] Lt. General Lester Lyles, testimony before the Subcommittee on Strategic Forces, Committee on Armed Services, United States Senate, February 24, 1999.

[4] Report of the Panel on Reducing Risk In Ballistic Missile Defense Flight Test Programs.

[5] Both of these tests were of THAAD interceptors.

[6] Lt. General Lester Lyles, testimony before the Subcommittee on Strategic Forces, Committee on Armed Services, United States Senate, February 24, 1999.

vehicles, may not be representative of threat penetration aids, booster, or post-boost vehicles. Test targets of the current program do not represent the complete 'design-to' threat space and are not representative of the full sensor requirements spectrum."[7]

And it is quite possible for a technology to work well in tests and fail in the real world. For example, recall that the Patriot system used in the Gulf War did phenomenally well in tests against ballistic missiles—it had a perfect 17 for 17 record in intercept tests prior to the Gulf War. Yet the Army claims only a 61% success rate for Patriot during the Gulf War, and independent assessments of its performance[8] (as well as statements by Israeli officials[9]) indicate that the success rate was actually much lower—and perhaps close to zero.

One reason for the failure of the Patriot to destroy the Iraqi al Huseyn missiles is that the Iraqi missiles broke up on reentry, creating multiple targets that maneuvered as they fell to the ground. These proved to be very effective countermeasures, albeit inadvertent ones. Future missiles must be expected to incorporate intentional countermeasures to confuse or overwhelm the defense.

Indeed, the U.S. NMD system will succeed or fail based on its ability to deal with countermeasures. So before deciding to deploy, the U.S. must understand whether the NMD system it is developing is likely to be able to work against plausible real-world threats.

Members of the Rumsfeld Commission have stressed that "absence of evidence is not evidence of absence" for ballistic missile development; this advice must also be heeded relative to countermeasure development for those missiles. Dr. William Graham and others have emphasized the importance of using "Try Intelligence" or "TRYINT" to assess potential ballistic missile threats. This would involve trying to build ballistic missiles using only the kind of information and technology assumed to be available to potential adversaries to see what is possible. The United States must also use TRYINT in assessing potential countermeasures and must test the NMD system against such countermeasures. While a countermeasure TRYINT program—the Countermeasures Hands-On Program (CHOP)—exists, the level of effort devoted to it is likely inadequate.[10] Moreover, it is not clear at what level its results will be incorporated into intercept tests.

It turns out that the type of interceptor the U.S. NMD system will use—a hit-to-kill interceptor that is designed to intercept outside the atmosphere in the vacuum of space—is particularly vulnerable to certain kinds of simple countermeasures. I will not go into detail here, but countermeasures that are technically simple (such as lightweight balloon decoys with the warhead also enclosed in a balloon) can make the system fail catastrophically.

Will these types of simple countermeasures be available to developing countries such as North Korea? Yes. It is logically inconsistent to assert that developing countries will be able to build or otherwise acquire the technology for intercontinental ballistic missiles, and at the same time will not have access to the far simpler technology to equip these missiles with effective countermeasures. (If one assumes these countries are receiving technology and/or assistance for ballistic missiles from more advanced missile states, such as Russia, one must also assume they would receive assistance on countermeasures.)

Are ballistic missiles equipped with countermeasures merely a theoretical threat? Some people argue that developing countries may not bother to use countermeasures. But it is also logically inconsistent to assert that countries like North Korea or Iran will go to all the trouble to build or acquire intercontinental ballistic missiles—largely to be able to target the United States—and at the same time will

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[7] FY98 Annual Report of the Director, Operational Test & Evaluation, submitted to Congress February 1999.

[8] George N. Lewis and Theodore A. Postol, "Video Evidence on the Effectiveness of Patriot during the 1991 Gulf War." *Science and Global Security,* Vol. 4, pp.1–63, 1993. The Panel on Public Affairs of the American Physical Society appointed a panel to review the Lewis-Postol analysis and criticisms of it; the panel found that the Lewis-Postol methodology was sound and that none of the criticisms stood up to scrutiny. These findings are reported in Jeremiah D. Sullivan, Dan Fenstermacher, Daniel Fisher, Ruth Howes, O'Dean Judd, Roger Speed, "Technical Debate over Patriot Performance in the Gulf War," *Science and Global Security,* Vol. 8, pp.1–55, 1998.

[9] Moshe Arens, former Israeli Minister of Defense, and General Dan Shomron, Chief of Staff of the Israeli Defense Force during the 1991 Gulf War, stated in interviews conducted by Reuven Pedatzur on an Israeli TV documentary (21 November 1993) that the Patriot successfully intercepted at most one Scud over Israel. Highlights of these interviews are reported in Tim Weiner, *New York Times,* 21 November 1993, and *Newsweek,* November 1993.

[10] According to Michael C. Sirak, "'Chop" shop helps create robust missile defenses," *Inside Missile Defense,* Vol. 5. No. 8, April 21, 1999, pp. 1, 8–12, CHOP brings together teams of four engineers to work on developing countermeasures for nine to twelve months. Yet a country serious about developing countermeasures could work for many years on the problem.

not be motivated to use simple countermeasures to defeat a U.S. NMD system deployed to counter their ballistic missiles.

While some see the Iraqi use of ballistic missiles in the 1991 Gulf War as a wake-up call to the United States about the future ballistic missile threat, it was also no doubt a wake-up call to other countries about the future deployment of U.S. missile defenses. Thus, countermeasures should not be thought of as an optional add-on that a country might or might not decide to put on its long-range missile at the last minute. A country that is developing or trying to acquire intercontinental ballistic missiles would no doubt see the parallel development or purchase of countermeasures as an integral part of its missile program.

Thus, asserting that countries deploying intercontinental ballistic missiles either will not be able to or will not bother to use effective countermeasures amounts to wishful thinking and should not be the basis for military planning.

Two sensor fly-by tests have been done that have reportedly distinguished decoys from a mock warhead. What does this mean? From a technical point of view, there is no doubt that sensors can detect temperature differences between objects in space, or differences in wobbling motions. But this capability is only useful in discriminating between warhead and decoys if the attacker does not manipulate the heat or motion signals in a way to confuse the defense. Rather than using decoys that look and behave differently from the warhead, the attacker would disguise the warhead to make it look like a decoy, or make all the objects dissimilar in appearance.

The bottom line is that none of the three criteria outlined above will have been satisfied by next summer. At best, the first criteria may be partially satisfied. Thus, it is clear that by next summer the technology will not justify making a decision to begin deployment of an NMD system.

RECOMMENDATIONS FOR THE FUTURE

What should the United States do to find out if the technology is ready in the longer term? In particular, what kind of a test program would the United States need to determine whether its NMD system is technically ready to deploy?

- First, the United States should not set an unrealistic time scale for its testing program. The testing schedule should not be predetermined, but should be set by the outcome of previous tests. There must be sufficient time between tests to assimilate the results of one test before conducting the next test.
- Second, the United States should set up a Red Team whose job it is to devise countermeasures using the kind of information and technology available to developing countries.
- Third, the NMD testing program should include flight tests of the interceptor against the best countermeasures potentially available to a threat nation, as devised by the Red Team. The United States should not decide to deploy an NMD system before it is proved effective against the Red Team countermeasures.
- Fourth, the United States should conduct enough tests to assess the reliability of the system. The number of tests required will depend both on the system reliability requirements and the test record.
- Finally, there should be independent oversight of the overall NMD testing program. In particular, there must be careful oversight to ensure that the Red Team is independent and adequately supported, and that its ideas are incorporated in tests.

CONCLUSION

National Missile Defense is a highly politicized issue and there is great political pressure on decision-makers to do something. But the political response must not get too far ahead of what the technology can deliver.

General Lyles stated in January 1999 [11] about the newly revised NMD program, "You will find no programs at all [in the Department of Defense] that have the limited amount of testing and the aggressive schedule that we've embarked upon here even with this revised program. . . ."

If the United States is serious about deploying a defense against ballistic missiles launched at its territory then it should be serious about finding out if the technology is ready. The only way to find out is by a rigorous and realistic testing program.

[11] Lt. Gen. Lester Lyles, Director, BMDO, DOD News Briefing, January 20, 1999.

APPENDIX A

Following are excerpts from the section on NMD of the FY 1998 Annual Report by the Director, Operational Testing and Evaluation (DOT&E), available at http://www.dote.osd.mil/reports/FY98/98JTETOC1.html#jte

TEST & EVALUATION ASSESSMENT

The aggressive schedule established for the NMD Deployment Readiness Program presents a major challenge. For instance, if a deployment is required by 2003, the NMD program will have to compress the work of 10 to 12 years into 6 years. As a result, many of the design and T&E activities will be done concurrcntly. Program delays have already caused IFT–3 to move to June 1999. This represents almost an 18-month slip over the last year and a half. This clearly demonstrates an extremely high-risk schedule and DOT&E considers the probability of meeting the DRR on time with the currently planned T&E program as highly unlikely.

The complex operating characteristics and environments of the NMD T&E Program make it necessary to plan and conduct IFTs that are limited in scope. DRR information based on a few flight tests with immature elements will be limited. As a result, the T&E program will rely heavily on ground testing and the execution of simulations for assessing the maturity and performance of the NMD system concept. For example, the decision to downselect the EKV contract early eliminates the benefit of intercept flight data to support that decision. This warrants a rigorous ground hardware-in-the-loop simulator test program to assess competing seeker design. It does not appear, however, that the LSI will increase the scope of that grown testing in the absence of the flight test.

The following risks can potentially impact the NMD T&E program's ability to test, analyze, and evaluate system performance:

Limited system-level testing: Only two flight tests and one system-level flight test (IFT–5) are planned before the DRR. Should IFT–5 fail, the DRR would be left with limited IFT and IGT data on which to basc a decision. Furthermore, the IFT–5 configuration differs from the Capability–1 system in that it uses prototype and surrogate sensors and a surrogate GBI booster stack.

Limited engagement conditions: Flight test launches from California and interceptors from Kwajalein Missile Range, along with safety constraints, place significant limitations on achieving realistic geometry and closing velocities.

GBI booster testing: The NMD T&E program makes use of a surrogate launch vehicle, the Payload Launch Vehicle, for all flight tests prior to the DRR. The objective booster contract was just awarded in July 1998 and first delivery will not occur until after the FY00 DRR. Lack of IFT data without the objective GBI capability (e.g., larger burnout velocity than the Payload Launch Vehicle) before the DRR will limit the GBI evaluation.

Limitations of ground testing: The Integrated System Test Capability will be the major source of data generated from ground testing. However, test articles used to represent NMD elements in the testbed may not be verified or validated in time for the DRR. In addition, early tests like IGT–1A were very rudimentary and only tested the message exchange between the BMC3 and prototype X–Band Radar; a simulated interceptor was not even launched. Substantial upgrades must be performed on the Integrated System Test Capability before overall system performance can be thoroughly assessed.

Target suite: The NMD T&E program is building a target suite that, while an adequate representation of one or two reentry vehicles, may not be representative of threat penetration aids, booster, or post-boost vehicles. Test targets of the current program do not represent the complete "design-to" threat space and are not representative of the full sensor requirements spectrum (e.g., discrimination requirements). Much of this limitation is attributable to the lack of information about the real threat. Multiple target testing; NMD system performance against multiple targets is not currently planned for demonstration in the flight test program. Validated simulations will be used to evaluate multiple simultaneous target engagement.

BMC3 interoperability testing: The BMC3 to Commander-In-Chief interface inside Cheyenne Mountain will not be tested prior to the DRR. Spare test articles: The current TEMP identifies a lack of spare test articles due to a resource allocation trade-off. This may have a significant impact on schedule and data availability for the FY00 DRR, and ultimately an FY03 deployment if there are any flight test failures.

Limitations of ground lethality testing: There is no ground test facility capable of propelling EKVs or their full-scale replicas against targets at the closing velocities expected for NMD intercepts. These closing velocities will exceed 7 kilometers per second. Existing full-scale facilities cannot yet achieve 3 kilometers per second. The

lethality test data to support DRR will be collected from light-gas-gun tests of reduced-scale replicas of EKV surrogates and targets at the lower-end (six kilometers per second or less) of the intercept velocity spectrum.

Programmatic changes: The advent of the LSI contractor has resulted in the repeat of extensive planning and analysis already performed by the JPO. The System Evaluation Plan is being replaced by a LSI generated System Verification Plan; and there does not appear to be a strong desire on the part of the JPO to have any independent developmental evaluation. The High Fidelity System Simulation, which was to be the fast running, system performance, digital simulation for assessing many scenarios throughout the threat space, has been largely abandoned in favor of developing Boeing's LSI Integrated Distributed Simulation.

LESSONS LEARNED

The NMD system shares an important functional attribute with theater missile defense systems like THAAD, Navy Theater Wide, and PAC–3—all are hit-to-kill systems. Recent THAAD flight test failures have provided us with the following important lessons: (1) hit-to-kill technology is extremely difficult; (2) pre-flight checkouts of reliability and performance need to be emphasized; and (3) strict quality control activities need to be implemented in the manufacturing of the GBI. In addition, the failure of IFT–1 underscored the need for a more robust program for targets and system spares, which will support the development of ballistic missile defense systems. This failure and its resultant impact on the test program highlights the very high level of schedule risk associated with the NMD program.

All of the above points were reemphasized in the findings of the Institute for Defense Analyses study, chaired by Retired General Larry Welch, on Reducing Risk in Ballistic Missile Defense Flight Test Programs. This study was co-sponsored by DOT&E, the Director, Systems, Engineering and Evaluation, and the Director, Ballistic Missile Defense Organization.

The CHAIRMAN. Thank you very much. As I indicated earlier, Senator Biden was unavoidably detained because of his interest in a vote that occurred on the Senate floor, which was delayed itself by 30 or 35 minutes, causing everybody to be behind time.

I want Joe to do his opening statement in just a moment, and I would also like, if he pleases, Senator Lugar to have his statement, but before I turn to Senator Biden, I think we should address the matter of countermeasures. Some have begun putting forward an argument that any NMD built can be defeated easily by countermeasures. Of course, countermeasures are not a reality simply because somebody draws a picture of one.

I would be willing to wager that a good many scientists could draw equally compelling pictures of things to counter the countermeasures, but we need not, I think, get into an art contest at this hearing, and I hope we will confine our discussion to the realm of the possible, and not allow flights of fancy either to lead us to predict that missile defenses can do nothing to protect our country, or that they may be perfect in affording such protection.

Having said that, I invite Senator Biden to make his opening statement.

Senator BIDEN. Mr. Chairman, I would like to ask that my entire statement be placed in the record, if I may.

The CHAIRMAN. Certainly. Without objection.

Senator BIDEN. Let me just state at the outset that testing aside, and I speak to this in my opening statement, I am concerned that our currently envisioned system may be the wrong tool for the job. I am skeptical that our national missile defense currently under development is the best means of defense against the threat of missile attack. I know you do not want to talk about them, but missile defense systems have to be able to defeat countermeasures.

I do not know enough to know whether or not the countermeasures envisioned by Dr. Garwin are art projects or realistically within the grasp and reach of the Koreans, or the Iraqis, or anyone else we are immediately concerned about. I just do now know, and I am going to ask about that at some point, and ask Dr. Graham, who is a very knowledgeable fellow, whether they are within their grasp and whether it is something we should be concerned about.

But the missile defense system, it seems to me, needs to be able to defend against the most likely ICBM payloads, including chemical or biological bomblets. Now, I assume that that was within the competence of the very nations that we are most concerned about, I assume that was part of the threat, but I may be mistaken, so I would like to talk about that as well, and whether or not the proposed system that we are talking about, and Dr. Wright was critiquing, is ineffective or effective against such attacks.

The most likely missile attacks against the United States territory, at least I have been schooled to believe over the last couple of years, are from cruise missiles or short-range ship-borne missiles, and yet the proposed system, I am under the impression, cannot even begin to deal with those.

I, by the way, truly appreciate all four of you being here. You are an incredibly competent panel, with differing views, which is the most helpful to us, quite frankly, at least to me. Mr. Chairman, I will cease my statement at this time, but one of the things I would like to do when it comes my time to question is ask each of them to respond to the other's comments, because I, at least, am more likely to learn a little more that way than with my prepared questions.

But let me close by saying that the thing that I have yet to fully understand, and maybe we can flush out in this question and answer period, is what each of you believe to be the threat, not generically, but specifically, what do you believe the threat is that warrants or would warrant our building a missile defense system. It seems to rest upon the notion that there is some madman in Iraq or a madman in Korea who, not withstanding the fact that he knows his country will be obliterated, will nonetheless feel he has the capacity to threaten us by saying, "I will strike Hawaii unless you do the following."

Now, I assume that is the premise upon which most of this is based, because if we assume people are rational, as Russian dictatorial bad guy leaders were for 50 years, the threat of use of nuclear weapons against us, which was fully within their capacity, was always viewed as not likely. That was because of deterrence: they knew that we would be able to visit an equally monstrous reign of firepower upon them in response to that which they could us.

My core question is: Does this current threat assume, General Piotrowski and others, that there is an irrational leader in the countries we are concerned about, or is it premised upon the notion that there is a rational leader who cares about whether or not his country is obliterated. Have we changed the equation?

I thank you, Mr. Chairman, for allowing me to speak.

[The prepared statement of Senator Biden follows:]

PREPARED STATEMENT OF SENATOR JOSEPH R. BIDEN, JR.

Thank you, Mr. Chairman. Thank you also for giving me the lead-time to invite two of our five witnesses today—Drs. Richard Garwin and David Wright. I look forward to hearing from all of today's witnesses, of course. I am very interested in their views regarding our technological progress toward the goal of a national missile defense, as well as their thoughts on what technical challenges remain to be overcome.

The status of our ABM capabilities will be a crucial factor in our decision whether to deploy a national missile defense by the year 2005. To put this hearing into context, the administration has repeatedly said they will base their deployment decision on four criteria:

(1) whether a threat exists to the United States;
(2) the cost-effectiveness of missile defenses;
(3) whether the necessary technology exists to build a defensive system; and
(4) whether the benefits of deploying that system outweigh any possible negative effects it might have on U.S.-Russian relations.

On the first point, the administration granted that a missile threat exists during the lead-up to the March vote on the Cochran bill. By including missile defense procurement money in the Future Years Defense Plan, the administration also seems to have decided that the proposed, very limited, National Missile Defense system will be worth the money if it works.

But the jury is still out when it comes to the administration's final two criteria, both of which were supported by the Senate in the amended Cochran bill. It will not surprise my colleagues to hear that I strongly doubt that those criteria can be met in the near term.

On the topic of today's hearing, let me be blunt. Nothing I have heard so far has convinced me that we are ready to field an effective missile defense by 2005, which is the administration's earliest target date for deployment.

I am concerned, moreover, that we may deploy a national missile defense for political reasons, without adequate testing. The 1998 Welch Report—the product of an independent commission charged by the Defense Department with assessing the missile defense testing program—warned that:

> To succeed, the national missile defense program must meet a series of formidable challenges. [It] should be restructured now to provide for adequate, sequential development and testing.

Without a rigorous development and testing program, the Welch panel warned of a "rush to failure."

Events since then are not reassuring. The first intercept test of the national system has been delayed until August because of fuel leaks in the kill vehicle. Because of that delay, the administration may be forced to decide on deployment after only three intercept attempts. That is far too few tests on which to base such a major decision, at least in my view.

Testing issues aside, I am concerned that our currently envisioned system may be the wrong tool for the job. I remain skeptical that national missile defenses currently under development are the best means to decrease the threat of missile attack.

A missile defense system must be able to defeat countermeasures. But the proposed system may be vulnerable to very simple countermeasures.

A missile defense system needs to defend against the most likely rogue-state ICBM payload—namely, chemical or biological bomblets. But the proposed system may be ineffective against such attacks.

The most likely missile attack against United States territory may be from cruise missiles or short-range, ship-borne missiles, yet the proposed system cannot even begin to defend against those attacks.

I wonder, therefore, whether early deployment of a national missile defense system is a wise response to the emerging missile threat to the United States.

I wonder whether we should not consider alternative means of decreasing the missile threat, rather than spending billions of dollars to deploy a ballistic missile defense that will only provide modest benefits and may well fail the technology test—as well as the test of maintaining U.S.-Russian strategic security, which we will discuss in tomorrow's hearing.

Again Mr. Chairman, I look forward to hearing the views of the witnesses on these important technical issues. Today's hearing should provide us a much clearer picture regarding some of the implications of deploying missile defenses.

The CHAIRMAN. Senator Shelby was very good, I wish you could have heard his statement——

Senator BIDEN. I do apologize.

The CHAIRMAN. Maybe you should read it, because he responded to some of the very things that you had mentioned.

Senator Lugar, the distinguished Senator from Indiana, is the former chairman of this committee, and a great Senator, a great American, and I would like for him to make a statement, if you wish.

Senator LUGAR. Thank you very much, Mr. Chairman. I will not ask a question, but I will in due course try to flush out the threat. Senator Biden has talked about this a little bit.

From time to time we have been discussing the so-called rogue nations, single shots, or fledgling programs of countries that might gain some strategic advantage by having these weapons, and General Piotrowski addressed this in a way.

I was curious as to the perception of the threat and what program is being developed to counter it. Is the threat strictly rogue nations or is it a more sizable threat? And with that in mind, what effect is the ABM Treaty having on any of the developments that you gentlemen are describing? To what extent is it a hindrance?

Clearly, if, in fact, one of our objectives was to counter the ICBM's of Russia, Russians would legitimately say that our missile defense system came into force simply to try to take away these potential threats and to change the strategic posture. so I am eager to hear much more about the ABM Treaty as a hindrance, whether it should be modified, appealed or does it not make any difference, and is part of the difference, perception of the threat to begin with, who we are after with this program.

The CHAIRMAN. Now we will begin the questions; I suggest that we take about 6 or 7 minutes each. I am no Henny Penny talking about the sky dropping myself, and neither is or has been the Rumsfeld Commission, which consists of some pretty great Americans who do not imagine things falling from the skies. They are pretty realistic, and they have served this country well in various connections.

Dr. Graham and Dr. Garwin, you were both members, I believe, of the Rumsfeld Commission, or still are, and you both agreed with the judgment that North Korea and Iran, and I quote, "Would be able to inflict major destruction on the United States within about 5 years of a decision to acquire such a capability," is that correct? Just 2 months after your report, North Korea launched a Taepo Dong–I missile. The United States intelligence community has warned that this missile could be used, "To deliver small payloads to ICBM ranges."

Now, my question is: Do you agree that this demonstrates an intent or even a possible intent by North Korea to acquire a missile capability to threaten the United States? Dr. Graham, you first, and then Dr. Garwin.

Dr. GRAHAM. Thank you, Mr. Chairman. Let me respond to that, and also to Senator Biden's question about the rationality of the leadership. I think there is an argument that can be made over the irrationality of the North Korean leadership, and what we are really dealing with there is a hostage population with a despotic gov-

ernment, but even on an irrational basis, they realize, the North Koreans realize that the greatest threat to their regional aspirations is the presence of the United States in South Korea, and Japan, and elsewhere in Asia, and our ability to move into those areas rapidly.

They also realize that we put great weight on our ability to build alliances and work cooperatively with other countries in a given region, such as Asia, and a rational use for ballistic missile and other military capability, but particularly long-range ballistic missile forces that can strike Japan, South Korea, and the United States, is to dissuade the U.S. from taking an active role militarily in conflicts in the region, and particularly in thwarting our ability to build alliances in the region.

I happened to live in Japan in 1948 through 1950, and was there during the start of the Korean War, and I remember hearing threats by the North Koreans that they were going to bomb Japan, because we were basing our military operations out of Japan at the time. They were not able to do it then. There is absolutely no question that they can do it with ballistic missiles, and I am sure that would give the Japanese and other allies great pause in thinking of letting the United States use those areas and in joining in alliances with the United States should the North Koreans try military action on their peninsula.

I think the threat in the nearest term form and easiest one to deploy is the one that the Rumsfeld Commission and Dr. Garwin described, which is ship-based ballistic missiles that could be shot from off our shores into our population and industrial centers, Scud missiles work just fine for that, and we have no defense against those today, and no defense against them planned under the ABM system.

The ABM system that we are seeing being developed today is a very stylized system designed to conform to the very limiting constraints of the ABM Treaty, and among other things, that treaty prohibits sea-based defenses, it prohibits air-based defenses, base-based defenses, it prevents multiple defensive sites on the land, and, therefore, we are treaty constrained not to protect ourselves through the shorter range threats that Dr. Garwin was describing, and also can arguably be said to protect us or to prohibit us from deploying launch-phased, boost-phased defenses, which are very effective against virtually all countermeasures, and in particular, the early release submunitions that he described.

So our ABM system design that the United States is currently pursuing is, in my view, a step in the right direction, but one with substantial deficiencies that need to be filled out before we have a comprehensive missile defense capability, and the limitations on it are primarily driven by the ABM Treaty today.

The CHAIRMAN. Thank you very much. I want the timekeeper to be sure that Dr. Garwin gets equal time.

Dr. GARWIN. Certainly, the Taepo Dong–I launch of August 31, 1998 shows progress and intent on the part of the North Koreans. When the United States expressed its displeasure, North Korea responded that they need the money, and they do sell their ballistic missiles.

They are a big proliferator, they are not a member of any regime that keeps them from doing it, they make money out of it, and they are very short of money.

Now, we do not have a lot of money, but we have a lot more than the North Koreans, and I think that we ought to see what kind of international or bilateral agreement could be formulated that would prevent the development in North Korea of longer-range ballistic missiles, and might even tone down or eliminate the development of shorter-range missiles.

But the ABM Treaty does not stand in the way of defending coastal cities against short-range ballistic or cruise missiles. That would be done locally. It would be done with within-the-atmosphere interceptors. Patriot might do that quite well.

What stands in the way is the demand that we protect every square inch of the 50 United States, and that is a big problem, because they could always find a place that was undefended and attack it, although that would not make sense from their point of view, and would not cause much damage, from our point of view.

So I think that if we look at the threats that exist, the threats that are easiest to pose, we ought to start working on the cruise missiles against coastal cities, including Hawaii, and the short-range ballistic missiles.

The national missile defense is going to stand in the way of doing the right thing, because it takes so much of our attention and of our effort, and it will invariably evoke arguments that "we are spending so much money on it, it must be effective." Economists always say that everything has its price, and its price determines its value. Apologies to economists who may be watching.

The CHAIRMAN. Very well. I think we ought to try to finish, at least on my time, and I will not take a next round, would you like to respond to the gentleman, Dr. Graham?

Senator BIDEN. Mr. Chairman, if I may, I would like you to take more liberty. There are only three of us here, and I think if you can get an interchange going——

The CHAIRMAN. That is exactly what I want to do.

Senator BIDEN [continuing]. I do not think you should be constrained by the time, with all due respect.

The CHAIRMAN. Well, I think that is a good idea. General, proceed.

General PIOTROWSKI. Well, I would like to make a few comments. First, Mr. Chairman, let me say what I do agree with. I do agree that countermeasures can evolve. I do agree that testing is important, and certainly that should be foremost in the development of this program, adequate testing to ensure an understanding of the reliability, but let me comment to some other points that were made.

Senator, you asked about rational versus irrational.

Senator BIDEN. I am serious about it. I am not trying to be argumentative.

General PIOTROWSKI. No, no, I want to respond to that in a serious fashion. I never believed that the Soviets would act irrationally during the time that I was CINCSPACE, CINCNORAD, and had to worry about an attack on North America and my advice to the President. I do not believe that that situation exists any more, and

I have perhaps a different understanding of irrational versus rational behavior.

We tend to analyze behavior based on our Western moors and our Western values. I have come to historically look at what was perceived to be irrational behavior historically in war, and when you look at it from the part of the actor who was believed to be irrational, you can find that they chose to die rather than live under the conditions that were forced upon them.

A very good historical exam, sir, are our Forefathers, who chose to take on the British empire when we barely had a toe-hold or maybe a finger-hold on this continent and declared war on the British empire. I am sure that most civilized nations in Europe felt that that was totally irrational, but it was our Forefathers' choice.

Do systems evolve? Yes, they do. I do not recall in my 38 years of historical military activity that we ever feel that a system that was capable of defeating or even taking on an equal footing, threats that could be imagined. The F–15, for example, when it was fielded, it is not the aircraft that exists today, which is far more capable.

The F–16, when it was fielded, did not have a night capability, did not have a good precision bonding capability. That has evolved over time. None of our systems had adequate electronics countermeasures to take on the threats that would evolve, the SA–4 or the SA–6, and on, and on, and on.

Our systems have evolved to meet the threats that have evolved. I believe that there is a threat today. I believe that whether there is intent or not, that can change in an instant. It can change with a leader. It can change with an event. We have always dealt in military capability against other military system capabilities, not so much with their intent, but their capability.

Senator BIDEN. Well, General, if I could interrupt just a second, I can recall that years ago there was a national forum put together, a series of debates with Admiral Zumwalt, Paul Warnke, Dr. Teller, and myself, and they set up these debates around the country, and 3,000 or 4,000 people showed up for these discussions, and it was about arms control, generically and specifically the SALT treaties.

One of the things that always fascinated me—and I knew he said it with every ounce of earnestness, he believed it—was that Dr. Teller, whom I certainly could not match in terms of knowledge of any of the systems that we were talking about, used to say the reason why we have to assume that the threat of a counterattack by the United States and the devastation it would bring upon the Soviet Union was not credible—he argued it was not credible that deterrence was working—was that the Soviets had demonstrated they were prepared to lose 20 million people during World War II and, therefore, they were ready to do it again. Yet, 50 years of history demonstrated that the Soviet leadership, although they imprisoned the people, were fairly conservative in how they acted.

I am not trying to be argumentative. I truly find myself at a loss when I hear Dr. Graham's arguments that the Japanese would not likely form an alliance with us, knowing that they could be more likely to be struck if they were cooperating with us. Everything in history demonstrates the exact opposite: that the Japanese, or the

Koreans, knowing that they are vulnerable with or without us now, as a consequence, would find it very much in their interest to have an alliance with us.

It seems that the assertions, although theoretically rational, fly in the face of historical analysis and human behavior. Our Founding Fathers were not worried that all Americans, their sons and daughters, would be obliterated if, in fact, they declared war. What they were most concerned about, from historical analysis, as you know, General, is that they, those who signed the Declaration of Independence, would, in fact, be hung on the gallows, since over 50 percent of the people who lived here then did not share their view.

The idea of mutually-assured destruction is something that I understand is now sort of out of vogue.The premise upon which some of this current concern is based, at least, is that there will be a North Korean leader who would threaten to hit Hawaii unless all American troops leave South Korea, for example, he threatens Hawaii unless we agree to send food aid, or threatens Hawaii unless we do the things he wants us to do, even though he would possibly put his entire country, himself, and all his people—whom he does not care about, theoretically, or at least apparently—in jeopardy of being literally obliterated.

I have trouble with that equation. But I am speaking more about what I think than listening to what you have to say. I just do not see how they equate, our Founding Fathers and the obliteration of an entire nation.

The idea is that somebody is going to come along and say, "Hawaii goes unless you give us the following," or some variation of that, or that Japan will say, "Look, United States, they now have this missile capacity, they can strike every city in Japan now. We want you out of here, because we are going to capitulate. We want to cut a deal right now with North Korea."

It seems to me to fly in the face of modern Eastern history as well as European history, of all history. I have seen nothing to indicate that people would react that way, whether it was in 1897, in 1917 or in 1948, I do not see anything that suggests otherwise, and I am searching for it, because I truly believe if we could put a shield up that protects against the threat that we are now talking about, I would be all for it, but I do not see how we get from here to there.

I am talking too much. I yield to the Chairman. I would like your response.

Dr. GRAHAM. Well, you raised a question on the motives of the leader of North Korea, and I do not claim to be an expert on that, I am not sure if anybody understands him, but one thing we have taught him to this point is, at least, that even with the poorest, most isolated country in the world, if he just goes to the trouble of attempting to develop a small number of nuclear weapons, we will engage him as a serious power, provide him with large quantities of fuel oil, provide him with a promise to build two very large nuclear reactors in his country, which he has got the infrastructure to use, and provide all the funding for that in the course of that process.

So it is clear that the North Korean militant acts in ballistic missiles, in warheads for ballistic missiles, and other military areas, are benefiting North Korea today.

Senator BIDEN. I think that is true, Doctor, but how does that translate into the assumption that he would use them? I think part of the reason we do that is because guys like you come along and tell us we may lose San Francisco if we do not either build a system or stop him.

Dr. GRAHAM. Absolutely. I would certainly not try to sit up here and show you that the leader of North Korea would not use nuclear weapons on ballistic missiles if he had those for any of a range of purposes.

More importantly, though, the threat of those and having that capability is enough to get him a lot in the world, nuclear reactors, food, heat, oil today, and undoubtedly other things in the future, and that in some ways is even more valuable to him than the prospect of losing much of his country to an all-out war. So it is not an irrational act on his part to build those. It is an irrational act on our part not to build defenses against them.

Dr. GARWIN. Well, much of the support for the nuclear reactors in North Korea I think stems from the vulnerability of South Korea to North Korea, and the desire to hold the peninsula together while North Korea evolves into a more conventional country. Whether that will work or not, I do not know. I hope it does.

There is a big difference between using nuclear weapons in retaliation, in case you are destroyed as a country; that is not desirable, but it is rationale. The United States and the Soviet Union, when we had no defense against one another, practiced that intensively for 50 years. There is a big difference in between that and the first use of nuclear weapons when you have only one or two, because the first use is surely going to be the last use. Once you have done that, the game is up.

First of all, it may not work. We have lost three modern Air Force boosters in the last months, something that we thought we knew how to do. Who believes that a North Korean ICBM is going to work perfectly every time they light the torch; and if they try to send it and it does not work, they will lose the rest of their weapons as well; and if it does work, they will lose the rest, even if that one comes over and explodes, and we lose 100,000 people, or whatever the number, depending on the accuracy.

So even if a country has nuclear weapons, even if it is not the most rational in the world, it can still be deterred with high probability. But my problem with the subject of this hearing on the national missile defense is that it does not really address this problem.

I understand General Piotrowski's statement about countermeasures, and I have been in this business for a very long time, but this is a countermeasure that is really easy. The bomblets would be done independent, in my opinion, of the presence of a defense.

They are to increase military effectiveness, and the question of the enclosing balloon, well, at a later hearing I think we could bring one in and seam it up on the floor, and shrink it down on a mock reentry vehicle, and see whether it works.

Now, the one difference is that here we have an atmosphere, every cubic yard of air weighs 2 pounds, and so we would have to bring in enormous tanks to fill a balloon the size of this room, but in space there is not any atmosphere, and it takes only a few grams of gas. So that is why these things are so much easier to do.

Our enclosing balloons that we have developed, but not necessarily deployed, are not the simple ones that I proposed. For various reasons, they are more complicated, but in this case, the simple one would really work, and I think I could ask General Piotrowski and Dr. Graham about that.

General PIOTROWSKI. There is no argument that countermeasures can be developed. I, again, like to use historical examples. When the AWAC's was fielded I played a large role in fielding at the E3A, back in 1976. Many scientists of notable reputation at that time argued that it was foolish to deploy the system, because radars are easily jammed, and it would be jammed and useless.

Well, we have been through a number of wars since then, the AWAC's are still flying, it is 23 years later, and it has never been effectively jammed, even though we could go to Radio Shack and buy a few components and show how easily it is jammed. It has not been done.

The question is, should we field a defense against what exists today and be able to evolve it over what will exist tomorrow? My background tells me yes, and that it would be difficult to explain to the American people, I am sorry we lost Los Angeles, but we were waiting to develop against countermeasures that we can envision in the future.

I think that is unacceptable, based on my background. I have never known a weapons system that was fielded that was able to counter the threats that could be perceived that would exist in the next couple of years, and I do not see it happening.

Senator LUGAR [presiding]. Do you have any comment?

Dr. GRAHAM. Yes. Thank you, Senator Lugar.

Countermeasures are serious issues that should be considered in the design of any ballistic missile defense system, there is no question about that. Most, if not all, of the countermeasures that are discussed today, in fact, have been on the books for decades, and are reasonably well understood.

In fact, the Ballistic Missile Defense Organization supports a small group called the Countermeasures Hands-on Project, which is a third-world-like operation populated by intelligent but relatively inexperienced young officers and enlisted men, in which they try to develop these countermeasures and test them to see how hard it is to make them and what can be said about them.

This is something that we discussed in the Rumsfeld Commission that I call "Try Int," that is, if you want to know you can do something or how your enemy might do something, try it under the circumstances that he would do it under and see how it works. In fact, even the balloon that Dr. Garwin described was one of the ideas that the Countermeasures Hands-on Project has tried.

In detail, of course, it is not as easy as it sounds, both from the mechanization, but even more from the dynamics of the balloon. While you might have a balloon shell encompassing a heavier ob-

ject like a reentry vehicle, you cannot change the mass distribution substantially, and our radars are now able to get very precise data on the dynamics of objects that they see.

So even if they cannot see inside the balloon, they can get information on where the center of mass is, which is, in fact, going to be the heavy warhead. So you go down into the subtleties of this action, reaction, and that will continue forever.

Our uniform experience in this is that countermeasures have proven harder to make work well in our own efforts to build them, both in the Countermeasures Hands-on Project, but more generally with our ballistic missle force, than we anticipated, and discrimination has proved to be less difficult than we had anticipated.

Remember, what you are doing as a developing-world country is you are betting your ability to deceive U.S. ballistic missile defense systems in the radar bands, in the optical bands, infrared, possibly ultraviolet, eventually from our space platforms as well as our ground-based radars, against their ability to fool these. We have so much more experience in these areas and so much more technical capability in these areas that that is an extremely risky bet for them, and one which today I would bet on the side of the U.S. winning, and that has certainly been our experience in recent ballistic missile defense tests.

Senator LUGAR. Well, thank you very much. It has been very helpful in flushing out the countermeasure issue. Let me try a broader question, and I would like each of you to comment. This may stretch analogies too far, but so be it. We have been having a debate last evening and this morning about Kosovo.

Essentially, in the conference with Senator Biden, Senator Helms, and I participated with the President, he has stated objectives for our country, and that is very important. This would also be true of what we are talking about today, that we try to define what it is we are attempting to do, and you gentlemen have been helpful in that respect.

But nevertheless, in trying to meet the objectives, the President has indicated that that planning for the use of ground forces is not to be done, quite apart from deployment of ground forces; that bombing missions will be conducted at 15,000 feet or higher to meet the problems of anti-aircraft that cannot be suppressed sufficiently; only on clear days will bombs be dropped where there is visual sight of the situation, which rules out a good number of missions; the Kosovo Liberation Army, or other such elements, would not be armed for a variety of reasons; the independence of Kosovo is not our objective but an autonomous province of Serbia, a country that is certainly at war with people that are living in the country now.

So there are a number of constraints. Now, they all have some rationale in terms of our foreign policy, our alliances, our relationships with other countries, and the amount of money we want to spend on the war, plus the casualties we want to sustain, but they do lead one, at least, Senator Biden and I, in our votes today, to wonder whether you can get there from where we are.

In other words, would it now be a better idea to say to the President, "Mr. President, you are authorized to do what you need to do, in order to be successful in this situation."

Now, I have a feeling in this conversation about missile defense, we have a similar predicament, in which we have had constraints of money, the national will has never been exactly clear, although it is being clarified by votes as they come along, and maybe we have not quite defined the objectives altogether. There are rogue states, and the possibility of ICBM's that are still out there from Russia, and we have the ABM Treaty, which has very considerable constraints.

Now, I just ask you, to what extent our program, whether we are in the national missile defense or in subsidiary programs dealing with countermeasures or developing, as Senator Biden suggested, defenses against cruise missiles from the coast quite apart from ICBM's, to what extent does the ABM situation constrain what we need to do, or is it the other problem that I sensed from General Piotrowski's testimony, that there often is the case that if there is a national will to do something that it is more likely to get done.

I think counter-testimony, maybe Dr. Wright, or maybe Dr. Garwin saying, fair enough, but even if you want to do it very badly, if technically you keep missing the bullets, and do not do the proper testing, do not do enough of it, you cannot get it done anyway, that there is sort of an American can-do spirit that says "That is just not so, we are Americans."

If we want to do this sort of thing, take off the constraints, spend the money, get the objectives broad enough so that we sort of encompass all the threat, why we are going to get it done. That is what I would like to believe.

On the other hand it appears that our policy now is constrained in many ways by the ABM Treaty and our relationship with Russia, and second, by the money problem. And probably third, by a lack of confidence that has come maybe from lots of test failures, that somehow this is not working out very well, that the technical genius in this country, great as it may be, is not all quite here to do that kind of thing, and, therefore, it is convenient, in a way, to sort of approach this incrementally.

So I hope we can make a little headway on it with the thought that maybe you will stumble into it, and given the timeframe of history, maybe no one will really develop much more in that process anyway, that we have that kind of time.

I just want to get some feel from you, if you were President of the United States and know what you know about this threat, the timeframe, the problems we have in terms of money, whether we have the technical skills, what should we be doing, and should we be constrained by the ABM Treaty?

Is the Russian relationship that important in this, and if it is, does this really mean that we are always going to be working around the edges of a problem, trying to stay in conformity, as we try to edge up to the rogue nation problem and state that as our objective? Do you have any overall comment about this sort of series of questions and thoughts? Dr. Graham, can you give an answer to that?

Dr. GRAHAM. Yes, Senator Lugar. I think there is no question that we have the technical and industrial capability to develop a much more substantial ballistic missile defense, in some ways along the lines that Dr. Garwin has suggested, for example.

Senator LUGAR. By more substantial, do you mean not only the national missile defense, but also you picked up some of these variations——

Dr. GRAHAM. Yes.

Senator LUGAR [continuing]. The small nation's response, the whole comprehensive bit?

Dr. GRAHAM. Yes. You would include a greater emphasis on countermeasure defense. Even there is some in the program today, it could certainly be strengthened. It would include defense against shorter range missiles, targeted at U.S. territories, for example, Aegis-ship based defenses against shorter and mid-range ballistic missiles, and without the ABM Treaty we would certainly deploy more than one site against long-range ballistic missile threats, and we would also, I believe, should make a substantial attempt to add to the Aegis and possibly other locations, such as the heart of Russia, very close to North Korea, if the Russians will cooperate, the boost phase defense, which is an extremely effective technique against countermeasures, as Dr. Garwin described.

Senator LUGAR. Would you pick up also whatever obligation we have with Japan, in terms of missile defense of that country?

Dr. GRAHAM. Yes, indeed. In fact, we are cooperating with Japan. They have bought, I believe, Patriots already, are considering the Aegis-based systems, and could acquire THAAD, as could other countries in that region. But if the President is going to make a sound decision on this, it seems to me to be useful for him to go back to history and look at the great successes we have had in major technical developments.

For example, the Minuteman system was technically more challenging in many ways than this. We decided to build an unattended intercontinental ballistic missile. That was unprecedented.

It would have solid propellant from missiles at all stages, so it would be ready at very short notice; hence, its name Minuteman. That was new. It would be based in holes in the ground, silos, which is the most difficult sort of structure to fire a ballistic missile from, because you cup the missile as it comes out of the silo with the heat of the first stage engine, and it would have nuclear weapons on it, so it would be an unattended nuclear weapons system.

All of those were new characteristics, and yet, General Shriever had a clear mandate that went from him to the Secretary of the Air Force, to the Secretary of Defense, to the President, that said, do it, take what national resources you need to build a viable system, and build it as rapidly as you can, and in a little over 4 years, he went from start to a full-scale engineering development, to the initial operating capability, which was, I believe, ten or twenty missiles deployed in their silos. He built all the infrastructure for that, the bases, the training facilities, the logistics, and so on, and had the whole system deployed in very few years.

That, I think, is a good example for a national missile defense system, but if he had constraints such as those that the ABM Treaty imposed on national missile defense, I believe there is no way that he could have developed that system at all, much less in the timeframe that he did.

I liked Dr. Garwin's interpretation of the ABM Treaty much better than the interpretation I have seen by the State Department,

the compliance review group, and everybody else, but unfortunately, they are the government and he is not.

There would be very strong arguments made against, for example, defense against the shorter range missiles, and you can see it in article 1, section 2, which is the Russian's favorite part of the ABM Treaty, which says, "Each party undertakes not to deploy ABM systems for the defense of the territory of its own country and not to provide a base," whatever that is, "for such a defense, and not to deploy ABM systems for defense of an individual region, except as provided for in article three of this Treaty," which at the time of the treaty was the capital or ballistic missile field.

So that essentially imposes a constraint against any kind of a territorial defense, and that is what we are living with today.

Senator LUGAR. General, do you have a comment?

General PIOTROWSKI. Yes. I will make them brief, sir. I believe that as long as we have no defense against ballistic missiles, it makes them very attractive to people who either want to blackmail us or wish us ill. Certainly, they are immutable today, and they will remain immutable until we field a system that changes that chemistry.

With regard to retaliation, I think people who believe strongly their feelings about retaliation, it is my conviction that, and I think you illustrated it, sir, in your comments about how carefully we are working in Kosovo to prevent the loss of innocent lives, I believe strongly that if a nuclear weapon was detonated in Los Angeles that we would retaliate, and if it came from Pyong Yang, we would retaliate against Pyong Yang, but I am not sure we would use a nuclear weapon and kill 8 million or 9 million people who are believed innocent, because it is the dictator, Kim Il Sung, who would push the button, not 8 million people who live in Pyong Yang, and do not believe the retaliation would take that form. We would retaliate. We would go in and I think we would root out the evil, but I am not convinced in my mind, in my lifetime, that we would retaliate with nuclear weapons.

Senator LUGAR. You may be right, but the whole idea with the Soviet Union for 50 years was they were certain they would. In other words, there would not be some humane thought about Moscow at that point.

General PIOTROWSKI. Yes, sir, and I would agree that historically that seemed to work, but I do not believe that either side was every pushed to the point where that might have even been considered.

I think we robusted each other. If we had been in an all-out tactical nuclear war in Central Europe, and perhaps one side was on the brink of loss, that might have been a thought, but I do not think we ever came to the point where that was even considered, but that is an opinion, not a fact.

I believe that we have the ability to develop a system capable of defeating the threat that we see today that will evolve into the capability to defeat threats in the future. That would require severe changes to the ABM Treaty as it exists today, as Dr. Graham has pointed out.

I think that we could do useful things if we wanted to start deployment and said, as President Kennedy said, we would put a man on the moon by the end of the decade and return him to earth,

we would do things differently and more meaningfully than are being done today. For example, we know how to build an X-band radar that can track and discriminate. That radar, if fielded today, at a site that we believed that we were going to deploy, could do useful work in space, in monitoring our own test RV's, and on, and on, and on.

I would field the command and control element in Cheyenne Mountain so that the operators could gain confidence as they used the radar, and then use simulators or emulators to fly out what we thought a ballistic missile interceptor would look like to gain confidence in the system, and to evolve that system to meet the threats that were extant when we were ready to deploy interceptors, and I believe that eventually we would evolve to a space-based system probably using lasers, where we had speed of light, and we could defeat systems early in the boost phase so they would not go far beyond their launch sites, and could defeat all of the countermeasures and all of the heinous weapons that one could think of, because they would be encapsulated in the ballistic missile when it was destroyed in boost. Sir, that ends my comments.

Senator LUGAR. Dr. Garwin.

Dr. GARWIN. Well, to go back to the 1972 ABM Treaty, we did not enter into that lightly. We did it because, although we could see that we could defend against the existing Soviet threat, if we fielded a defense, we saw that threat expanding without bound. We knew what we were doing in order to counter the ballistic missile defense system that the Soviet Union had deployed around Moscow, and Moscow, in case nuclear war came, would have been destroyed much more thoroughly than if there had been no defense against it.

So that is the problem with trying to build a defense against hundreds of nuclear weapons on ballistic missiles from Russia. The problem is that there would not be hundreds, there would be thousands, and if we look at space-based lasers, for instance, we discussed this 15 years ago, and it is very easy to destroy these space components.

In fact, even if there are thousands of space-based interceptors, it is a lot easier to destroy them from the ground one at a time, soon after they are put in orbit, than it is to maintain them in orbit ready to be used at a moment's notice.

So the ABM Treaty, as I have explained, does not in any way inhibit our protection right now of U.S. cities against short-range, ship-launched cruise or ballistic missiles. It has nothing to do with that. It was against strategic ballistic missiles, which are either of ICBM range or long-range missiles launched from submarines.

I think that the ABM Treaty could use some updating, but rather than go in and say we want to be freed from the constraints of the ABM Treaty, we ought to have a specific proposal for Russia and now the other partners to the ABM Treaty. This proposal, in the case of boost-phase intercept, would use not cruisers, but military cargo ships, because we need to put large interceptors, much larger than the ones that fit into the vertical launch systems of ordinary military ships. We do not need very many of these.

I think that a lot of the support for national missile defense comes from a feeling that we could, in fact, deploy an effective de-

fense against the Chinese ballistic missiles, because there are fewer than 20 of them, and as I indicated, we plan to build 75 ground-based interceptors even with this preliminary C–1 system.

So China would see that we are serious about a system which they would have to believe would eliminate their deterrent, and that is a sure way to get them to build more, and to get them, in addition, to work on the countermeasures, which there would be no reason to work on now, so presumably they have not deployed very many of them, since we have no defensive system at all.

Senator LUGAR. Dr. Wright.

Dr. WRIGHT. Let me make a couple of comments. One, I think it is fair to say that the kind of technology that is being developed for the system really is remarkable, so I do not think that the implication is that somehow U.S. technological efforts are not really first rate. I think they are.

The problem is that you do not have a clear technical objective of the program, and I think that that is the key difference with the Apollo program. It was clear that you had a well-defined technical problem there. As people used to like to say, the Moon did not fight back when you were trying to land a person on the Moon, and I would say to a large extent the same is true of the analogy with the Minuteman missile. Again, I think that was a remarkable bit of technology, but it had clearly stated goals that were not changing as you went through, and that is a very big difference in this case. You are not exactly clear what you are going to be shooting at. The parameters of the defense of the threat are going to be changing.

Second, I would like to say just a couple of words about the blackmail scenario that has been talked about here a couple of times. The concern is that if there were a threat of a use of one of these weapons that blackmail would tend to limit U.S. freedom of action, and the question is, well, what happens to that scenario if the defense that you have put up is less than perfect?

Would U.S. political leaders have enough confidence in the effectiveness of the missile they would put up, especially against weapons armed with weapons of mass destruction, to be able to ignore the threat that was made, and completely restore U.S. freedom of action, and I think the answer to that is simply no, that missile defenses in the end do not significantly change the blackmail scenario that has been laid out here.

Finally, I think it is worth keeping in mind that in any policy decision you are forced to make difficult tradeoffs, and I think that is a real lesson of Kosovo, that the U.S. is trying to balance a lot of different issues here.

Two points there: One is I think that that means it is very crucial to understand how well a national defense system would work, what its effectiveness in the real world would be expected to be, because that is the thing that ultimately you are going to have to decide whether that is worth the tradeoff, in terms of dollars, in terms of reaction by the countries, in terms of other things that you would like to do.

But also it seems to me that, from my point of view, the biggest threat the United States faces today is the very large nuclear arsenal that remains in Russia. You had mentioned that.

At current force levels that the Russians deploy, I do not think the kind of defenses that the U.S. are talking about would be a major concern, but that is not where I would like to end up. I would like to leave the opportunity open and make real progress toward getting the Russian nuclear arsenal down to as small a number as possible.

My concern is that Russia has shown that it is concerned about U.S. missile defenses, and if that turns out to be U.S. deployment of missile defenses, it turns out to be a barrier to getting to low levels of Russian nuclear forces, than I would say that that is not a good tradeoff, and I would hope that at some point in the future, we would be holding a hearing like this, at which point Russia would say that they are not concerned about U.S. missile defenses, and the kind of tradeoffs you would have to make in the policy world would be very different, but I do not believe that is where we are today.

Senator LUGAR. I would agree that we are not there. I would think, however, that Dr. Garwin makes an interesting point, and you cannot draft this proposal today, but a specific proposal to the Russians, with regard to this, seems to me to be in the realm of the doable, not immediately, maybe not in this period when we are dealing with Kosovo, but at some stage.

The question I think maybe Senator Biden and I would have is, what is the proposal. This hearing is very helpful in sort of flushing out all the questions that ought to be asked, but in due course we need to have some more thoughts, with each of you as experts, as to what it is that we want to do, and then to what extent is the Minuteman analogy applicable? In other words, to what extent is this a question of priority, in terms of our own national will?

I gather for the moment it is one of the things we are concerned about. From time to time we think about the potential for Hawaii, or Alaska, or someplace to be attacked, or we sort of know out there that the North Koreans are difficult, and maybe others, but it sort of filters in with a lot of other things we are thinking about.

Maybe there is never any way that you have a prioritization of 1 to 10, but on the other hand, each of us have to make judgments on appropriations. Maybe the two of us are not the instrumental persons in ranking them, but we can speak up and we all do. To the extent that we really do not understand the nature of the threats or which ones we ought to prioritize——

Senator BIDEN. Mr. Chairman, on that point, if we could followup—and I hope you are willing to keep this going a little bit longer, because at least I find it enlightening—I truly appreciate the four of you being here. I mean, you are the experts. Several of you are among the most renowned scientists in the world. You guys know what you are doing.

I try to distill this after 27 years of dealing with what one of our deceased colleagues used to call the nuclear theologians. We used to go through this logic about strike, counterstrike, what would happen, how many losses, et cetera. I would sit there in these hearings and meetings with some of you and your predecessors, and feel like I was reading Suma Theologica again and arguing about how many angels fit on the head of a pin, and motivations, and it gets very complicated. But if I can stand back for a second and distill

it this way, I think it gets at what Senator Lugar has been flushing out:

Were Senator Lugar President and I Secretary of State, what if I came to you guys and said, "Look, I need you now to prioritize for us. Do not tell me the politics; let me do the politics. Do not tell me whether it can or cannot be done. Do not consider the limitations that are imposed by the ABM Treaty. Tell me, in the following list of priorities, what are the greatest threats we have?"

For example, Dr. Garwin, I believe that if, within the near term, the scientific community came and the defense community came to us and said, "Look, the single, best immediate way to deal with one of the rogue states, North Korea, is to put in the Vladivostok area a system that could eliminate the threat in the boost phase," I believe with every fiber in my being, after 27 years of being a part of negotiating teams, or witnessing the aftermath of negotiation with the former Communist Party in the Soviet Union and the present leadership, that with serious and hard negotiation it could be made clear to them that it was in their interest as well as our interest that that missile defense be done on Russian soil.

Now, if, in fact, you were to say to me that, that is the cleanest—do not give me your politics, let me do the politics; I stand for reelection, you all do not—if you were to tell me that is the cleanest scientific way to eliminate that threat, then President Lugar would have something to work on.

We have to understand what is underlying this debate. There are those like Senator Helms who truly believe that, and he quotes it and he means it, "We have never lost a war and never won a treaty," so we are divided in this body, as we have been for the last 30 years or more, 27 years I have between those who think even arms control, notion of arms control is a bad idea, and those who think arms control is a means by which we can help maintain our security.

But when we sit and listen to all of you, what we do not say to you is, a lot of people in this debate do not trust the motivation of those advising us. That is because some would listen to what was said today and say what this is really about, is not the rogue states. This is really about Russia. This is really about moving on to a position in which we have a missile defense system that can render harmless Russia's nuclear arsenal, because we believe the Russian bear is going to reassert himself as an imperialistic aggressor in the world community, and we should stamp it out now.

There are others who believe that the reason for the underlying debate about the missile defense system is really China, that China is the place where my grandchildren are going to face a problem and a threat, and so what this really is about is getting a jump on the ability of China ever to be able to threaten the United States in any way with nuclear, biological, or chemical weapons.

Then there are others who believe you mean what you say, that what you are really talking about is dealing with the immediate concern of the rogue nations. So I do not think we ever honestly say that out loud, but in a debate on the floor, in our caucuses, at least in the Democratic Caucus, that is the kind of interplay you get.

So it gets very hard not only to determine the objectives, Dr. Wright, because the truth is, politically, at least, that there are different objectives behind the support for an ABM system of any kind.

So back to my question. Given the technological shortfalls that we all acknowledge thus far—notwithstanding, General, your point that if you set a goal and we have no constraints on it, we are more likely to achieve it than not—but given the technological shortfall, do any of you believe that the proposed national defense should be deployed? Or is the real argument whether to build a sea-based or a spaced-based ballistic missile defense?

I listen to you, Dr. Graham, and it seems to me that in effect you are arguing for a wholesale rejection of ABM. I respect that, but if I listen to you, you seem to be arguing that ABM should be rejected wholesale. Others of you are saying, well, no, it may need to be amended.

So my question again is, to repeat it, do you believe the proposed system should be deployed, or should the real argument, the honest argument, be whether or not to build a sea- or a space-based ballistic missile system and sort of leapfrog this?

Dr. GRAHAM. Senator, when you say I think I reject the ABM, I presume you mean the ABM Treaty.

Senator BIDEN. Yes. I am sorry. I meant to say the Anti-Ballistic Missile Treaty. I may be wrong, but it seems that you would prefer that it be abrogated, period. If you were advising President Lugar, my guess is you would say, "Mr. President, abrogate the treaty, period. Get out of it."

Dr. GRAHAM. That is absolutely right, Senator Biden. I would say, get out of that treaty. You can always conceive of some other treaty you might want to be in, but in this area, I believe the U.S. would be far better off without that treaty in any of its current manifestations.

Senator BIDEN. Should we be going to sea-based and space-based missile defense?

Dr. GRAHAM. I believe we should, Senator Biden, and I do not believe it is an either/or question. I think there is merit to building a land-based component to the national missile defense; although, I would not constrain it to one site.

Senator BIDEN. But if you did what General Piotrowski is saying, and that is, set a goal, an objective, listening to you, I doubt whether you would say that the present land-based system being contemplated, if that were the only thing that was going to be done, is worth it.

It seems to me what you are saying is that it is worth it as a component of a larger goal. I am trying to understand the goal, because General, you have impressed me with your point about setting a goal, making a judgment, and if we do that then pursue it.

I am getting mixed signals here, because it does not seem as though any of you are saying that this system in and of itself—assuming we can negotiate with the Russians and the successor states an agreement that what is contemplated here is within the ABM Treaty—would you do it if that was all you were going to do, Dr. Graham?

Dr. GRAHAM. Having the experience of—even the current ABM system I believe would benefit the United States. One of our greatest shortfalls is that we have not developed, constructed, and deployed any ABM system for 25 years, so on that basis, on a technical basis, I would say, keep going, do it, but I would also argue extremely strongly that this is a component and not a particularly well-designed component of a territorial defense capability, and our goal should be to provide for the defense of U.S. territories against ballistic missiles and, by the way, as Dr. Garwin mentioned, against cruise missiles and a lot of other threats that we have to worry about, but I would say, do this, but do not make this the only thing you do.

If it is the only thing you are going to do, consider it an exercise in bringing up our technology, our industrial base, and so on, but do not imagine for a minute that it is going to protect you against the full range of ballistic missile threats that, for example, we identified on the Rumsfeld Commission.

Senator BIDEN. Mr. Chairman, this is the last iteration of this question I will try. If the Lord Almighty came down and sat here in the chairman's seat and said, "Gentlemen, I can assure you that if we do this, this is all we are ever going to do in the near term," I doubt whether any one of you would say, go ahead and spend the money to do this.

I understand the argument, and if the Lord came down and said it is an open-ended deal, you would do this, you got the old nose-under-the-tent, you would be able then to ramp up the technology, you would be able to attract people back into the program, the people we have lost, you would be able to get things moving, you would get dollars spent, and that would lead to the next thing, and then maybe more. But I guess what I am saying is, it seems like an expensive gamble for something that on its face technologically does not work, and in the near term, even if it worked to specifications, could not do the bulk of what you are most worried about, the most likely scenarios.

I understand that dilemma for some of you: you have to start somewhere. But if this is where you start and this is where you end, it seems to me we have wasted a whole hell of a lot of money when we could have been doing other things, and if in the process the Russians overreact to this and conclude that they should now end any discussion on a START II or START III saying "we are not destroying anything else"—at the end of the day we spent a whole hell of a lot of money for something that has actually increased the threat. That is because now, the only outfit in the world at this moment that can, in fact, destroy us, if they just launched them all,—although we would get them, too—if they became irrational, the only outfit that can truly destroy us—would, in fact, be more dangerous to us than they are at the moment.

If anybody wants to respond to that, fine; if you do not, I understand. But that is the dilemma I find myself in, in wanting to support a system, as opposed to coming to President Lugar and saying, "Look, Mr. President, we can take care of these several things that are immediate threats, and here is how I propose it. If you can get the Russians to sign onto this ABM Treaty of putting a defense system in Vladivostok, then you will be able to take care of this

piece now, and if you can get them to do this, you can take care of that piece."

Senator LUGAR. Let us have Dr. Garwin's response here.

Dr. GARWIN. I think we should separate the political from the technical. My understanding of the political situation is exactly yours, although I could not put it that well. The most immediate result of abandoning the ABM Treaty would be to abandon any hope of bringing Russian nuclear weapon holdings down to a thousand or maybe even to one hundred, and that would not be a good result.

On the technical side, I do believe that we ought to dis-aggregate these things, but everybody is so used to decisions taking decades or more that they do not have time to respond. If you say North Korea is the problem, let us fix North Korea. Then we will fix something else tomorrow, or next month, or the next year.

Now, we did once deploy a ballistic missile defense system, Safeguard, in Grand Forks, ND. It cost I guess about $21 billion in 1998 dollars. It was operational for a few months. Even though one of the arguments for deploying it was learning by doing, we did not want to learn any more after we had deployed it, so we shut it down.

Very often these programs come to you prepackaged. Some good things, some bad things. We are all familiar with that, even on amendments to appropriations bills. But here there is particular evidence, because whenever the national missile defense is discussed, it is in these precise words, "It would have as its primary mission the defense of all 50 States against a small number of intercontinental range ballistic missiles launched by a rogue nation," and then General Lyles, or whoever is proposing, goes on, "such a system would also provide some residual capability against a small accidental or unauthorized launch of strategic ballistic missiles from China or Russia. It would not be capable of defending against a large-scale deliberate attack."

Well, that subsidiary "residual capability" is a requirement masquerading as an observation. Somebody has decided that this is what is absolutely necessary, and to my mind, this is the primary purpose of the national missile defense; and by the way, since China can only launch its ICBM's as a small launch and not a large-scale deliberate attack, then China has every reason to believe that this system is oriented against them.

Now, if that is what we want to do, then we ought to say that is our purpose in building the system, and we ought to consider what kind of countermeasures the Chinese can build to such a system; and then I certainly agree, we do not want to build this specific proposed system.

I think we should have a task force to look at the North Korea problem and to see what we can do, maybe a U.S.-Russian task force would even help, but we would go it alone, and look at military cargo ships, and see which approach we want there, and then move on.

Senator LUGAR. Let me just ask for one more comment just to complete the record. Obviously, this is a strong answer to Senator Biden's question as to whether this particular discussion today should proceed.

Do either you, Dr. Graham or General, have a comment in defense of proceeding with this system?

General PIOTROWSKI. Let me answer a slightly different question, it is one that I think Senator Biden asked. I believe an at-sea ballistic missile defense, if the focus was North Korea, is a very sound approach. You would have to solve many of the same technical problems, but you have a large thrusting booster that is going to burn for 300 seconds, or 250 seconds.

You can put in a barge or surface ship, the capability to defeat that, think such that I would have confidence in it. It is a point solution, and one that could then go on from that point solution as other things evolve. So I am not at all against an at-sea solution for a specific capability. I accept the fact that this is a very daunting and difficult political issue as well as technical issue, but that is a useful solution against a point problem.

Senator LUGAR. But how about this NMD, should we proceed with this, that is one of the basic questions of the hearing. Do you have a final comment, sir?

Dr. GRAHAM. Yes, Senator Lugar. Notwithstanding Dr. Garwin's generous interpretation of the ABM Treaty with regard to defense of our coastal cities, I believe that what we are seeing now is about the best ballistic missile defense system for the U.S. territory that we can build under the constraints of the ABM Treaty and, in fact, even this system will violate common interpretations of the ABM Treaty in several areas.

I believe we should build a more effective system. If this is where we have to start under this administration and its constraints, I believe it is worth starting. We will learn a lot. We will make up for a lot of the damage done to our technical infrastructure in this area over the last 25 years of particularly not deploying ballistic missile defense systems.

But this is not an end-point issue. There is no silver bullet in ballistic missile defense, or offense, for that matter, and we are never going to get to the point where we say OK, that is it, that is the ultimate system, we never have to think about it again.

Like all other offense and defense interactions, it will be a continual process of assessing the defense and see what needs to be done to bring it into balance. I hope that someday we will get to the point where we decide that the Soviet Union or now Russia really does not have some kind of an innate privilege to kill as many Americans as it wishes, whenever they wish to, and that we do not have a built-in privilege of killing as many Russians as we want to whenever the occasion might arise.

That was forced upon us by the invention of ballistic missiles and nuclear warheads 50 years ago, and I think it is something today that we can get out of with a determined effort. The trouble is that we have gotten so accustomed to that in mutual-assured destruction and other related philosophies, that we forget that the problem is trying to survive as a country and as nations, and not accommodating ourselves to a threat and absorbing it, when, in fact, we can defend ourselves against it, but the defense will be a continuing process, it will have many components, and it will have to evolve over time.

Senator BIDEN. I know you said the last thing, Mr. Chairman, but can I just followup on one point that Dr. Graham just made? If you could get the ABM Treaty amended to accommodate the defense system that Dr. Garwin talked about, and that is a sure defense, or a defense against cruise——

Dr. GARWIN. We do not need amendments.

Senator BIDEN. Pardon me?

Dr. GARWIN. We do not need amendments for that.

Senator BIDEN. No, but Dr. Graham thinks you do. If, in fact, there was no question that that was allowed, either because they agree it is allowed or we amended the treaty, would that not be a preferable way to go than this, assuming there was no question that the ABM Treaty permitted it? Which would you prefer then?

Rather than assessing that you cannot do it, assume that President Lugar gets it amended, or it is already permissible. Which is preferable, in terms of the threat we are talking about, at least the immediate short-term threat?

Dr. GRAHAM. You would need to change more than that in the treaty so that it did not interfere with our ability to provide for a territorial defense. For example, you would have to remove the clause in the treaty that says we cannot provide for a territorial defense. You would also have to change the part about where we can locate interceptors and where we can locate radar sets to guide and the fire control solutions for the interceptors.

Eventually, if you get to the point of the argument where you say the ABM Treaty is not interfering with our ability to build at least a light, that is, tens to hundreds, but not thousands of warheads, ABM system, then I would say, OK, it is a matter of indifference, because it is not blocking our ability to do what we should do, at least at the level of the Third-World threat, the level of the China threat, and the level of the accidental or inadvertent Russia threat.

That would be a big step forward, in my view. If you can arrange to amend the treaty so we are not constrained in that direction, more power to you.

Senator BIDEN. But my point is, if you could, would you then not go this route, but go the route that Dr. Garwin is talking about? That is the point I am trying to get at. In other words, every time I talk to people like you, Doctor, who know so much more about the technology than I do, you give me the political or the treaty constraints. Assume you did not have that constraint, which of the two approaches would you take?

Dr. GRAHAM. It is not an either/or situation. You would certainly want to have a high priority on defending against short-range ballistic missiles launched, for example, by ships. That should be a high priority.

It is clear that North Korea, Iran, and other countries are also developing longer- and longer-range ballistic missiles, and you want to have at least a modest defense against long-range ballistic missiles, so that does not become their attack of choice. You also want to have a cruise missile defense.

So when you cast it as an either/or situation, it is not the real-world problem. It is any more than having a, whether you have a police department or a fire department in a town, it is an either/or situation. You want to have them both. Here, we should have

the defenses that Dr. Garwin described, we should have long-range defenses, and someday we should have space-based defenses to help against some of the threats he described earlier. You have to take all of those into account, and the treaty blocks you in virtually all of those.

Senator BIDEN. Would you share this with the Russians?

Dr. GRAHAM. What is the this in that statement?

Senator BIDEN. Everything. Everything that you are talking about. Any system you built that dealt with missile defense. The implication of your earlier statement was, we should end the era where the Russians feel that they can at will destroy Americans and we feel that at will we can destroy them.

Would you share the system with them, whatever anti-ballistic missile system is developed?

Dr. GRAHAM. I would share it with them in this way. Early on, while they still have nuclear weapons, I would be glad to share the functionality of the system, its capabilty to intercept missiles. Later, when they did not have any nuclear weapons, or any significant number, and we did not have any significant number, then I would be willing to consider the details of the system as well, but the more they know about the details, the more they would know about how to overcome the system, and I would reserve that to a later era.

Senator LUGAR. Thank you very much, Dr. Graham.

Let me thank each one of you on behalf of the chairman and the distinguished ranking member for the extraordinary testimony and your willingness to work hypothetically through each of our questions.

I think the hearing has been a very important one, and we are glad that so many other Americans are sharing with us, those in the audience in this hearing today, and those who have watched the televised portion of this. We thank you for coming.

[Whereupon, at 12:34 p.m., the committee adjourned, to reconvene at 10 a.m., May 5, 1999.]

DOES THE ABM TREATY STILL SERVE U.S. STRATEGIC AND ARMS CONTROL OBJECTIVES IN A CHANGED WORLD?

WEDNESDAY, MAY 5, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 10:09 a.m., in room SD–562, Dirksen Senate Office Building, the Hon. Chuck Hagel presiding.

Present: Senators Hagel and Biden.

Senator HAGEL. On behalf of the Foreign Relations Committee, I welcome all of you to today's hearing, the fourth in the Foreign Relations Committee series of hearings that have focused on the 1972 Anti-Ballistic Missile Treaty.

This morning's distinguished witnesses are experts in the fields of arms control and missile defense. They are the Honorable Jim Woolsey, Director of Central Intelligence from 1993 to 1995; Honorable Ronald Lehman, Director for the Arms Control and Disarmament Agency from 1989 to 1993; Dr. Keith Payne, a foremost scholar on arms control issues and president and founding research director at the National Institute for Public Policy; and my—not old, but long-time friend—Air Force General Eugene Habiger, former Commander in Chief, United States Strategic Command.

And we welcome you all here this morning, and we are grateful that you would spend a little time to make the kind of contributions that are important to this issue. And we appreciate your presence because within each of you embodies a number of insights that are very important to the perspective on not only this issue, but the long-term issues that we are dealing with relative to the consequences of what we do next, and how we go about taking that action.

At the outset, let me say that I personally strongly believe that the United States must begin the task of immediately designing, building and deploying a national missile defense system to protect the American people from the growing threat of ballistic missile attack.

The Rumsfeld Commission has warned rather clearly that both North Korea and Iran "would be able to inflict major destruction on the U.S. within about 5 years of a decision to acquire such a capability."

No one that watched North Korea's flight testing of the Taepo Dong–I or Iran's launches of the Shahab–3 can reasonably doubt

that the decision has been made to go forward with their technology. Both of these nations know that America cannot now defend itself against missile attack, as does all of the world.

And yet this administration continues to stall and delay in deploying such a defense. It is becoming very clear that over the course of this committee's investigation that the true source of the Clinton administration's opposition to ballistic missile defense seems to be its devotion to what many of us believe is an antiquated arms control agreement, the 1972 ABM Treaty.

Like many of my colleagues, I am deeply troubled that this country is being held hostage to an outdated concept of strategic deterrence that has outlived its purpose. It is no longer relevant, and most importantly has placed the United States in a very dangerous and vulnerable position. Former Secretary of State Dr. Henry Kissinger put it best when he recently wrote, and I quote, "The end of the cold war has made a strategy of mutually assured destruction largely irrelevant. Barely plausible when there was only one strategic opponent, the theory makes no sense in a multi-polar world of proliferating nuclear powers."

Gentlemen, again, we are grateful for your testimony, and the committee looks forward to hearing your insights.

With that, let me now ask each of you to present your testimony.

I will be joined by colleagues as votes occur and other committees lighten their load and we would ask that each of you give your statements and then we will come back with questions.

I would ask Mr. Woolsey to begin. Thank you.

STATEMENT OF HON. R. JAMES WOOLSEY, FORMER DIRECTOR OF THE CENTRAL INTELLIGENCE AGENCY

Ambassador WOOLSEY. Thank you. Mr. Chairman, I will, if it is all right, ask for my statement to be inserted in the record, and I will just speak informally from it for a few minutes.

Senator HAGEL. It will be.

Ambassador WOOLSEY. What I would like to suggest this morning, Mr. Chairman, is that in the circumstances of today, strong support for ballistic missile defense and a willingness to amend substantially, even to withdraw from, the ABM Treaty is a reasonable position.

And I want to suggest to the committee that it is a reasonable position even for those who, like myself, have historically emphasized the central importance of offensive strategic systems, have seen some value in certain arms control agreements, and did not initially welcome President Reagan's Strategic Defense Initiative. The circumstances have changed, and to my mind that calls for a substantial change in our assumptions and policies.

I will skip the biographical points I made really to just point out to the committee that I have been involved in this issue for 30 years in one way or another, in a number of different capacities.

And I mention that in 1987, immediately after the Reykjavik summit, Brent Scowcroft and I co-authored an article in the New York Times Magazine, which included the following statement in criticism of the proposals to end all ballistic missiles that President Reagan had made at Reykjavik and to rely, essentially, completely on SDI.

We wrote, "The official line has become a sort of a strategic Manichaeanism: that there exists only the dawn of SDI and the darkness of mutual assured destruction that went before it. The concept of careful and stable deterrence, with modernization of nuclear weapons to improve their survivability, some militarily useful work on defensive systems and moderate arms control was abandoned."

Now, in the circumstances of the time, Mr. Chairman, I think that that was at least a reasonable and defensible position which we advanced.

But it is important to realize that for a number of those of us who held that set of views, it was not desirable that the world consisted of a strategic situation in which assured destruction was mutual.

It was very far from being desirable from our point of view that the Soviet Union was able to destroy the United States. Quite a few of us never liked the mutual aspect of mutual assured destruction at all.

But we persuaded ourselves that nonetheless the ABM Treaty presented the lesser of two evils really for two reasons. First of all, we were not convinced that the technologies that were available or even foreseeable in the early seventies, when the treaty was signed and even through much of the eighties, for ballistic missile defense were going to spawn deployable systems that were capable of defending us reliably against our major concern, which was an all-out Soviet attack.

Threats of lesser magnitude, such as from rogue states, were not really on the horizon at that point. And as far as China was concerned, the central strategic reality with respect to China for most of that period was that we were cooperating with China in what began in the Nixon administration—I think a rather clever triangulation effort to work cooperatively with China against the much larger threat, the Soviet Union.

So for that set of reasons, ballistic missile defense was not at the forefront of much of—for many of us—our thinking.

The second reason was a sort of belt and suspenders reason. We felt that the massive Soviet lead in large ICBM's equipped with MIRV's seriously threatened our own ICBM force, particularly Minuteman. And that would force us, in a crisis—particularly a crisis that might arise in Europe where the Soviets had a huge conventional force, particularly the Group of Soviet Forces in Germany that threatened Western Europe—in which if nuclear war should come about, we might be thrown back on relying very heavily on our own ballistic missile submarines, the ICBM's and a major share of the bombers being vulnerable.

In such a situation, Soviet deployment of an ABM system, we felt, could lead Soviet advisors and the Politbureau to be too optimistic.

We thus felt it was important to limit Soviet defenses to the relatively small deployment around Moscow because they had an extensive infrastructure of sophisticated radars and air defense interceptors that in some circumstances might be applicable to dealing with an American retaliatory strike.

And we felt that deterring the Soviets in a crisis depended very heavily on our being able to clearly and under all circumstances penetrate their defenses.

We believed that strategic stability required the Soviets to have that degree of certainty, and we were willing to pay in the coin of limiting American defensive systems in order that the Soviets would not have effective defenses.

Now that thinking may seem dated today—and to some it was not persuasive in 1972, and it came increasingly to be questioned after President Reagan's famous 1983 SDI speech.

By the end of the cold war and in the nineties the strategic changes are major: (a) the rise of the possibility of an accidental or unauthorized launch by the increasingly chaotic Russian military forces, even including the Strategic Rocket Forces; (b) persistent work on longer range and more flexible ballistic missiles and on weapons of mass destruction by rogue states; and I would add, (c) China's increasingly intransigent position with respect to Taiwan and its own ballistic missile threat against the United States. For all of these reasons, I believe that the ABM Treaty in today's world really has to be seen in an entirely different light.

First, I would say there is common ground possible between those of us who have been on different sides of the ABM Treaty debate in the past. We may have both been somewhat right and somewhat wrong. It does not matter. Together, we won the cold war. It is time—indeed, it is past time—to go on to the next set of problems.

Second, if we focus on the strategic realities of today, there is, in my judgment, no strategic rationale for the ABM Treaty. The old rationale of our wanting to limit Soviet defenses as spelled out above does not apply to today's Russia or to the Russia of the foreseeable future.

Even if that country turns more hostile to the United States than it is today, Russia is no longer capable of threatening Europe with many divisions of conventional forces, so it would have no advantage in a crisis on that continent.

Moreover, Russian strategic nuclear forces do not threaten a substantial share of our nuclear deterrent. The deterrent that we do maintain is no longer heavily reliant on fixed land-based ICBM's that might be vulnerable to Russian attack.

Hence, we have no particular reason to want to limit Russian defenses to ensure that our retaliatory forces would be able to penetrate those defenses.

The only rationale in my judgment for the ABM Treaty today is one that is rooted in current foreign affairs concerns.

The Russians do not want us to withdraw from it, so doing so would, presumably, upset them and perhaps lead them to do other things that we do not want. For example, they may threaten for the dozenth time or so to refuse to ratify the START II Treaty.

But it seems to me there is a limit to the degree to which we should let this sort of thing influence us. In the first place, numbers of Russian warheads are not the principal threat to strategic stability now. We are not worried particularly about their launching an attack on our fixed land-based ICBM's.

It is better for the Russians to have more warheads if those are controlled by a solid command and control system, than fewer warheads in a chaotic situation.

Numbers of warheads were the currency back in the seventies and even into the eighties because of the threat to our fixed land-based ICBM's.

As far as I am concerned, that is not the currency any more. That is not the measure, the figure of merit, that one should focus on when dealing with the strategic balance.

It seems to me that it is worthwhile—because Russia is an important nation and a country that we need to work with on a number of matters—and important to propose changes to the Russians with respect to the ABM Treaty, and to try to work with them as we did in 1992.

President Yeltsin himself made a remarkable speech in January 1992 and that led to the Ross-Mamedov talks in 1992–93, in which the Bush administration tried to bring the Russian Government around to support for substantial amendments to the ABM Treaty and a reasonably substantial deployment of ballistic missile defenses in the United States.

It is worth trying in my judgment to return to the days of 1992. I believe with the current Russian Government, success is most unlikely, but I think the probability is not zero.

If such an approach proves fruitless, there are ample legal and strategic grounds, in my view, for withdrawing from the treaty.

We cannot perpetually let our security versus the likes of North Korea, Iran, and Iraq be held hostage to Russia's not wanting us to have defenses.

In the meantime, Mr. Chairman, I do not support, and I urged the Senate nearly 2 years ago not to approve, the delineation agreement that the administration has reached with the Russians, which limits unnecessarily the effectiveness of our theater defenses, nor the accompanying expansion of the treaty to encompass Belarus, Ukraine and Kazakhstan.

That expansion to include those countries is a step for which, in my judgment, there is not even the tiniest shred of a strategic rationale. We do not fear an attack from Belarus, Ukraine or Kazakhstan with intercontinental ballistic missiles, because they do not have any.

We do not need to limit their defenses in order to deter them from attacking us; therefore, we do not care what kind of defensive systems Belarus, Ukraine and Kazakhstan have. And there is absolutely no reason for our giving someone such as Mr. Lukashenko, who speaks for the most unreconstructed parts of the reds and browns in the former Soviet Union, some sort of veto over our ability to defend ourselves.

In my judgment, Mr. Chairman, only a very major modification of or withdrawal from the treaty would meet our strategic needs.

As interpreted by the administration, the treaty is even undermining the effectiveness of our theater ballistic missile defenses at the present time, systems that are not supposed to be covered by the treaty.

A very limited one- or two-site defense of the United States of the sort that might be compatible with a treaty that has only been

modestly amended would be essentially worthless against some perfectly plausible threats such as ship-launched ballistic missiles. That is one of the threats that we identified during the deliberations of the Rumsfeld Commission on which I served.

Indeed against some very plausible threats, such as ballistic missiles carrying clusters of biological weapons that might be released early in an ICBM's trajectory, only boost-phase intercept from space is going to offer a possible solution.

In short, Mr. Chairman, the world in which the ABM Treaty was an imperfect but, in my view, a reasonable accommodation to the strategic circumstances in which we found ourselves is gone with the wind.

In the new world in which we live, we now require defenses for our security. And our treaty obligations should be adjusted to serve our strategic needs, not the other way around.

Thank you, Mr. Chairman.

Senator HAGEL. Mr. Woolsey, thank you.

[The prepared statement of Ambassador Woolsey follows:]

PREPARED STATEMENT OF HON. R. JAMES WOOLSEY

Mr. Chairman, Members of the Committee, it is an honor to be asked to testify before you today on the topic of the Anti-Ballistic Missile Treaty of 1972.

It is my purpose to suggest to you that, in the circumstances of today, strong support for ballistic missile defense and a willingness to amend substantially, even to withdraw from, the ABM Treaty is a reasonable position—even for those who, like myself, have historically emphasized the central importance of offensive strategic weapons, have seen some value in certain arms control agreements, and did not initially welcome President Reagans Strategic Defense Initiative. The circumstances have changed, and that calls for a substantial change in our assumptions and our policies.

In order to make this point, I believe it would be informative to trouble you with a few biographical points. Thirty years ago this fall, as a Captain in the U.S. Army, I was serving as an analyst of strategic programs in the Office of the Secretary of Defense, and in that capacity I was assigned as an advisor on the U.S. delegation to the first round of the SALT I talks in Helsinki. Thus I was a very junior participant in the initial negotiations that led, three years later, to the ABM Treaty. When the treaty was approved by the Senate in 1972 I was the General Counsel of the Senate Armed Services Committee and assisted Senator Stennis in the Committee's consideration of the treaty and the floor debate. Then for three years in the late 1970's, as Under Secretary of the Navy, I was heavily involved in the Navy's strategic force planning, especially for the Trident program, some important aspects of which were influenced by the existence of the treaty.

In 1983, I was a member of President Reagan's Commission on Strategic Forces, the Scowcroft Commission (and the principal draftsman of its report); we did not reject SDI when it was announced by the President during the middle of our deliberations, but it is fair to say that the Commission assigned SDI a decidedly secondary role to what we felt to be the nation's central strategic objective: maintaining a survivable and effective offensive deterrent. Following the Reykjavik summit of 1986, I was the co-author of an article in the New York Times Magazine that was highly critical of President Reagan's proposal there to ban all ballistic missiles and rely principally on SDI for our strategic protection. We wrote in the article:

> "The official line has become a sort of strategic Manichaeanism: that there exist only the dawn of S.D.I. and the darkness of mutual assured destruction that went before it. The concept of careful and stable deterrence, with modernization of nuclear weapons to improve their survivability, some militarily useful work on defensive systems and moderate arms control, was abandoned."

One aspect of the approach to strategic issues summarized by this quotation, for many of us in the seventies and eighties, included adherence to the ABM Treaty. But for an important share of the treaty's supporters, acceptance of the treaty was not accompanied by any lapse into revery about the beauty of the concept of mutual assured destruction. It was very far from desirable, for many of us who supported

the treaty then, that by agreeing not to deploy nationwide ballistic missile defenses we would thereby guarantee most Soviet missiles a free ride to American targets—quite a few of us never liked the mutual aspect of mutual assured destruction. But we persuaded ourselves then that, nonetheless, the treaty presented the lesser of two evils, for two reasons.

First, we were not convinced that the technologies foreseeable in the early seventies, or even through much of the eighties, for ballistic missile defenses were going to spawn deployable systems capable of defending reliably against our major concern—an all-out Soviet attack. Very little else with respect to threats was on anyone's mind. Thus we felt that the U.S. was not giving up something that was practically attainable when it signed on to the treaty. Threats of lesser magnitude, other than the one that came to be posed by Chinese ICBM's, were not apparent in those years. (And for most of this period we were working cooperatively with China against the Soviet Union on a range of issues.)

Second, we felt that the massive Soviet lead in large ICBM's equipped with MIRV's, together with its reasonably capable ballistic missile submarine force, put a large share of our own ICBM's and bombers theoretically at risk if the Soviets should ever contemplate launching a first strike in the midst of some crisis. This forced us in our strategic planning to rely heavily on our own ballistic missile submarines as the only truly survivable part of the American nuclear deterrent. Soviet deployment of an early ABM system around Moscow, together with their extensive infrastructure of sophisticated radars and air defense interceptors throughout the country, led some of us to join the you-need-both-a-belt-and-suspenders set. We wanted to ensure that—even if U.S. offensive forces were heavily depleted by a Soviet attack and Soviet defenses were upgraded—the United States' ability to retaliate using submarine-launched missiles alone would be clear and sufficient. We felt that checking Soviet recklessness in a crisis—most likely one in which the Soviets would be able to count on superiority of conventional forces in Europe—heavily depended on this clarity and sufficiency, and that limiting Soviet deployment of even less-than-perfect ABM defenses was extremely important to this end.

This thinking seems dated now—to some it was not persuasive even in 1972—and it came to be increasingly questioned after President Reagan's famous 1983 SDI speech. By the nineties it became outdated in almost all of its assumptions due to the end of the cold war, the rise in the possibility of an accidental or unauthorized launch of a ballistic missile by increasingly chaotic Russian military forces, and persistent work on both longer-range and more flexible ballistic missiles and on weapons of mass destruction by rogue states such as North Korea, Iran, and Iraq.

My point with respect to the ABM Treaty in today's world is really twofold.

First, there is common ground possible, today, between those who have been on different sides of the ABM Treaty debate in the past. Both those who have opposed the treaty for many years (often in company with early support of the more ambitious forms of SDI) and those, such as myself, who supported the treaty during the same period and were skeptical of ambitious SDI, need to realize that what matter, today, are the decisions that now need to be made, not ancient jousts between SDI supporters and ABM Treaty supporters during the era before the fall of the Berlin wall. We may have both been somewhat right and somewhat wrong. It doesn't matter. Together we won the cold war. It's time, indeed past time, to go on to the next set of problems.

Second, if one focuses on the strategic realities of today, I would submit that there is no strategic rationale for the ABM Treaty. The old rationale for our wanting to limit Soviet defenses, as spelled out above, does not apply to today's Russia or the Russia of the foreseeable future, even if that nation turns more hostile to the U.S. than it is today. Russia is no longer capable of threatening Europe with many divisions of conventional forces so it would have no advantage in a crisis on that continent. Consequently we do not need to rely in any day-to-day sense on our strategic offensive nuclear forces to protect our NATO allies from Russian conventional attack. Moreover, Russian strategic nuclear forces do not threaten a substantial share of our nuclear deterrent: the deterrent that we do maintain is no longer heavily reliant on fixed land-based ICBM's that might be vulnerable to Russian attack, and hence we have no reason to want to limit Russian defenses to ensure that our retaliatory forces would be able to penetrate Russian defenses.

The only rationale for the ABM Treaty today is one rooted in current foreign relations concerns: the Russians do not want us to withdraw from it, so doing so would, presumably, upset them and perhaps lead them to do other things that we don't want. For example, for the umpteenth time they may threaten to refuse to ratify the START II Treaty. But it seems to me there is a limit to the degree to which we should let this sort of thing influence us. The Russians were willing in 1992, following President Yeltsin's remarkable speech in January of that year, to consider

substantial revisions to the ABM Treaty and to discuss mutual work on ballistic missile defenses with us. Perhaps this or the next Russian government will prove similarly reasonable in the future. That doesn't look likely today, but it is still worth offering, in my view, to work with the Russians in the way that we began in 1992 and abandoned in 1993. If that proves fruitless there are ample legal and strategic grounds for withdrawing from the treaty. We cannot perpetually let our security vis-a-vis the likes of North Korea, Iran, and Iraq be held hostage to Russia's not wanting us to have defenses.

In the meantime, in my judgment, the Senate should not approve the delineation agreement that the Administration has already reached with the Russians, which limits unnecessarily the effectiveness of our theater defenses, nor the accompanying expansion of the treaty to encompass Belarus, Ukraine, and Kazakhstan—a step for which there is not even the most remote strategic rationale. We don't have any reason to want to limit these countries' ballistic missile defenses. Why should we let them have a hand in limiting ours?

In my view only a very major modification of, or a withdrawal from, the treaty would meet our strategic needs. Even if one believes that a full defense against an all-out Russian attack is not attainable, the treaty clearly hinders our ability to defend ourselves against a number of lesser and plausible threats during this post-cold war era: rogue states, an accidental launch from Russia, or a launch from China provoked by, e.g., a crisis over Taiwan. As interpreted by, particularly, this Administration, the treaty is even undermining the effectiveness of our theater ballistic missile defenses, systems that are not supposed to be covered by the treaty. A very limited one- or two-site defense of the U.S. of the sort that might be compatible with a treaty that has been only modestly amended, would be essentially worthless against some perfectly plausible threats, such as ship-launched ballistic missiles, that we identified during the deliberations of the Rumsfeld Commission. Indeed against some very plausible threats, such as ballistic missiles carrying clusters of biological weapons that may be released early in the trajectory, only boost-phase intercept from space offers a likely response.

In short, Mr. Chairman, the world in which the ABM Treaty was an imperfect, but in my view reasonable, accommodation to the strategic circumstances in which we found ourselves is gone with the wind. In the new world in which we live we now require defenses for our security, and our treaty obligations must be adjusted to serve our strategic needs, not the other way around.

Senator HAGEL. Mr. Lehman.

STATEMENT OF HON. RONALD F. LEHMAN, FORMER DIRECTOR OF THE ARMS CONTROL AND DISARMAMENT AGENCY

Secretary LEHMAN. Thank you, Mr. Chairman, Senator Biden. I am honored that you have asked me to come back and appear before the committee again.

In particular, I want to thank you and your staff for some flexibility in accommodating my schedule. And in particular, I would like to say that I am honored to be appearing with this particular panel, because I know each of these individuals personally and hold them in the highest regard.

I also should emphasize up front that I am only speaking for myself. These are my personal views and are not necessarily the views of any organizations I have been associated with or any past or present administration. They are simply my views.

You have asked for my thoughts on the interaction of arms control and ballistic missile defense including some elaboration of how we have tried in the past to enhance the relationship. Today, the importance of this issue is every bit as significant as it was during the cold war, and a vast literature on the subject exists.

In general, the public debate for and against ballistic missile defenses, like that on arms control itself, has experienced much oversimplification over the years by both advocates and opponents.

Given the complexities involved, it should not be surprising that there have been considerable differences among thoughtful experts as well. Nevertheless, uncertainty has been reduced, and trends are becoming ever more clear.

The spread of ballistic missiles has been more rapid than had been widely understood. In this age of globalization and increased cooperation among proliferant states, the missile capabilities of many states, both potential aggressors and those who feel increasingly threatened, is growing.

Likewise, the technologies which are at the heart of ballistic missile defense—technologies such as high-performance computing, micro-electronics and sensors—are also advancing rapidly, bringing with them the prospect of more effective defensive systems, especially for advanced post-industrial states.

Even in the areas of military doctrine, deterrence theory, and arms control policy, areas in which the residual heat of past debates most often distorts a clearer vision of the future, greater convergence can be detected.

Indeed, support for ballistic missile defenses has always existed in some measure across party lines and left and right across the ideological spectrum.

The passage of the National Missile Defense Act of 1999 gives hope, but not certainty, that a new consensus may be possible.

A process of determining afresh the enduring principles and new realities of arms control and ballistic missile defense is needed. The hearings being held by this committee are an important step in that process.

Much has changed, but some of the basics have not changed. Both arms control and ballistic missile defense must be seen in the context of broader national goals and national security strategies.

Even within the realm of countering ballistic missile threats, arms control and ballistic missile defenses are themselves additional tools, but not the only tools for enhancing our security.

These tools must be integrated with our military forces and doctrine, our technological and industrial prowess, our diplomacy and other components of a multifaceted effort to enhance the Nation's security.

Properly integrated, arms control, ballistic missile defenses and the other tools at our disposal all together result in a strategy for which the total is greater than the sum of its parts.

Unfortunately, incomplete, disjointed and unbalanced approaches can have the opposite result. Bringing all the parts together effectively is not easy given the complexities among and within nations.

There is much that can be said about all of this, but in the interest of providing time for discussion, let me highlight several key judgments:

One, ballistic missile defenses, both strategic and theater, can significantly enhance deterrence and crisis stability, increase our military capabilities, protect allies, friends and coalitions, strengthen nonproliferation, support our diplomacy, improve the conditions for peace in troubled regions, and expand the prospects for effective arms control and reductions.

The proper balance between offensive and defensive capabilities shifts over time, but the most significant, near-term capabilities

missing from our current national security arsenal are defenses against ballistic missiles.

Missile defenses do not substitute for a multifaceted national security strategy, but neither does even the most effective multifaceted strategy eliminate the need for deployment of ballistic missile defenses in today's world.

Ballistic missile defenses do not eliminate the need for a continuum of military forces, both nuclear and conventional, but they can enhance global and regional deterrence and support our military forces in combat.

Deployment of significant ballistic missile defenses is inevitable, but it is not at all inevitable that they will be deployed in time to meet the needs of the United States and its allies and friends.

The key to a timely deployment decision remains the early demonstration of success, which in turn requires meaningful program objectives and modern management with dynamic exploitation of technology and competition.

That deployments will take longer and cost more than is necessary may result from divisions within the policy community over the proper role of defenses, but the most immediate constraints appear to be those which deny technologists the ability to demonstrate the best that is feasible.

The United States should develop its ballistic missile programs primarily to address its own requirements and timeframes, but a better way to proceed is cooperatively with Russia, Israel, Japan and others, recognizing that specific needs, urgency and feasibility differ among nations, and that cooperation on early warning and other theater defenses may be equally vital to many nations.

Appropriate treaties, agreements and joint efforts on offensive and/or defensive arms can enhance security and complement the deployment of missile defenses, but failure to adjust to the changed realities that necessitate the deployment of ballistic missile defenses may ultimately prove to be the greatest threat to existing and future arms control agreements as well as to our security.

An inability to exploit ballistic missile defenses for a more cooperative approach to international security may deny the United States opportunities for leadership and tension reduction and may perpetuate the corrosive political effects of international relationships too often rhetorically defined in terms of mass mutual hostages.

Obviously, not everyone favors the deployment of ballistic missile defense. A serious discussion of the issues will be necessary to broaden support, and a more vigorous marketplace of ideas will help ensure that the gains are maximized and costs minimized.

Because such a process must adapt to a world in an uncertain transition, I would be skeptical of any offers of a single true path. Nevertheless, I believe it would be useful to remind everyone that windows of opportunity do open, although sometimes not clearly and not for long.

The situation as it played out in 1992 offers a number of insights.

With the breakup of the Soviet Union, the cold war began to wind down, leaving behind many legacy issues with which we are still dealing. The political changes suggested opportunities for Rus-

sia and the United States to work together to build a stronger, safer basis for their common security.

Each recognized that the world had changed dramatically, yet each was uncertain how much cooperation would be possible and how much of the old relationship would or should remain.

As interactions with Russia improved and as both sides cut back on their military preoccupation with the other, the United States modified its planned ballistic missile defenses and, interestingly, Russian showed greater interest in cooperating on ballistic missile defense.

At the same time, the two nations continued with the most comprehensive arms control accomplishments ever achieved.

I should add that Ambassador Woolsey was very helpful in quite a number of those. We did not always agree on each and every issue, but I still commend him. It took a bipartisan effort to pull together that remarkable arms control revolution.

Senator BIDEN. Mr. Secretary, it looks like you got him now, though.

Secretary LEHMAN. We keep working on him. It is never easy.

In September 1991——

Senator BIDEN. He has gone over.

Secretary LEHMAN. In September 1991, soon after the Moscow coup, President Bush had called for cooperation on defenses. A month later, Soviet President Gorbachev announced his support for discussions on such cooperation, a direction given greater weight when, in January 1992, President Yeltsin proposed joint United States-Russian cooperation on a "global protective system."

Focusing on the effort to ensure that the dissolution of the Soviet Union remained peaceful, joint decisions on defense cooperation awaited the Moscow Summit of June 1992, which created a group of experts to discuss cooperation on early warning, cooperation on technologies, nonproliferation and the legal basis for a Global Protection System, the United States having adopted the name proposed by the Russians.

During those discussions, I presented the U.S. case for an amended ABM Treaty, proposals that were subsequently presented in greater detail in the Standing Consultative Commission.

The U.S. view was that circumstances had changed and that an opportunity now presented itself for creating a security relationship more suitable to friends. Central to this new relationship was exploring cooperation in protecting both of our populations from attack, rather than collaborating to maximize their vulnerability to mass destruction.

Cooperation on early warning, missile defense and nonproliferation seemed preferable to a preoccupation with mass destruction rhetoric that would inevitably poison our political relations. This did not involve the abandonment of deterrents or the abolition of nuclear forces.

Instead, this approach was designed to promote nonproliferation and enhance security and stability by defending against small attacks, whatever the source.

In addition to the radical geopolitical changes taking place, technological advances had blurred distinctions between ABM systems on the one hand and early warning, command and control, air de-

fense missiles and theater ballistic missile defenses on the other hand.

Advances in technology had already vastly complicated the clarity of categories and confidence in compliance. Yet many of the systems now in tension with the ABM Treaty were for other vital missions not ABM related.

In particular, because sensors are so important to early warning, national technical means of verification, and conventional forces, we proposed that sensors run free, that we agree not to make them an issue between our two countries.

The United States also proposed more extensive ABM deployments than those permitted by the ABM Treaty as originally signed in 1972.

Russia has 100 interceptors deployed around Moscow, but the original treaty permitted 200 at two sites and additional interceptors at several additional test sites.

The United States offered to forego a decision on space-based interceptors in the context of an agreement to increase the number of ground-based interceptors to cover the entire United States to a planned level of effectiveness. Russia could do the same.

In short, the American position held that the ABM Treaty was broken, but the United States was prepared to fix it in the context of changes that would increase the security of both countries and others.

Given that threats already emerging were beyond the control of either Russia or the United States, we were not prepared to let considerations of the ABM Treaty ultimately require us to sacrifice our security and that of our allies and friends, including Russia, who might be threatened by ballistic missiles.

Likewise, we sought the broadest cooperation and were prepared to negotiate restraints, but we would not permit a veto over necessary deployments.

Mr. Chairman, admittedly, this is a cursory coverage of what are very complex issues. I have written on this and spoken on this many times over the years.

There are two statements that I gave extemporaneously that were subsequently punished that I might offer for the record, if you wish, in which you——

Senator BIDEN. Published?

Secretary LEHMAN. What is that?

Senator BIDEN. Did you say punished or published?

Secretary LEHMAN. Published. Did I say punished?

Senator BIDEN. Oh, you said punished. Freudian slip.

Secretary LEHMAN. It is hard to punish.

They were subsequently published and as remarks that took place in those times, so you can get a little flavor for what was actually happening at the time. And I offer these for the record, if you wish.

Senator HAGEL. We will include those in the record.

[The material referred to follows Secretary Lehman's prepared statement.]

Secretary LEHMAN. Then, Mr. Chairman, I will conclude my remarks at that point.

Thank you.

Senator HAGEL. Mr. Lehman, Thank you.

[The prepared statement of Secretary Lehman follows:]

PREPARED STATEMENT OF HON. RONALD F. LEHMAN

Mr. Chairman, Distinguished Members of the Committee on Foreign Relations:

I am honored that you have asked me to appear again before this Committee to exchange ideas. I wish also to thank you for your kindness in accommodating my schedule. Up front, let me make clear that these are strictly my own views. I do not speak for any other person or for any organization, program, or Administration with which I have been or am now associated.

You have asked for my thoughts on the interaction of arms control and ballistic missile defense including some elaboration of how we have tried in the past to enhance the relationship. Today, the importance of this issue is every bit as significant as it was during the Cold War and a vast literature on the subject exists. In general, the public debate for and against ballistic missile defenses, like that on arms control itself, has experienced much oversimplification over the years by both advocates and opponents. Given the complexities involved, it should not be surprising that there have been considerable differences among thoughtful experts as well. Nevertheless, uncertainty has been reduced and trends are becoming ever more clear.

The spread of ballistic missiles has been more rapid than had been widely understood. In this age of globalization and increased cooperation among proliferant states, the missile capabilities of many states—both potential aggressors and those who feel increasingly threatened—is growing. Likewise, the technologies which are at the heart of ballistic missile defense—technologies such as high performance computing, microelectronics, and sensors—are also advancing rapidly, bringing with them the prospect of more effective defensive systems especially for advanced, post-industrial states.

Even in the areas of military doctrine, deterrence theory, and arms control policy—areas in which the residual heat of past debates most often distorts a clearer vision of the future—greater convergence can be detected. Indeed, support for ballistic missile defenses has always existed in some measure across party lines and left and right across the ideological spectrum. The passage of the National Missile Defense Act of 1999 gives hope, but not certainty, that a new consensus may be possible.

A process of determining afresh the enduring principles and new realities of arms control and ballistic missile defense is needed. The hearings being held by this Committee are an important step in that process. Much has changed, but some of the basics have not changed. Both arms control and ballistic missile defense must be seen in the context of broader national goals and national security strategies.

Even within the realm of countering ballistic missile threats, arms control and ballistic missile defenses are themselves additional tools, but not the only tools for enhancing our security. These tools must be integrated with our military forces and doctrine, our technological and industrial prowess, our diplomacy, and other components of a multifaceted effort to enhance the nation's security.

Properly integrated, arms control, ballistic missile defenses, and the other tools at our disposal all together result in a strategy for which the total is greater than the sum of its parts. Unfortunately, incomplete, disjointed, and unbalanced approaches can have the opposite result. Bringing all of the parts together effectively is not easy given the complexities among and within nations.

There is much that can be said about all of this, but in the interest of providing time for discussion let me highlight several key judgments:

(1) Ballistic missile defenses—both strategic and theater—can significantly enhance deterrence and crisis stability, increase our military capabilities, protect allies, friends, and coalitions, strengthen nonproliferation, support our diplomacy, improve the conditions for peace in troubled regions, and expand the prospects for effective arms control and reductions.

(2) The proper balance between offensive and defensive capabilities shifts over time, but the most significant, near term capabilities missing from our current national security arsenal are defenses against ballistic missiles.

(3) Missile defenses do not substitute for a multifaceted national security strategy, but, neither does even the most effective multifaceted strategy eliminate the need for deployment of missile defenses in today's world.

(4) Ballistic missile defenses do not eliminate the need for a continuum of military forces, both nuclear and conventional, but they can enhance global and regional deterrence and support our military forces in combat.

(5) Deployment of significant ballistic missile defenses is inevitable; but it is not at all inevitable that they will be deployed in time to meet the needs of the United States and its allies and friends.

(6) The key to a timely deployment decision remains the early demonstration of success, which in turn requires meaningful program objectives and modern management with dynamic exploitation of technology and competition.

(7) That deployments will take longer and cost more than is necessary may result from divisions within the policy community over the proper role of missile defenses, but the most immediate constraints appear to be those which deny technologists the ability to demonstrate the best that is feasible.

(8) The U.S. should develop its ballistic missile programs primarily to address its own requirements and time frames, but a better way to proceed is cooperatively with Russia, Israel, Japan, and others, recognizing that specific needs, urgency, and feasibility differ among nations and that cooperation on early warning and other theater defenses may be equally vital to many nations.

(9) Appropriate treaties, agreements, and joint efforts on offensive and/or defensive arms can enhance security and complement the deployment of missile defenses, but failure to adjust to the changed realities that necessitate the deployment of ballistic missile defenses may ultimately prove to be the greatest threat to existing and future arms control agreements as well as to our security.

(10) An inability to exploit ballistic missile defenses for a more cooperative approach to international security may deny the United States opportunities for leadership and tension reduction and may perpetuate the corrosive political effects of international relationships too often rhetorically defined in terms of mass mutual hostages.

Obviously, not everyone favors the deployment of ballistic missile defenses. A serious discussion of the issues will be necessary to broaden support, and a more vigorous marketplace of ideas will help insure that the gains are maximized and costs minimized. Because such a process must adapt to a world in uncertain transition, I would be skeptical of any offers of a single, true path. Nevertheless, I believe it would be useful to remind everyone that windows of opportunity do open, although sometimes not clearly and not for long. The situation as it played out in 1992 offers a number of insights.

With the breakup of the Soviet Union, the Cold War began to wind down leaving behind many legacy issues with which we are still dealing. The political changes suggested opportunities for Russia and the United States to work together to build a stronger, safer basis for their common security. Each recognized that the world had changed dramatically, yet each was uncertain how much cooperation would be possible and how much of the old relationship would or should remain. As interactions with Russia improved, and as both sides cut back on their military preoccupation with the other, the United States modified its planned ballistic missile defenses and, interestingly, Russia showed greater interest in cooperating on ballistic missile defense. At the same time, the two nations continued with the most comprehensive arms control accomplishments ever achieved.[1]

In September of 1991, soon after the Moscow Coup, President Bush had called for cooperation on defenses. A month later, Soviet President Gorbachev announced his support for discussions on such cooperation, a direction given greater weight when, in January of 1992, President Yeltsin proposed joint U.S.-Russian cooperation on a "global protective system."

Focusing on the effort to ensure that the dissolution of the Soviet Union remained peaceful, joint decisions on defense cooperation awaited the Moscow Summit of June, 1992, which created a group of experts to discuss cooperation on early warning, cooperation on technologies, nonproliferation, and the legal basis for a Global Protection System, the U.S. having adopted the name proposed by the Russians.

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[1] During the period in which the Cold War was waning and the United States was moving toward deployment of ballistic missile defenses, the Strategic Arms Reduction Treaty and Protocol (START I), the U.S./Russian Joint Understanding and START II Treaty eliminating multiple-warhead land-based missiles were signed. Agreements with the Soviet Union were concluded on the Prevention of Dangerous Military Activities; on a Bilateral Verification Experiment and Data Exchange Related to the Prohibition of Chemical Weapons; on Destruction and Non-production of Chemical Weapons; and on Implementing Trial Verification and Stability Measures of the Treaty on the Reduction and Limitation of Strategic Offensive Arms. The verification Protocols to the Threshold Test Ban Treaty and the Peaceful Nuclear Explosions Treaty were also signed and the Treaties ratified during this period. Multilateral agreements completed include the Treaty on Conventional Armed Forces in Europe (CFE); the 1991 and 1992 Vienna Agreements on Confidence- and Security-Building Measures (CSBMs); the Treaty on the Final Settlement with Respect to Germany; the Open Skies Treaty, and Chemical Weapons Convention (CWC).

During those discussions, I presented the U.S. case for an amended ABM Treaty, proposals that were subsequently presented in greater detail in the Standing Consultative Commission.

The U.S. view was that circumstances had changed and that an opportunity now presented itself for creating a security relationship more suitable to friends. Central to this new relationship was exploring cooperation in protecting both of our populations from attack, rather than collaborating to maximize their vulnerability to mass destruction. Cooperation on early warning, missile defense, and nonproliferation seemed preferable to a preoccupation with mass destruction rhetoric that would inevitably poison our political relations. This did not involve the abandonment of deterrence or the abolition of nuclear forces. Instead, this approach was designed to promote nonproliferation and enhance security and stability by defending against small attacks, whatever the source.

In addition to the radical geopolitical changes taking place, technological advances had blurred distinctions between ABM systems on the one hand and early warning, command and control, air defense missiles, and theater ballistic missile defenses on the other hand. Advances in technology had already vastly complicated the clarity of categories and confidence in compliance. Yet many of the systems now in tension with the ABM Treaty were for other vital missions not ABM related. In particular, because sensors are so important to early warning, national technical means of verification, and conventional forces, we proposed that sensors run free—that we agree not to make them an issue between our two countries.

The United States also proposed more extensive ABM deployments than those permitted by the ABM Treaty as originally signed in 1972. Russia has 100 interceptors deployed around Moscow, but the original treaty permitted 200 at two sites and additional interceptors at several additional test sites. The United States offered to forego a decision on space based interceptors in the context of an agreement to increase the number of ground based interceptors to cover the entire United States to a planned level of effectiveness. Russia could do the same.

In short, the American position held that the ABM Treaty was broken, but the U.S. was prepared to fix it in the context of changes that would increase the security of both countries and others. Given that threats already emerging were beyond the control of either Russia or the United States, we were not prepared to let considerations of the ABM Treaty ultimately require us to sacrifice our security and that of allies and friends, including Russia, who might be threatened by ballistic missiles. Likewise, we sought the broadest cooperation and were prepared to negotiate restraints, but we would not permit a veto over necessary deployments.

Mr. Chairman, admittedly, this is a very cursory discussion of a complex subject, and I have had time to address briefly only one historic example of how the United States has proposed to harmonize arms control and ballistic missile defenses in the interest of international security. Elsewhere, I have discussed these issues in greater detail. If you wish, I would be prepared to submit for the record two publications that contain statements I made in 1992 and 1996 elaborating on exactly the questions you have asked me to address today.

Again, I welcome this opportunity to explore with the Committee in greater detail exactly why deployment of ballistic missile defenses has become necessary to:

Enhance deterrence and crisis stability,
Increase our military capabilities,
Protect allies, friends, and coalitions,
Strengthen nonproliferation,
Support U.S. diplomacy,
Improve the conditions for peace in troubled regions, and
Expand the prospects for effective arms control and reductions.

Thank you, Mr. Chairman.

[Remarks, November 1992, published 1993]

CHANGING REALITIES

(Ronald F. Lehman II)

The development of a consensus for a strategic defense initiative (SDI) is at the cutting edge of national security, foreign policy, and arms control strategy. This is a time when we need to be probing and engaging some of the difficult issues that we have faced over the years. This article highlights where we have been going and discusses specific events that have been taking place with respect to developing a concept for defenses against ballistic missile attack.

Truly, the world is in transition. We are entering the post-cold war era. Increasingly we have seen not only our foreign policy and national security strategy move away from preoccupation with the East-West military balance, but also we have seen this occur in arms control. The coup attempt in Moscow in August 1991 in many ways encapsulated and symbolized those trends. The coup's failure was another sign that the cold war was over and the traditional military threat to NATO in Western Europe was diminishing rapidly. And now, we have the possibility of entering into a new world in which we may be cooperating with the countries of Eastern Europe, and subsequently with the countries that have emerged out of the Soviet Union, to enhance our security, prosperity, and freedom together.

This has had a tremendous impact on how we think about arms control. Before the August 1991 coup attempt, we looked at Soviet military forces in terms of the traditional threat, and we had just completed what some call a "traditional arms control treaty"—START (Strategic Arms Reduction Treaty). At that time, there was intense concern over the question of accidental or unauthorized launch of ballistic missiles, and a preoccupation with the question of the nonproliferation implications of the turmoil in Eurasia.

SOVIET DISSOLUTION RAISES SECURITY CONCERNS

When the Soviet Union began to break up, we were faced with a serious nonproliferation question: what happens when a nuclear weapons state breaks up? Does that portend the emergence of additional nuclear weapons states and, if so, what are the implications for our security?

We also saw another aspect of the problem. In the turmoil caused by the Soviet breakup, we were increasingly concerned over the control of nuclear weapons, technologies, and material, including fissile material. We were concerned about the future of scientists, engineers, and technicians, who might find, in the economic and political difficulties they were experiencing in their own countries, an opportunity to go abroad and become involved in the development of nuclear, biological, chemical, or ballistic missile programs in other countries that posed a proliferation threat. We quickly began to address these issues with the former republics of the Soviet Union, particularly with Russia, Ukraine, Kazakhstan, and Belarus. We made significant efforts to prevent proliferation overall, both through export control and political policy.

Another effort dealt with the question of the traditional arms control agreements as we had known them. For example, we all think of START as dealing with offensive force reductions, but we took that agreement and turned it into an important tool for nonproliferation. In the context of the Lisbon Protocol, we were able to get agreement from the three former republics, other than Russia, which have nuclear weapons on their territory, to become non-nuclear weapon states under the Non-proliferation Treaty (NPT). The Treaty on Conventional Armed Forces in Europe (CFE), likewise, was turned from a treaty to deal with offensive ground threats to NATO in the NATO/Warsaw Pact context into a regional security structure. The treaty helped bring stability through the reallocation of conventional forces within the former Soviet Union.

One area of cooperation that has not received much attention, but which has important arms control dimensions, is U.S.-Russian cooperation in ballistic missile defenses. President Mikhail Gorbachev first talked about the possibility of cooperating in the area of early warning in 1991. The United States had clearly stated for a number of years, in the defense and space negotiations, in the Standing Consultative Commission, and in all of our bilateral dealings with the Soviet Union, that we saw an increased need for strategic ballistic missile defenses. We saw the possibility of moving to a better, safer world with greater reliance on defenses. We said we intended to do that when the programs were available that would provide for that enhanced security. However, we also always said we were prepared to consider a cooperative approach, a cooperative transition.

From the outset of our negotiations with the Soviet Union in the mid-1980s on strategic defenses, it was very difficult to find common ground between our two countries. Now, in the post-cold war period, we have the tremendous potential for developing common ground. In January 1992, President Boris Yeltsin talked about U.S.-Russian cooperation in a global protection system. We viewed that as a very important step, and we have sought to engage Russia to develop this concept, one that deals not only with our two countries, but also with our NATO allies and other allies and friends around the world.

As we have elaborated our own system for limited defenses—known as "Global Protection Against Limited Strikes" (GPALS) and consisting of a number of approaches to interceptors, both anti-tactical ballistic missiles (ATBMs), ground-based

anti-ballistic missile (ABM) interceptors and eventually space-based interceptors (SBIs), and a wide variety of sensors, we have seen that there are increased areas where we could cooperate. For example, we could cooperate in national ballistic missile defense programs, and in the end many nations of the world would gain the benefit of this technology for enhancing their security as well as ours.

SECURITY TALKS UNDERWAY

We have begun to engage Russia on this issue. The instrumental step was taken at the June 1992 Summit in Washington when Presidents George Bush and Boris Yeltsin agreed to begin a process through high-level discussions to develop a cooperative approach to a Global Protection System (GPS), highlighting not only early warning and cooperation in the development of the technologies, but also establishing the legal basis for GPS. This means that the question of the legal basis for such a system has to take into account the 1972 Anti-Ballistic Missile (ABM) Treaty.

The U.S.-Russian high-level group established by the two presidents met in July and September 1992. That group is known informally as the Ross-Mamedov Group. The two delegations established working groups to deal with the overall GPS concept, with technical cooperation, and with nonproliferation. The United States and Russia are also discussing the legal basis for GPS.

The relationship between the ABM Treaty and the legal basis for GPS has to be viewed in light of changing circumstances, particularly since the ABM Treaty was negotiated in 1972. The great debates over offense/defense relationships have been transformed by those developments. Whereas, in earlier periods we spent much time debating overall strategic stability and the question of the offense/defense relationship, in today's cooperative world we are looking at limited ballistic missile defense systems to deal with limited threats.

The U.S. concept for its GPALS system, which would contribute to an overall GPS, is a limited system. What are the implications of the ABM Treaty for a limited system? Over the years, largely because the United States deactivated its own ABM system, which was deployed for only a very short period, the impression has been left that the ABM Treaty bans ABM interceptors and ABM systems. In fact, it permits them. The ABM Treaty, as signed in 1972, actually permitted 200 interceptors in addition to test and training launchers. As a result of the 1974 Protocol to the ABM Treaty, that number of permitted interceptors was reduced to 100 at one deployed site, with a number of additional launchers at test ranges. Russia has ABM interceptors deployed around the Moscow area. Therefore, the treaty, as originally concluded in 1972, provided for additional numbers of ABM interceptors, exceeding the number presently deployed by Russia and well above those of the United States, because we have none.

The ABM Treaty approached defenses from the point of view of managing limited systems. It also had a broader philosophical basis, dealing with the question of area defenses, protecting retaliatory capability. There was a fear that ABM systems might deny the retaliatory capability of either of the two sides, which could be destabilizing. However, in the new cooperative era of today, we believe the time has come to look at the ABM Treaty from the point of view of cooperating in the protection of our citizens, rather than collaborating to maximize their vulnerability. The ABM Treaty has to reflect this new political reality.

That is not to say that only the political reality is changing. The technical reality has been changing as well. Increasingly it has become more difficult to distinguish between surface-to-air missiles (SAMs) against aircraft and anti-tactical ballistic missiles (ATBMs) and ABM systems. Many of the SAM systems deployed today have certain characteristics that would have thrilled ABM designers in the 1960s. Technology is making it more difficult to distinguish between interceptors' roles that once were believed to be clear cut. The same is true for sensors. Modern electronics, communications, and sensor technology make it more difficult to say what does and what does not have an ABM capability.

A related issue illustrates how difficult this has become: the controversy over the Krasnoyarsk large phased-array radar. We were dealing with large phased-array radars in the ABM Treaty, saying they should be on the periphery of national territory and oriented outward to minimize their utility as ABM radars. The existence of the Krasnoyarsk radar complicated the consideration of this issue, but it was simple compared to the kinds of issues that will emerge when you have modern data links of the type that exist today, which have already begun to raise questions of compliance.

MULTILATERAL WORLD INCREASES THREATS

In addition to changes in technologies, and changes and distinctions between interceptors and sensors, there are changes that result from the political upheavals taking place. For example, in the republics of the former Soviet Union, one finds that the former Soviet ABM system is now spread among a number of independent sovereign countries. The interceptors are in Russia, but not all the testing sites, nor all development facilities, nor all the sensors. Indeed, not all ABM facilities are even in the Commonwealth of Independent States. Thus, we have been talking about the ABM Treaty as a bilateral treaty existing in what is increasingly becoming a multilateral world. This introduces additional complications. On the other hand, when you look at the Global Protection System, which will ultimately develop in a multilateral way, there are certain realities that can be seen unfolding in the context of the ABM Treaty.

The bottom line really is that the ABM Treaty has to evolve to take into account technical and political changes if it is to continue to be of use to the United States, Russia, and the rest of the world. It has to take into account the need, with the new proliferation threats, to protect our citizens. How can it do that? From our point of view, it has to permit the deployment of our GPALS system. That means it would have to address a number of issues:

First is the question of deployments. The United States does not have any deployed ABMs, but the ABM Treaty as originally signed would have permitted 200 interceptors as well as 15 additional launchers at test sites. Our GPALS would be several times that size in ground-based interceptors, and we envisage space-based interceptors in the future. We have to address those issues. However, to get there, we would have to develop the systems and test them, and right now we have difficulty with the ABM Treaty because it puts constraints on our testing program. We need relief from the treaty so that we and others can, as part of our efforts to move ahead and provide protection to our citizens, do the testing required.

ABM Treaty relief involves the question of sensors. Many of the compliance issues of the ABM Treaty have to do with the very difficult issue of knowing what is or is not an ABM sensor. The time has come to address this question in light of the newly cooperative world. We also need to ensure that there are no doubts that the ABM Treaty *does not* cover ATBM systems. And we need to ensure that ATBM systems are not constrained or delayed because of debates over whether they are or are not ABM systems. Finally, we also need to deal with the question of technology transfer, because the ABM Treaty is a bilateral treaty and it prohibits the transfer of ABM technology to other states. This creates a fundamental tension with the concept of a cooperative global protection system that involves a number of countries.

In summary, the time has come to cooperate in protecting our citizens rather than collaborating in maximizing their vulnerability. This is the reality of the new world. The technologies exist that would permit us to do this, but under the ABM Treaty those technologies are constrained and the process can be delayed. We need relief from those constraints. Like our other arms control agreements, the ABM Treaty needs to evolve to reflect new realities if it is to continue.

We must always remember that arms control is an important policy tool, indeed a tool we must use in our interests and the interests of our friends around the world, including our new friends. However, we have to use arms control effectively, and that means it has to be flexible enough to accommodate the realities of the new world.

[Proceedings, Carnegie Endowment, Seminar—February 14, 1996]

START II, Missile Non-Proliferation, and Missile Defense—The Offense-Defense Relationship: Past and Future

(Remarks by the Honorable Ronald F. Lehman II)

As one who participated in the START negotiating process from beginning to end. I am pleased to join with so many of you, both from the United States and Russia, who helped make these historic agreements possible. I see many familiar faces, but it is perhaps just as important that I see so many new faces.

The negotiation of the START treaties took place not so many years ago, but most of the original cast of these dramas has moved on to new roles and others have taken their place. Unlike the quick action taken on the INF Treaty, the entry into force of the START treaties was not immediate. During many months of rapid change, this delay has introduced to the contemporary stage a significant number

of new players. For that reason, I would like to concentrate my remarks less on the debates in their current style than on the ideas which inspired us in the past and the visions we had then of the future. My assigned task of looking at the relationship of strategic offensive and defensive weapons systems in the context both of further arms reductions and of the proliferation of weapons of mass destruction is actually facilitated by this distance from the current debate.

THE EARLY HISTORY OF OFFENSE AND DEFENSE

Just as arms control is inseparable from national security, so offense and defense are inseparable in the consideration of military strategy. This has always been so. Throughout the history of warfare, one can see periods in which tactics or technology favored the offense or favored the defense, but some optimal mix evolved in each era. Offensive action could apply force for political gain, but it could also be used for defense or for retribution against aggression. Defenses could blunt an attack, but adopting defensive positions on part of the battle front was also a means for both aggressor and victim to concentrate their forces elsewhere. Along with this economy of force role, defenses also provided early warning and attack assessment as each sought to stage decisive action on its own terms.

Even in the age of great fortifications, when the defense was said to be dominant, defensive operations served primarily to delay, dissipate, and channel an attack to a time and location where the advancing forces would be at a disadvantage. The successful defenders of great castles may have, on a few occasions, actually engaged in little combat from behind the protection of their ramparts before a siege was lifted. Ultimately, however, they had to sally forth to reclaim their land after exhaustion, attrition, or fear of diminished prospects for victory had caused the attacker to fall back on its own defenses. Indeed, aggression abroad was not often risked without secure fortifications at home.

This is not to say that the balance between offense and defense has no bearing on the likelihood and intensity of war. It does. During the age of the great fortified cities in Europe warfare was still frequent, but usually limited and highly ritualized with rules of engagement which minimized casualties. As trench warfare demonstrated in World War I, however, increased use of defensive tactics did not always mean that the loss of life was minimized. Likewise, in the world's military histories, bold offensive action is as much associated with limited casualties as it is with massive slaughter and long periods of peace were associated with powerful empires which tolerated no resistance.

In short, strong defenses could be both stabilizing and essential to sound military doctrine, but the price of war was determined more by the causes of conflict, the character of man, and the correlation of forces than by the mere preference of offense or defense dominance. And, finally, although defensive action always played some role, the offense or threat of it brought hostilities to an end. This "spirit of the offense" came to dominate military thinking in the age of Clausewitz. As technology has made weapons more and more destructive, this concept of war as an extension of rational political competition was frequently combined with a more pacific notion that weapons had become so horrible that rational war could not be contemplated. Nobel's dynamite, artillery, the machine gun, the submarine, the Zeppelin, the airplane, poison gas, however, all proved insufficiently horrible to guarantee peace.

This reflection of the extension of violence as the heart of warfare rather than as the basis for peace has inspired many commentators to prefer defense dominance, indeed, to advocate worlds in which all states would have a minimum of offensive force relative to the defenses of their neighbors. In some cases, this distinction between offensive and defensive force has been carried over into distinctions among weapons. One can read of armies that went to war with only swords. One does not read of armies going to war with only shields. One can understand a logic for peace in which the former would be banned and the latter become a safeguard against aggression.

The necessary distinction, however, has not stood the test of time for a number of reasons. Certainly, few defensive weapons have no offensive capability. The soldier with only a shield may sling it at his enemy or use it as a bludgeon. Infantrymen even distinguish between offensive and defensive hand grenades (actually, the offensive grenade has less shrapnel because it is used by troops moving in the open against troops confined in bunkers and foxholes). Second, defensive arms like defense itself serve to complement the offense. Thus, traditional military strategy has also required a mix of weapons which were either predominantly offensive or defensive.

The coming of the thermonuclear age reopened this debate once more. Early on, fear of the society-destroying capability of nuclear weapons led to great investments in air defenses to defeat aircraft armed with nuclear weapons. Defensive interceptors themselves were even armed with nuclear weapons. Early declaratory nuclear policies stressed damage limitation, but defenses against ballistic missiles fell well behind the accumulation of huge arsenals of nuclear warheads on the intercontinental ballistic missiles of the superpowers although perhaps not behind those of lesser nuclear powers such as China. The absence of large-scale defenses in the face of overwhelming offensive nuclear capability highlighted the ultimate vulnerability of both sides. The expense of nation-wide defenses to counter such large threats and the certainty that they would not be leak proof increased pressures to limit offensive arms. In this content, the United States and the Soviet Union began their negotiations on strategic arms limitations (SALT).

The centerpiece of the SALT I package in 1972, however, was the Anti-Ballistic Missile (ABM) Treaty, a treaty which itself limited defensive not offensive arms. The ABM Treaty was justified through argumentation that mutual vulnerability was stabilizing. Although the original goal of a treaty capping the growth of offensive arms was not achieved, an Interim Agreement on offensive arms did limit numbers of silo launchers, submarine launch tubes, and even ballistic missile submarines. It did not limit warheads, however, but the existence of the new ABM Treaty was said to reduce incentives to deploy more warheads. This incentive was sweetened when the 1974 Protocol to the ABM Treaty halved the number of permitted defensive interceptors and deployment sites and also when the United States closed its only ABM site a few months after it had finally become operational.

Interestingly, during the initial SALT negotiations, it was the Soviet Union, far more than the United States, that questioned why one would want to limit defenses. And it was the United States which stressed linkage between the future of the ABM Treaty and further reductions in nuclear arms, albeit, in the opposite direction from that Moscow has proposed in resent years. Yet, the consequent SALT II, like SALT I, permitted and codified a massive increase in strategic warheads despite the scarcity of ABM systems and despite the emergence of large numbers of gray area theater nuclear weapons such as the Soviet SS–20 Intermediate Range Ballistic Missile and the Backfire bomber.

As NATO prepared to respond to the SS–20 with its own INF missiles, the West became polarized over nuclear modernization. At the risk of some oversimplification, one could say that one school believed that enough was enough whatever the Soviet Union had. The other school sought to redress the imbalance it perceived. The first school became supportive of a freeze on modernization. The second group proposed a dual track of modernization and the negotiations of reductions to enhance stability. The debate was over offensive arms. Both sides advocated fewer, although they disagreed on how to achieve their goal.

At the height of the nuclear freeze movement, I participated in a debate in a church in San Antonio, Texas. The Speaker of the U.S. House of Representatives at that time, himself a Texan, had just appeared and announced his support for a nuclear freeze. I was a junior U.S. government official defending the NATO deployments against the freeze when my debate opponent, a retired U.S. Army major general, changed the subject briefly. What the world really needed, he said, was defenses against missiles. The audience, clearly in favor of the freeze, roared in approval of strategic defenses. This was some weeks before President Reagan announced his Strategic Defense Initiative in March, 1983. The freeze debate faded away as the United States revisited the question of the role of defenses. Political polarization did not disappear, but new constellations of vociferous advocates and opponents did appear including hawks together with doves on each side of the issue—Edward Teller and Freeman Dyson favoring defenses, while mainstream thinkers and even the uniformed military seemed split on the issue.

THE DEBATES IN THE 1980'S

The debates of the 1980s were fascinating, although initially there was confussion, misinformation, and rhetoric on both sides of the question. Sometimes there was not much clear thinking even on the theoretical level. Let me give you just one example, the debate over Mutual Assured Destruction (MAD) versus Mutual Assured Survival (MAS), again at the risk of oversimplification. If you took the people who thought they favored each of those positions, set them down, and asked what nuclear targeting doctrine was associated with their concept of defenses, the most common answer for both sides was countervalue targeting, or as some would say, city-busting. Absent absolutely leak proof defenses, both sides were still talking about populations being targeted with tremendous loss of life and destruction. Those

who favored defenses were arguing, in essence, that defenses might save millions of lives. Those opposed to defenses favored greater certainty of the most massive destruction to enhance deterrence. The bottomline for both sides was an emphasis on the targeting of population *per se.*

For much of the national security community, however, the focus was different. That community recognized the ultimate countervalue effects of a strategic nuclear exchange, but this community focused more on its own differences, differences concerning the impact of strategic defenses on the military balance and thus stability. Here most experts also fell into two schools. One school basically believed defenses favor the aggressor. Here's why: He who launches his missiles first will overwhelm an opponent's defense with numbers. If an aggressor conducts a disarming first strike against an adversary's retaliatory force, and the remnant of that retaliatory force then faces the alerted defenses of the aggressor, the aggressor has gained leverage in both offense and defense. Hundreds of computer runs were made based upon this assumption. Thus, they often concluded that even if the offense and defense were equal and symmetrical on both sides, defenses would be destabilizing.

On the other side of this issue, experts were doing *their* computer runs. And their approach was different: "He who shoots first in order to disarm has a harder targeting requirement than he who simply must retaliate in order to inflict unacceptable pain." If the initiator of the war must have high confidence of counterforce success in detail to avoid unacceptable retribution, defenses can so complicate the disarming first strike that under almost all calculations, they are stabilizing.

In summary, the nuclear policy debate in the 1980s seemed bogged down in debates over perfection. The primary public debate concerned whether anything less than perfect defense was sufficient—that is, whether to defend anyone if everyone could not be defended, and against every threat. The primary debate among defense intellectuals was whether even the most imperfect defenses might encourage too much nuclear self confidence to be stabilizing.

COMPROMISE CONCEPTUALIZED

In the middle of this debate, the United States was confronted by the Soviet Union in bilateral negotiations even as research and development programs were going forward. When the nuclear arms talks resumed in Geneva in 1985, the Soviet Union sought linkage between the INF issue, the START issue, and the co-called Defense and Space issue. The United States recognized that there were interrelationships, but did not want any one negotiation held hostage to another. The United States and the Soviet Union agreed to a format that covered both sides' interpretations of what the proper relationship should be. This resulted in odd shaped tables and strange protocols. The gist of the Soviet Union's position was that there could be no START Treaty unless the United States solved Soviet problems with INF and Defense and Space. Early on, we were able to agree to proceed with the lNF Treaty, and later we were able to work out a form of delinkage on START.

I want to remind everyone in the room, however, that the U.S. position was always that everything was interrelated. The U.S. did not think there ought to be any formal linkage of agreements, but in fact, in the context of those negotiations, the Reagan Administration at various times had conceptualized a number of compromises across agreements. The U.S. position usually stressed delinkage of most issues, but the U.S. position sometimes included variations of the so-called "grand compromise"—"you give us something on offense, and we'll give you something on defense." Sometimes, the U.S. position also had certain aspects of what I call the "green light" compromise, according to which the United States would not accept certain provisions in an offensive agreement unless is were given something favoring defenses. One finds examples of all of these approaches in the U.S. negotiating position, sometimes all at the same time.

GPALS INITIATIVE IN 1991

New political circumstances, geopolitical agreements, and strategic calculations appeared rapidly at the end of the 1980s. In January 1991, in the context of improved relations between the United States and the Soviet Union, President Bush proposed a different, much more limited approach to strategic defenses. This lead people to rethink what would be needed in the post Cold War era to enhance security and still have a stable relationship with the then Soviet Union. President Bush proposed the so-called GPALS system (Global Protection Against Limited Strikes) which was downscaled tremendously from the Phase I Joint Chiefs of Staff requirements for the original Strategic Defense Initiative. Those requirements, at least in their original absolute numbers, had already been achieved by START I.

The initiation of the GPALS program was followed by a series of rapid and major international developments. The completion of START I and a few weeks later the failed coup in Moscow suggested that cooperation between Washington and Moscow should be enhanced. In September 1991, President Bush called for cooperation on defenses. The United States also announced that it would be eliminating all of its tactical nuclear artillery and many other tactical nuclear weapons. In October of 1991, President Gorbachev announced that he too believed cooperation on defenses should be discussed. By January of the next year, President Yeltsin of Russia made a bold proposal that the United States and Russia work together to bring about a cooperative, global protective system. In that same positive environment, the United States agreed to talk also about START II, a step Washington had believed was premature prior to the recent political changes. START II began to weigh very heavily upon everything we were doing. START II was seen as a way of strenthening the foundation for a cooperative future both in limiting offensive arms and cooperative defenses. Obviously some form of interrelationship would emerge, given the history of the negotiations and also the new opportunities for cooperation.

In the final statement of the June 1992 Summit, Russia and the United States agreed that a group of experts, the so-called Ross-Mamedov group, would discuss cooperation on early warning, cooperation on technologies for defense, nonproliferation, and the legal basis for a Global Protection System (GPS), including any changes which might be necessary to retain the existing treaties, including the ABM Treaty. (Note that the United States had decided to adopt the Russian name, or GPS).

The most important Ross-Mamedov session was probably that of September 1992. At that meeting, on behalf of the United States, I presented the case to the Russian delegation for amending the ABM Treaty. Ambassador Robert Joseph subsequently presented this proposal in its detail at the Standing Consultative Commission. The U.S. view was that circumstances have changed, politically and technologically, and that we now have an opportunity for a new relationship. An important part of this relationship is rethinking the question of whether we should begin cooperating In defending both of our populations, rather than collaborating to maximize their vulnerability. We talked about what we thought needed to be done about early warning, technology cooperation, and nonproliferation. We accepted and emphasized a multifaceted approach to the problem.

We made clear that defenses would play an important role in thc future, and we made specific proposals to amend the ABM Treaty. We proposed that it permit more than the 200 interceptors that were permitted by the original ABM Treaty. As I highlighted in my remarks at the time, the ABM Treaty does not ban defenses. In fact, it explicitly provides, as signed in 1972, for 200 interceptors, plus additional test sites. Thus, in its original form it already envisioned as many as perhaps four or more places where a country might have interceptors, although only two of those were to be operational deployment sites.

We talked about the changes in technology which made it increasingly difficult to maintain distinctions between early warning, command and control, surface-to-air missiles and theater ATBMs on the one hand and similar ABM systems on the other hand. We stressed the need to look at the whole—at what a BMD system really is. The inevitable increase in the capabilities of non-ABM systems was feeding ever more contentious debates over distinctions that were also very difficult to verify. The electronics revolution is radically altering the meaning of many of the boundaries sought by the ABM Treaty. This led the United States to propose that sensors run free—that we would agree that with respect to sensors, since they're so important for so may vital functions such as early warning, national technical means of verification, and conventional forces, not to make them an issue between us.

With respect to numbers, of course we had a position proposing several hundred ground based interceptors. I should note that Russia has 100 interceptors already while the United States has none. The United States was willing to forego a decision on the question of space-based interceptors, if we achieved an agreement for near term ground-based systems along our line of several hundred—maybe six, seven, eight hundred—not that far from the Russian number which was 100 and not far from the 200 permitted by the ABM Treaty in 1972. So in a sense, we were haggling about the numbers, although we had in mind a certain level of effectiveness that we wanted to achieve by the technologies that we had available. That level of effectiveness seemed compatible also with the Russian concept of a Global Protective System.

Discussion of amending the ABM Treaty was complicated also by the changes in the political circumstances of that time. One signatory to the bilateral treaty, the Soviet Union was gone, and the existing ABM system of the former Soviet Union no longer was solely within the sovereign bounds of a single country. There were a series of basic fixes to the ABM Treaty that we thought would be necessary to make it viable and effective, and our position was that we were prepared to do this, in the context of getting an agreement on defenses that was in the interest of both sides. This history demonstrates that the United States did engage very specifically on how to work together with Russia in the context of the ABM Treaty. Circumstances had changed. The ABM Treaty was broken, but the United States was prepared to agree to fix it if in the context of cooperation on defenses.

DEFENSES AND FURTHER OFFENSIVE REDUCTIONS: THE LEGACY OF REYKJAVIK

Permit me now to jump to the future. Increasingly, as we approach the millennium, in the context of the NFI extension, we are hearing more and more about attempting to go to zero nuclear warheads, or to very low numbers. And emerging again and again in the debate, and not on a partisan or ideological basis, is the view that you cannot go to deep reductions without defenses. This was actually one of the key issues at Reykjavik, and what the debate over what was proposed at Reykjavik was really all about.

We have already given much thought about the offense-defense relationship, but we need to get beyond frozen positions. I have tried to give you a sense of some of the key initiatives from the past which were designed to get us beyond stalemate. Today, as we try to go beyond linear thinking about how you safely move towards further reductions, traditional patterns of partisan politics and ideological splits are starting to fragment. So, perhaps it would be a good idea if everyone engaged on the issue of the offense-defense relationship revisit the question through a fresh process. We should revisit our assumptions, determine the real constants and variables for our age, and think anew. To do that, we will have to put aside our current mindsets, our current coalitions, and our current interest groups to determine if there isn't a path which brings us together.

CURRENT TRENDS: FOUR ASSERTIONS

With this discussion of past and future as a foundation, let me turn to the question of the present just briefly. It isn't my primary focus, but I want to make four assertions about the present in reaction to what I have heard here and in Moscow recently. These are four assertions you can accept or reject.

First, if it were left to the U.S. and Russian military, START II would have entered into force already.

Second, if available material resources, i.e., budgets, were comparable on both sides, the ABM Treaty would not be as big an issue as it is today. There is actually a strong latent view within Russia that it ought to have defenses against ballistic missiles. In fact, they do. They have 100 ABM interceptors.

Third, unfortunately—and I hope not increasingly, many of the issues that are being raised about START II and the ABM Treaty are really being used as vehicles for expressing uncertainty about the geo-strategic future, uncertainty about where we, the United States and Russia, are in our relationship to each other. This includes also uncertainty about where we think we ought to be. We need to answer the question of what it means to say the Cold War is over.

Fourth, the substantive uncertainties about the ABM Treaty or START II are really being greatly amplified by contextual uncertainties, most of them of a domestic political nature. We have important new or reinvented players in Washington and Moscow. Some of them know these issues well, but many do not. There is a tendency to see many decisions made on the basis of a simple interrogation: "If my domestic opponent is in favor of it, I must be against it," or vice versa. We have a similar problem on the international front to which I alluded earlier; namely, that whatever you think of the arguments on their merits, the legacy of the ABM Treaty and the legacy of Cold War deterrence debate are giving us vocabulary that is not always helpful, as we try to discuss a proper U.S.-Soviet relationship. In a way, our very words, including words I've used today such as a "mutual hostage relationship," poison the water. We need fresh language reflecting our real objectives, language which doesn't carry so much baggage.

We're experiencing manifestations of the "Ifft rule." Ed Ifft is famous for saying, "it's not that our positions are different, its that they're the same at different times." Some believe that this is a description of a fickle or frivolous basis for negotiations. I don't interpret the rule that way. Rather, it reflects the reality that as circumstances change, what we should do can change.

If you go back to the mid-1980s, for example, the Soviet Union put out many feelers to see if we would be willing to settle the ABM dispute by agreeing to 200 ground based interceptors—or 300, or 400. And it was in the United States that voices said, "Wait a minute, we'll never get an environmental impact statement through. Our future is in space. This is a Soviet trap to get us to try to deploy some missiles that we can't deploy politically while they build a large ground based system. We will lose." Our positions have been the same at different times, but there remains in the domestic debate today in Russia and the United States, the Cold War remnant of, "if it's good for the other side, it must be bad for us." Again, we need to find a way to break out of that mindset.

START II COMPROMISES

When I first became active in arms control negotiations, the one fundamental rule about domestic politics was that you never took a treaty to Capitol Hill in election year. But in 1987, we broke the rule. It wasn't all that easy, but it wasn't all that hard. We got the INF Treaty ratified. Here we are again, in a much more difficult world, in the middle of an election year in Russia as well as in the United States. And friends of mine in Russia say to me, "Well the problem is that START II was negotiated from weakness, and our side gave too much to you." I remember it a little differently, however. In fact, I remember how much we gave to the Russian side that would have been unthinkable in previous years. I think about the separate SLBM limit that we'd never agreed to before, the bomber counting rules which reversed a fundamental U.S. approach to stability. I think of the intrusive inspection of bomber bases and special limits on bombers, and how, again and again, on issues like the SS–19, silos dismantlement, and simplified verification we allowed issues to be reopened in order to address Russian concerns.

We used to say there could not be further reductions until after START I had entered into force and after vast new improvements in verification were achieved. Instead, at Russian insistence, we agreed to act almost instantaneously on START II and, basically, to use the START I verification rules. It was in the interests of both countries for us to exhibit this flexibility, but these concessions, or compromises, or flexibility by the United States, would not have taken place in fact, if the situation had not changed in Russia. If the previous regime had been in power in Moscow, we probably never would have shown that flexibility. There probably would not have been a START II Treaty.

So, when you think about the START II Treaty, remember that the United States was actually very forthcming. We thought it was important to a new, better relationship. And if we were wrong, that's going to have tremendous impact at home and abroad. Yes, Russia is having an electon, but so is the United States. In this election year, both sides need to be very, very careful. To our Russia colleagues, I would say don't ask our president to go to the Congress and to look as if he's cutting deals with a foreign government blocking the aspirations of the elected officials of the United States. The Congress expects the president to come to them and to work out a united U.S. position. The Congress expects him to work together during negotiation of that position. Neither Russia nor the United States will gain from an end run of their own political processes. At a minimum, there must be a very close consultative process.

RECOMMENDATIONS

What is my recommendation? I think we need to do some rethinking in a less polarized way that brings all the player, including some new players, to this process. There are certain things that our countries have agreed already to do. Let's do them. START II is, I think, essential. If we want to keep our relationship on track, moving in the right direction, START II must enter into force. We can and should, however, commit to a fresh look at the questions related to offenses and defenses. This probably ought to be done after both countries' elections.

This new process probably ought not be a negotiation initially, or a formal government-to-government process by itself. It may require a Track II process, and it should have a certain number of legislators from the United States and Russia. An informal process—perhaps initially off the record and anonymous—is necessary. Opinion leaders with diverse views must rethink these questions of what we mean by "the end of the Cold War" and what we should do about offense and defense after the Cold War. How do we think about balancing weapons if the Cold War is really over, and how do we get beyond that? If we can't do that, we're in for trouble.

A PREDICTION

Now, let me make one prediction about the future. My own view is that further defenses will be deployed. They're already deployed in Russia. They will be deployed in the United States. Putting together the coalition necessary will take longer than advocates recommend, and this will continue to result in greater development costs. The operational system itself, however, will inevitably cost less, not more than has long been assumed. National missile defense will cost less than what many people think because smaller threats are of increasing urgency and because dual-use technologies which leverage defense are advancing. The world of electronics is going in a direction that drives many defense associated costs down.

The decision to deploy nationwide defenses, however, will not be made in Moscow or Washington based upon an accountant's estimate of affordability. It will be made when citizens demand that they be defended. The event that will probably cause this to happen may not even have anything to do with Russia, and it may not be based on an initial threat against the United States. It may well be that theater ballistic missiles, armed with a weapon of mass destruction, strikes someone else's forces or cities. The world will suddenly change the way it evaluates this equation. Much of the current debate will be washed aside by the force of events.

Defenses are not an alternative to a multifaceted approach including reductions, nonproliferation, and controlling smuggling, but my own assessment is that we will be living for some time in a world in which a multifaceted approach is not a substitute for defenses against ballistic missiles. I believe that a new look undertaken without the blinders of past political divisions will reveal that cooperating in defending the people of Russia and the United States against ballistic missiles will be seen as necessary for the security of both and a powerful foundation upon which to build a more viably arms control and non-proliferation regime.

Senator HAGEL. General Habiger.

STATEMENT OF GENERAL EUGENE E. HABIGER, FORMER COMMANDER IN CHIEF, U.S. STRATEGIC COMMAND, OMAHA, NE

General HABIGER. Mr. Chairman, Senator Biden, thank you very much for the opportunity to come to speak before this committee.

First, let me tell you that in the 10 months that it has been since I furled my flag and put on this civilian suit, my views have not changed materially in this area.

The most significant change in my views has to do with the deployment of the missile defense system.

I was always under the inclination that we needed the system. It was not a matter of if we needed it but when we needed it. But based upon the publication of the Rumsfeld report since I retired, it has turned up certainly the wick in my view that we ought to deploy that system sooner rather than later.

I would like to make two points, if I could, sir. First, regarding the cold war and the series of situations that we have got ourselves into now as a result of that cold war and how it ended: The cold war was a unique war. It lasted over 40 years. We had never experienced a conflict that lasted nearly that long.

And the loser really did not lose. If you look at what we did to the Germans after World War I, what we did to the Germans and Japanese after World War II, we essentially demilitarized them.

After the cold war ended, we essentially let the Russians stay at their current—at then current nuclear levels of about 12,000 nuclear weapons.

So what we had at the end of the cold war was essentially two eight-foot-tall boxers fully primed to beat the living daylights out of each other, and they agreed to stand down.

Now, we have been on a very stable glide path with arms control agreements to get down to new levels of nuclear weapons, which is the right thing to do.

Hopefully, the Russians will, at some point in the not-too-distant future, ratify START II, and we can get on with START III. And I will tell you the Russians are very interested in getting down to START IV levels.

The Russians have done the math, and they understand that when you get to the START IV levels, whatever those levels are going to be, it then must become a multilateral effort rather than a bilateral effort, and that is going to be a much more difficult situation.

With my experience with the Russians and the confidence building over the past several years. I began my contacts with the Russians back in 1992 when the chief of staff of the Russian Air Force, came to Texas where I was stationed. I got to know him very well.

The Russian military folks at the senior levels are very professional. They are very serious about what they are doing.

They are also very paranoid about both our military capabilities, and our technological capabilities. And if we were to go out and walk away from the ABM Treaty, we would do great harm in my view.

I agree with what Secretary Lehman said about pursuing initiatives with the Russians. I think there is great potential in this area.

The next point I would make, and my final point, is that we will in fact need a ballistic missile defense system. But it appears to me that we are myopic in our thinking if we assume that it has to be a national system.

If you look back at how we have treated our allies, the English, the Germans, the Japanese, I think we ought to—as Secretary Lehman just described, be looking at more of a global defensive system.

I have every confidence the Russians would step up to that kind of an approach, and would also position us to not only look at the three or four rogue nations that we see on the horizon today, but the potential for other nations in the future.

For example—I am not saying that India is a rogue nation, but they are rapidly pursuing a capability. Pakistanis are producing the capability. And—and who is to say that 50 years from now that we might have to look to—to the south against potential nations with these kinds of capabilities?

So, sir, it is with that that I make my opening statement. I look forward to your questions.

Thank you.

Senator HAGEL. General, thank you.

Dr. Payne.

STATEMENT OF DR. KEITH PAYNE, PRESIDENT AND DIRECTOR OF RESEARCH, NATIONAL INSTITUTE FOR PUBLIC POLICY; AND ADJUNCT PROFESSOR, GEORGETOWN UNIVERSITY, WASHINGTON, DC

Dr. PAYNE. Thank you, Mr. Chairman. It is a pleasure and a great honor to be here, particularly serving with these esteemed colleagues at the table.

I would like to summarize my opening statement and submit the full statement for the record.

Senator HAGEL. It will be included.

Dr. PAYNE. Thank you.

Mr. Chairman, I have spent several years closely examining the Senate record to identify the rationale for the ABM Treaty as it was presented to the Senate in 1972.

And it is on the basis of that study that one can conclude that the treaty was built on particular arms control and deterrence theories circa 1972.

Now, 27 years later it is clear that those theories were thoroughly mistaken. Many are reluctant to acknowledge these mistakes, perhaps because so much political and intellectual capital has been invested in the ABM Treaty. Some are not reluctant. But we should cease being influenced by theories that have so little validity.

The ABM Treaty, for example, was ratified on the premise that strictly limiting national missile defense would lead to stabilizing offensive force reductions.

Arms control theory at the time posited that if national missile defense was limited, reductions in Soviet ICBM's would be forthcoming because the Soviet Union would not need to penetrate U.S. defenses and, therefore, could agree to reductions.

In short, the theory was: No ABM Treaty, no offensive force reductions. But with the ABM Treaty, stabilizing offensive force reductions.

While seeking the Senate's advice and consent on the ABM Treaty, Nixon administration officials were specific about this expected benefit of limiting national missile defense. Indeed, it became the primary justification for the treaty.

For example, in 1972, Henry Kissinger testified before the Senate that, and I quote, "As long as the ABM Treaty lasts, offensive missile forces have, in effect, a free ride to their targets."

That free ride for Soviet missiles was considered useful as a necessary basis for negotiating offensive arms reductions.

Unfortunately, the expected benefit never was realized. In fact, history unfolded in the opposite direction. For two decades following the ABM Treaty, the Soviet Union pursued a massive buildup of destabilizing ICBM's capable of threatening U.S. strategic deterrent forces.

To be specific, the number of such deployed Soviet ICBM's increased from 308 in 1972 to over 650 16 years later, with a related increase in the number of Soviet countersilo warheads from—from roughly 300 to well over 5,000. As a result, U.S. ICBM's became vulnerable to a Soviet preemptive strike.

The Scowcroft Commission, on which Ambassador Woolsey served, for example, judged U.S. ICBM silos to be vulnerable in 1983 as a result of this Soviet offensive buildup.

This Soviet buildup was precisely what arms control theory predicted the ABM Treaty would preclude. It was entirely contrary to the confident expectations that justified the treaty. Such a confounding of expectations was predicted at the time by very few prescient critics of the ABM Treaty.

Other related arms control claims for the ABM Treaty similarly went unrealized. For example, during the Senate hearings in 1972, senior officials claimed that the treaty reflected Soviet acceptance of the U.S. concept of mutual deterrence through mutual vulnerability.

The validity of that claim for the ABM Treaty was important because it meant that neither side would seek to upset the supposed deterrence balance established by the treaty.

Now, however, former senior Soviet officials have explained repeatedly and at length that the ABM Treaty did not reflect Soviet acceptance of our notions of deterrence through mutual vulnerability. Far from it.

For the Soviet Union, the ABM Treaty represented a tactical move to derail U.S. superiority in missile defense technology and to permit the Soviet Union to concentrate its resources on its strategic offensive buildup.

That is not my interpretation. That is the testimony of senior Soviet officials.

In complete contradiction to arms control theory, the ABM Treaty appears actually to have facilitated the Soviet offensive missile buildup of the seventies and the eighties that led to the vulnerability of our retaliatory forces.

The optimistic expectations used to justify the ABM Treaty went unmet. I believe because the U.S. arms control theory ultimately was based on "mirror-imaging," it mistakenly attributed U.S. goals and hopes to the Soviet Union.

Ironically, when Boris Yeltsin finally endorsed START offensive reductions in 1992, he simultaneously proposed U.S.-Russian cooperation on a global ballistic missile defense system. That is, President Yeltsin proposed that offensive reductions and missile defense move forward together.

And even now, key members of the Russian Duma publicly and privately advocate cooperating with Washington on limited NMD deployment as the route necessary to preserve the START process.

In short, with 27 years of hindsight, it is now possible to conclude, based on abundant empirical evidence, that the arms control theory underlying the ABM Treaty was mistaken at its foundation.

The deterrence theory underlying the ABM Treaty was similarly mistaken. The deterrence argument justifying the treaty in 1972 was that mutual deterrence would provide reliable protection against missile attack, while missile defense would undermine deterrence and not protect adequately. Therefore, so the argument concluded, the United States should focus on mutual deterrence as the preferred alternative to national missile defense.

This line of reasoning was prevalent during the original Senate ABM Treaty hearings and remains a commonly expressed view.

It was plausible in 1972. To repeat it now reflects a complete lack of familiarity with almost two decades of scholarly research concerning deterrence.

I can summarize those findings in one sentence: Deterrence is inherently unreliable for reasons that cannot humanly be fixed.

Many U.S. officials and commentators continue to assert otherwise. They typically express confidence that the absence of a third world war proves that deterrence can be made reliable.

Perhaps, it is enough to note in response to such hubris that similar confidence in deterrence became popular during the decades of peace following the Franco-Prussian War in 1871. Unfortunately, such confidence came to a quick end with the outbreak of World War I in the summer of 1914.

I have closely examined actual historical cases of deterrence and coercion over the course of many years—in fact, going back 2,000 years.

My findings and those of similar empirical studies are that deterrence fails with some frequency because flesh and blood leaders do not consistently behave in the manner required by deterrence theory.

Unlike the leaders typically assumed in theory, real leaders can be uninformed and misinformed, isolated and out-of-touch. They can make terrible mistakes. They can behave willfully, foolishly, emotionally, unpredictably, unreasonably and even irrationally.

They may not prefer a conflict, but they may see no acceptable alternative; or they may have goals for which they are willing to lead their societies into great sacrifice and great risk.

Unfortunately, there are no earthly developments that can reliably prevent these very real and very human factors from undermining deterrence. And we should recognize this danger.

We were, for example, very fortunate to have made it through the cold war, a conclusion now shared by former U.S. officials who were involved in the 1962 Cuban missile crisis and have had the opportunity to compare notes with their Cuban and Russian counterparts.

The finding that a strategy of deterrence is inherently unreliable does not mean that deterrence is useless. Far from it.

But it does suggest strongly that to choose to remain vulnerable to countries such as North Korea, on the basis of confidence in deterrence, would be to thoroughly misunderstand what deterrence can and cannot accomplish.

In conclusion, the ABM Treaty was built on arms control and deterrence theories that now can be demonstrated empirically to be mistaken.

The ABM Treaty did not facilitate the promised offensive force reductions. And contrary to all comforting assurances, deterrence is inherently unreliable. Its functioning cannot be ensured or even predicted with any confidence. Serious empirical research on the subject allows no other conclusion.

I believe that this fact alone, in light of the pace of proliferation, argues strongly for NMD deployment if the necessary technology is available.

Thank you, Mr. Chairman.

Senator HAGEL. Dr. Payne, thank you.

[The prepared statement of Dr. Payne follows:]

PREPARED STATEMENT OF DR. KEITH B. PAYNE

INTRODUCTION

It is a great honor to address here two questions crucial to consideration of national missile defense (NMD): First, how valid is the arms control theory underlying the 1972 ABM Treaty?; and, second, is the mutual vulnerability approach to deterrence in the U.S. national interest?

The ABM Treaty was built on particular arms control and deterrence theories. It now is clear that those theories were thoroughly mistaken. Many are reluctant to acknowledge these flaws, perhaps because so much political and intellectual capital has been invested in the ABM Treaty. But we should cease being influenced by theories that have so little validity.

THE ABM TREATY AND ARMS CONTROL THEORY

The ABM Treaty, for example, was ratified on the premise that strictly limiting NMD would lead to "stabilizing" offensive force reductions. Arms control theory at the time posited that if NMD was limited, reductions in Soviet ICBMs would be forthcoming because the Soviet Union would not need to penetrate U.S. defenses and therefore could agree to reductions. In short, the theory was: no ABM Treaty, no offensive force limitations; with the ABM Treaty, "stabilizing" offensive force reductions.

While seeking the Senate's advice and consent for the ABM Treaty. Nixon administration officials were specific about this expected benefit of limiting NMD; indeed, it became the primary justification for the treaty. For example, in 1972 Henry Kissinger testified before the Senate that, "As long as [the ABM Treaty] lasts, offensive missile forces have, in effect, a free ride to their targets." [1] This "free ride" for Soviet missiles was considered useful as the necessary basis for negotiating offensive arms reductions. Unfortunately, the expected benefit never was realized; in fact, history unfolded in the opposite direction.

For the two decades following the ABM Treaty, the Soviet Union pursued a massive buildup of "destabilizing" ICBMs capable of threatening U.S. strategic deterrent forces. To be specific, the number of such deployed Soviet ICBMs increased from 308 in 1972 to over 650 sixteen years later, with a related increase in the number of Soviet countersilo warheads from roughly 300 to well over 5,000. [2] As a result, U.S. ICBMs became vulnerable to a Soviet pre-emptive strike. The "Scowcroft Commission," for example, judged U.S. ICBM silos to be vulnerable by 1983 as a result of this Soviet offensive buildup: "The Soviets nevertheless now probably possess the necessary combination of ICBM numbers, reliability, accuracy, and warhead yield to destroy almost all of the 1,047 U.S. ICBM silos, using only a portion of their own ICBM force." [3]

This Soviet buildup was precisely what arms control theory predicted the ABM Treaty would preclude; it was entirely contrary to the confident expectations that justified the treaty. Such a confounding of expectations was predicted at the time by very few prescient critics of the ABM Treaty.[4]

Other related arms control claims for the ABM Treaty similarly went unrealized. For example, during Senate hearings in 1972 senior officials claimed that the treaty reflected Soviet acceptance of the U.S. concept of mutual deterrence through mutual vulnerability. As Secretary of State William Rogers stated before the Senate: "This [ABM Treaty] is a general undertaking of utmost significance. Without a nationwide

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[1] *Military Implication of the Treaty on the Limitations of Anti-Ballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms,* Hearing Before the Committee on Armed Forces, United States Senate, 92nd Congress, 2nd Session (Washington, D.C.: U.S. GPO, 1972), P. 121.

[2] These statistics concerning Soviet strategic weapons are found in John Collins and Bernard Victory, *U.S/Soviet Military Balance, Statistical Trends, 1980–1987,* Report No. 88–425 S (Washington, D.C.: Congressional Research Service, April 15, 1988); and John Collins and Patrick Cronin, *U.S./Soviet Military Balance,* Assessments and Statistic, Report No. 85–89 S (Washington, D.C.: Congressional Research Service, Spring 1985).

[3] See *Report of the President's Commission on Strategic Forces* (the Scowcroft Report) (Washington, D.C.: April 6, 1983), p. 4.

[4] Several participants in the SALT I process were accurate in their relatively pessimistic estimates of what would occur over the next fifteen years. See, for example, William Van Cleave's testimony in *Military Implications,* pp. 569–92. See also, Don Brennan, "When the SALT Hit the Fan," *National Review,* June 1972, pp. 685–92; and Mark Schneider, "Problems of SALT: 1972," Survive, July/August 1972, pp. 2–6.

ABM defense, there can be no shield against retaliation. Both nuclear powers have recognized, and in effect agreed to maintain nuclear deterrence."[5] The validity of this claim was critical for the ABM Treaty because it meant that neither side would seek to upset the supposed deterrence balance established by the treaty.

Former senior Soviet officials, however, have since explained repeatedly and at length that the ABM Treaty did not reflect Soviet acceptance of U.S. notions of deterrence and mutual vulnerability. Far from it. For the Soviet Union, the ABM Treaty represented a tactical move to derail U.S. superiority in missile defense technology and to permit the Soviet Union to concentrate its resources on its strategic offensive buildup.[6] In complete contradiction to arms control theory, the ABM Treaty appears to have facilitated the Soviet offensive missile buildup of the 1970s and 1980s.

The optimistic expectations used to justify the ABM Treaty went unmet, I believe, because U.S. arms control theory ultimately was based on "mirror-imaging"; it mistakenly attributed U.S. goals and hopes to the Soviet Union.

Ironically, when Boris Yeltsin finally endorsed START offensive reductions in 1992, he simultaneously proposed U.S.-Russian cooperation on a global ballistic missile defense system. That is, President Yeltsin proposed that offensive reductions and missile defense move forward together. And, even now, key members of the Duma advocate cooperating with Washington on limited NMD deployment as the route necessary to preserve the START process.[7] With twenty-seven years of hindsight, it now is possible to conclude, based on abundant empirical evidence, that the arms control theory underlying the ABM Treaty was mistaken at its foundation.

THE ABM TREATY AND DETERRENCE THEORY

The deterrence theory underlying the ABM Treaty is similarly mistaken. The deterrence argument justifying the treaty in 1972 was that mutual deterrence would provide reliable protection against missile attack, while missile defense would undermine deterrence and not protect adequately. Therefore, so the argument concluded, the U.S. should focus on mutual deterrence as the preferred alternative to NMD.

This line of reasoning was prevalent during the original Senate ABM Treaty hearings and remains a commonly-expressed view. Unfortunately, it reflects a complete lack of familiarity with almost two decades of scholarly research concerning deterrence. I can summarize those findings in one sentence: deterrence is inherently unreliable for reasons that cannot humanly be "fixed."

Many U.S. officials and commentators continue to assert otherwise. They typically express the notion that the absence of a Third World War proves that deterrence can be made reliable. For example, in 1995, then-Assistant Secretary of Defense for International Security Affairs, Joseph Nye said that "if deterrence prevented 10,000 Soviet missiles from reaching the United States, it baffles me as to why it wouldn't prevent 20 Chinese missiles from reaching Alaska."[8]

Then-Principal Deputy Undersecretary of Defense for Policy, Jan Lodal made the same point in even more definitive terms: "Nuclear deterrence worked throughout the Cold War, it continues to work now, it will work into the future . . . The exact same kinds of nuclear deterrence calculations that have always worked will continue to work."[9]

When discussing U.S. nuclear weapons then-Deputy Secretary of Defense John Deutch stated in congressional testimony that, "Deterrence is ensured by having a survivable capability to hold at risk what potentially hostile leaders value, and we will maintain that capability."[10]

Perhaps it is enough to note in response to such statements that confidence in deterrence became popular during the decades of peace following the Franco-Prussian War of 1871. That confidence came to a quick end with the outbreak of World War I in the summer of 1914.

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[5] Secretary of State William Rogers, Statement to Senate Foreign Relations Committee, June 19, 1972, quoted in, *SALT I Reconsidered* (Washington, D.C.: Institute of American Relations, 1979), p. 99.

[6] See, for example, the discussion in, William E. Odom, *The Collapse of the Soviet Military* (New Haven: Yale University Press, 1998), pp. 71, 436.

[7] See, "Duma Member Alexei Arbatov on Joint NMD," *Russian Arms Control Digest,* No. 36 (April 13, 1999). See also, "Duma Advisors Advocate Russian Accommodation on ABM Treaty to Preserve Some NMD Limits and START Process," *Russian Arms Control Digest,* No. 39 (April 26, 1999).

[8] "Word for Word," *Defense News,* October 23–29, p. 26.

[9] Jan Lodal and Ashton Carter, News Conference Transcript, July 31, 1995. (mimeo).

[10] Testimony in U.S. House, Committee on Foreign Affairs, *U.S. Nuclear Policy:* Hearings, 103rd Cong., 2nd sess. (Washington, D.C.: USGPO, 1995), p. 36 (emphasis added).

I have closely examined numerous actual historical cases of deterrence and coercion occurring over the course of many centuries.[11] My findings, and those of similar empirical studies, are that deterrence fails with some frequency because flesh and blood leaders do not consistently behave in the manner required by deterrence theory. Unlike the leaders typically assumed in theory, real leaders can be uninformed and misinformed, isolated and out-of-touch; they can make terrible mistakes, behave willfully, foolishly, emotionally, unpredictably, unreasonably, and even irrationally. They may not prefer conflict, but see no acceptable alternative; or, they may have goals for which they are willing to lead their societies into great wartime sacrifice and enormous risk.

Unfortunately, there are no earthly developments that can reliably prevent these very human factors from undermining deterrence, and we should recognize this danger. We were, for example, very fortunate to have made it through the Cold War—a conclusion now shared by former U.S. officials who were involved in the 1962 Cuban Missile Crisis and have had the opportunity to compare notes with their Cuban and Russian counterparts.

The finding that a strategy of deterrence is inherently unreliable does not mean that deterrence is useless. Far from it. But it does suggest strongly that to choose to remain vulnerable to countries such as North Korea, on the basis of confidence in deterrence, would be to thoroughly misunderstand what deterrence can and cannot accomplish.

CONCLUSION

In conclusion, the ABM Treaty was built on arms control and deterrence theories that now can be demonstrated empirically to be mistaken. The ABM Treaty did not facilitate the promised offensive force reductions and, contrary to all comforting assurances, deterrence is inherently unreliable; its functioning cannot be "ensured" or even predicted with any confidence. Serious empirical research on the subject allows no other conclusion. In light of the pace of missile proliferation, this fact alone argues strongly for NMD deployment if the necessary technology is available.

Senator HAGEL. And once again, to all four of our witnesses, we are grateful.

Now, let me introduce the ranking minority member of the Foreign Relations Committee, Senator Biden.

Senator BIDEN. Thank you very much, Mr. Chairman. Gentlemen, I apologize for coming late. I am, like all of us, on more than one committee. And I have a Juvenile Justice bill, and Janet Reno is testifying before our Judiciary Committee downstairs. As you all well know, the Nation has been gripped by the violence that took place in Colorado, and that is the subject of our discussion, so I apologize.

Quite frankly, nothing is of more consequence to this Nation and its future than what we are talking about today.

I have an opening statement, and I would like to ask unanimous consent that it be placed in the record in its entirety, Mr. Chairman.

Senator HAGEL. It will be.

Senator BIDEN. Mr. Chairman, yesterday we had the first hearing on the issue that we have before us today. And the hearing, I think it is fair to say, casts very strong doubt on whether the thin missile defense system proposed by the administration makes much sense, on whether—if we are going to move toward a missile defense system—this is the wisest way to move.

Most of our witnesses yesterday were not prepared to support the proposed national missile defense system that we are debating in the Congress in the Cochran bill, if it were going to be the only system that were built; rather, the supporters of national missile de-

[11] Some of this work is summarized in, Keith B. Payne, *Deterrence In The Second Nuclear Age* (Lexington, KY: University Press of Kentucky, 1996).

fense favored space-based and sea-based systems, of a much greater capacity and capability.

I remember that if our only concern were North Korea's ICBM's—and this is a question, General, that I am going to ask you in a bit—it seemed to some that we could move readily to address that threat by striking a deal with Moscow to station boost-phase interceptors in the Vladivostok area. Quite frankly, that would be the single most effective way to deal with the North Korean threat, and the cheapest by a longshot.

Today's focus on the arms control value of the ABM Treaty is timely and, if we were to accept Dr. Payne's assertions, useless. Supporters of a national ballistic missile defense do not wish merely to guard against rogue nations and rogue strikes, despite the rhetoric that we—not you—use on the floor of the U.S. Senate.

Rather, as Dr. Bill Graham said yesterday, they see mutual deterrence as either a useless or an immoral strategy and argue that we should just straight out abandon the ABM Treaty.

And the reason I respect Mr. Woolsey's comments is that he has not fooled around with this. He just thinks we should flat out get rid of the ABM Treaty and move on.

Today, we can address the question of whether the half century of missile defense has produced a good result. Dr. Payne concludes it has not.

Part of the problem is that we would not be building our missile defense system in a vacuum here. We are not starting from scratch. Despite the end of the cold war, as General Habiger has pointed out, there are still thousands of nuclear weapons in Russian hands.

It remains in our vital interest to manage our relationship, it seems to me, with Russia, so that neither side ever feels compelled to—to use those weapons. And one of the best ways to further reduce the danger of a nuclear war with Russia is to continue the process, regardless of how it came about, of strategic arms reductions. I suspect we would all think that it is useful for us, that it is in our interest, that the Russians reduce the number of nuclear weapons they have in their possession.

Whether it is through the START process or any other process, we need to ensure that Russia finally ratifies, if we are going to stay the course now, START II and that we move quickly to START III. We need to be able to get to a START IV if, in fact, such a treaty makes sense, assuming the underlying proposition is correct, that it is in our interests that the Russians—not a particularly stable government at this moment, and the Lord only knows where they will be 10 years from now—have fewer weapons, particularly MIRV'ed weapons, at the end of the day.

It seems to me we also have to continue working with Russia on such nonproliferation concerns as control and disposition of fissile material, avoiding a Russian nuclear brain drain, and stopping Russian assistance to other countries' nuclear or long-range missile programs.

All those efforts, I think, will be put at risk—and one of the questions I want to ask is whether you think those efforts are meaningful and necessary, and likely to be put at risk—by abrogation of the ABM Treaty, were we to decide to do that? For many in the Senate share Mr. Woolsey's view that we should abrogate the treaty.

Dr. Payne may be right regarding the fallibility of deterrence, although I suspect you are not, Doctor. I would wonder, however, whether your study of 2000 years shows that those human factors you cited were any more or less relevant to the defensive systems of the other side.

I think you have stated a universal truth that applies not only to deterrence, but to defensive systems as well. Some supporters of a national ballistic missile defense system understand these risks. Dr. Schlesinger told this committee 2 weeks ago: "We should not casually damage our political relationship with Russian in a way that simultaneously would damage Russian prestige and make Russians less cooperative with us."

And he was referring to many of the things I mentioned, the things that you have been working on, Secretary Lehman, the nonproliferation issues that you know so well.

When we get to the questions, which we are going to do in about 10 seconds, Mr. Chairman, I would like to be able to have a discussion when I ask some questions. I would like to invite everyone to get involved in it. Especially when we have so few members here, it is a useful thing, at least for me and I suspect also for the chairman, if you all take on one another when you disagree. Mind you, I am not trying to start a fight.

But you are a very knowledgeable panel; and to the extent that you may disagree with each other, it would be useful for us to understand those differences. It would enlighten us a little bit.

So let me conclude by saying that as I have sort of peeled back the onion here, it seems to me that at its root, the real debate here is not about a thin missile defense system. Rather, it is about whether or not we have a true national missile defense system and the degree to which that impacts on our relationships with the one outfit that still has a whole hell of a lot of those big old missiles. For we are talking about only three, four, five, seven, eight missiles that North Korea may build—that might make it across the ocean, that probably can make it to Hawaii but we are not sure—but we know there are thousands that we have a high degree of confidence can make it from Russian soil to United States soil.

You know, the chairman and I have worked a lot on matters in the Balkans and on NATO. And we were both told of an incident—I will not reveal the source, but it is fascinating:

I asked one of our negotiators on the NATO strategic doctrine question, "What kind of progress are you making with the French?"

And he said, "Well, we are making some good progress." But he said, "The other day, my French counterpart looked at me and said, 'Yes, yes, it works in practice. But will it work in theory?' "

Now allegedly, that was actually said. So, Dr. Payne, I want to know about practice, not theory.

Dr. PAYNE. All right.

Senator BIDEN. And if we were back in 1972, a guy like me might reach a different conclusion than I may be willing to reach about such a system in 1999, in light of the state of the world being very different today.

And so I am looking for practice, not just theory here. But I am not suggesting any of you are only talking about theory. So hopefully, we can have a discussion.

I thank you for allowing me to make a statement, Mr. Chairman, and I yield back the floor.

Senator HAGEL. Senator Biden, thank you.

[The prepared statement of Senator Biden follows:]

PREPARED STATEMENT OF SENATOR JOSEPH R. BIDEN, JR.

Thank you, Mr. Chairman. Thank you especially for chairing todays hearing with a witness who is well known to you—General Eugene Habiger, former Commander-in-Chief of U.S. Strategic Command. General Habiger was one of the Pentagon's finest strategic thinkers, and I think we will all benefit from his insights.

Actually, I look forward to hearing from all of today's witnesses. Both Jim Woolsey and Keith Payne have studied the Russian leadership. All of our witnesses, therefore, can speak to whether Russian officials are merely posturing when they warn against abrogating the ABM Treaty. All our witnesses can address the risk that U.S. action to deploy a national missile defense might sacrifice START II and future strategic arms reductions, and condemn us to face MIRV'ed ICBM's for decades to come.

These questions will be crucial to the decision on whether to deploy a national missile defense by 2005. To put this hearing into context, the administration says that it will base its deployment decision on four criteria:

(1) whether a threat exists to the United States;
(2) the cost-effectiveness of missile defenses;
(3) whether the necessary technology exists to build a defensive system; and
(4) whether the benefits of deploying that system outweigh any possible negative effects it might have on U.S.-Russian relations.

The administration clearly recognizes that a missile threat exists and will fund a very limited, National Missile Defense system. But the jury is still out when it comes to the administration's final two criteria, both of which were supported by the Senate in the amended Cochran bill.

In my view, yesterday's hearing cast strong doubt on the proposition that those criteria can be met in the near term. While our panel of technical experts differed in their basic views on missile defense, they all agreed that a limited ballistic missile defense system would have to deal with ever more sophisticated countermeasures. In addition, they all understood that the proposed National Missile Defense is a "high-risk" program.

Most of our witnesses yesterday were not prepared to support the proposed National Missile Defense system if that were the only system to be built. Rather, the supporters of national missile defense favored space-based and sea-based systems with much greater capabilities. If our only concern were North Korean ICBM's, we could more readily address that threat by striking a deal with Moscow to station a boost-phase intercept system near Vladivostok, or on military cargo ships off the coast there.

Today's focus on the arms control value of the ABM Treaty is thus most timely. Supporters of a national ballistic missile defense do not wish merely to guard against rogue-state missiles, despite the rhetoric of the last year on that issue. Rather, like Dr. Bill Graham yesterday, they see mutual deterrence as an immoral strategy—despite the fact that it has given us more than half a century of strategic stability without a single use of nuclear weapons or intercontinental missiles.

Today we can address the question of whether a half century of U.S. missile defense will produce as good a result. Part of the problem is that we would not be building our missile defense in a vacuum. Despite the end of the Cold War, Russia still has thousands of nuclear weapons. It remains in our vital strategic interest to manage our relationship with Russia so that neither side ever feels compelled to use those weapons.

One of the best ways to further reduce the danger of nuclear war with Russia is to continue the strategic arms reduction process—the START process. We need to ensure that Russia finally ratifies START II, either by itself or in combination with a START III treaty that reduces the strategic arms burden for both our countries. I am hard put to see how that can be done, unless we conform any national missile defense we may build to an amended ABM Treaty.

We must also continue working with Russia on such non-proliferation concerns as: the control and disposition of fissile material; avoiding a Russian nuclear "brain drain;" and stopping Russian assistance to other countries' nuclear or long-range missile programs. All of those efforts will be put at risk if Russia perceives the United States as building missile defenses to make it safe to use nuclear weapons without fear of retaliation.

Some supporters of a national ballistic missile defense understand these risks. As Jim Schlesinger told this Committee two weeks ago, "we should not casually damage our political relationship with Russia in a way that simultaneously would damage . . . Russian prestige and make the Russians less cooperative with us."

I share Secretary Schlesinger's concern to maintain that relationship with Russia, and I look forward to hearing the views of the witnesses on these important topics.

Senator HAGEL. Let me get a couple of questions on the record for Chairman Helms before we get into some of the give and take that Senator Biden has suggested and that I think is a good way to do this.

General Habiger, many have argued that ballistic missile defenses are fundamentally inconsistent with strategic arms reductions, but if that is the case, why does the SALT II Treaty explicitly call upon parties to observe the joint statement on a global protection system, which according to the treaty's article-by-article analysis relates to START II and the creation of a global system against ballistic missile attack?

General HABIGER. Interesting question. I do not see an inconsistency. The ABM Treaty—the deployment of ABM systems was almost immediately negated with the advent of multiple independent reentry vehicles. And that is one of the reasons why the Russians stopped at Moscow, and we stopped at the great State of North Dakota.

The ABM Treaty and our adherence to it has given the Russians some—some solace that we are not going to run away technologically. That is a big deal for them, our technological advantages.

And based upon those things, I will just stop right there, sir.

Senator HAGEL. Ambassador Woolsey, would you like to add anything to that, or Secretary Lehman?

Ambassador WOOLSEY. I guess I would say that I think a steady state of substantial defenses and low levels of offense is not, even in theory or likely in practice, to be unstable.

It seems to me what most people have historically been worried about is transition. One cannot deploy ballistic missile defenses overnight.

And if you were in, let us say back, a cold war environment, say in the early eighties, when there were at some times very great tensions between the United States and Soviet Union, and you had just barely embarked on deploying defenses, and the other side, the Soviet Union, let us say, saw its deterrent being degraded year by year, month by month, then under those circumstances, I think, so the deterrence theory ran, it might be more likely in a crisis for the Soviets to use nuclear weapons, because they felt that over a long period of time their deterrent was going to be seriously degraded.

I think—I think Keith put this right—deterrence is far from historically reliable, but sometimes it is useful.

And I think deterrence in a number of circumstances during the cold war between the United States and the Soviet Union was useful, in part because the Soviet Union was most of the time a somewhat stodgy power.

It was not, in a lot of circumstances, all that venturesome; and the people who ran it tended more to be bureaucrats than madmen. I think the situation could be very different with an Iraq or Iran or North Korea.

But to come back to Senator Helms's question, I think that in a steady state and as an ultimate situation, either during the cold war or especially today, substantial defenses are not inconsistent with low levels of offense. The trick has always been, and particularly back during the cold war, getting from point A to point B.

Senator HAGEL. And before I ask Secretary Lehman to respond: Was not a good amount of the Bush administration's 1992 negotiations with the Russians based on the—the assumption that defense was a very significant part of START II?

Ambassador WOOLSEY. I——

Senator HAGEL. Ambassador, do you want to respond to that—I know Secretary Lehman does, but——

Ambassador WOOLSEY. You can——

Senator HAGEL. Go ahead, Mr. Secretary.

Secretary LEHMAN. Yes. In fact, both in START I and START II, well, going back to the SALT process, there was a very long series of interactions on how offense should relate to defense, and that is reflecting the historic reality that there has always been an offense/defense relationship.

At various times in various negotiations, we sometimes tried to leverage the defensive negotiations by emphasizing the offensive; the offensive by emphasizing the defensive. Sometimes, we wanted to de-link them. Sometimes we wanted to link them. Both sides did this, depending on the circumstances.

One of the things I am most proud of in the arms control field was the START II Treaty. I fought very hard to get that treaty. There was a time when people thought that after START I, there would be nothing. I think we surprised the world by what we achieved.

The particular provisions that you are talking about, in fact, I was very actively involved in negotiating. And we made it very clear that it was our intent to proceed toward deployment of defenses and it was in that context that we were proceeding with START II.

I would like to come back at some point on this broader question of Russian attitudes and the offense/defense relationship.

But I think you had wanted me to address more specifically this other question of the relationship between deterrence and defense.

As I said, there has always been offense/defense in history. And sometimes the offense plays a more predominant role. Sometimes the defense plays a more predominant role.

But I have never viewed ballistic missile defenses as always being a substitute for or an enemy of deterrence. You put together a package that makes the world safer and supports your national security interests.

I think there is a lot of oversimplification from both the advocates and opponents of ballistic missile defense on that relationship.

I believe that the United States needs to maintain a strong deterrent, and I think that it will. But I think increasingly the world is such that a component of the strategy that needs to get greater emphasis is ballistic missile defense.

Senator HAGEL. As a Nebraska Cornhusker, I appreciate the difference between offense and defense.

Thank you, Mr. Secretary.

Dr. Payne, would you care to add anything to the question?

Dr. PAYNE. Well, just the point that when President Yeltsin proposed the global protection system in January 1992, what he did was to confound all of the previous arms control theory that described earlier, because essentially what he said was: We, in Russia, will accept and actually endorse the idea of reducing offensive forces. At the same time, we would like to go forward with missile defense.

That, in effect, was what arms control theory said could not happen. And that theory was what the ABM Treaty was built on.

Senator HAGEL. A question to each of the four of you: In your opinions, is it the economic pressures facing Russia today that is driving their strategic evaluations and policies more than any arms control agreements or ideas?

Are they mixed, or how would—how would you rate the economic pressures on Russia as to how they are evaluating and implementing their defense posture policy strategies?

Secretary Lehman.

Secretary LEHMAN. There is no doubt that Russia is going through a very difficult economic time. And so some of the projections of how low Russian forces will go primarily are motivated by an economic analysis.

But let me make one additional point. If Russia really believed the United States was a great Satan, the big enemy, they would find the resources and they would find a way to retain some level of forces.

But, in fact, it is fact that we are engaged with them. The world has changed. That permits them to try to assess their priorities and the United States is not, I think, their great enemy.

Senator HAGEL. Ambassador.

Ambassador WOOLSEY. Mr. Chairman, during the last 6 years, the Russian economy declined by most measures by at least 50 percent, and during the deepest 6 years of the Great Depression, ours declined by about a third, so they have had more than the Great Depression and they do not look like they are coming out of it.

The fact that they have not been able to pay their international debts and continue to have to be bailed out is undermining substantially any foreign investment, which is the only thing, I think, that is going to lead them out of the economic situation they are in. And so they are under very great fiscal stress. Their economy is now smaller than the Netherlands and headed down.

But they are still finding enough resources to work on a new ICBM and to put the proportionately larger share of their military resources into their strategic nuclear programs.

This has been combined with a shift in doctrine somewhat similar to that which we undertook in the Eisenhower administration—more bang for the buck, a shift toward heavier reliance on nuclear forces.

And they clearly regard their nuclear forces as their trump card. In a sense, it is the only thing really that makes them a great power. Insofar as they are a great power at all, it is only because of those.

Now, I think that they see the United States' flirtation with ballistic missile defenses in a very straightforward way. I do not think there is a lot of offense/defense theory here.

I do not think there is a lot other than, "If the United States gets these, they are going to be technologically substantially ahead of us and ahead of us in deployed defensive forces and that is bad because it is a zero sum game."

I think Mr. Primakov very much believes that it is a zero sum game and that is what is good for us is bad for Russia and vice versa.

I think President Yeltsin is not necessarily of that view, and he certainly was not of that view in 1992.

I think part of the difficulty here is finding a way to appeal to and work with those Russians—such as Yavlinsky and his Yabloko party, some parts of the foreign ministry, President Yeltsin hopefully—that might be willing to work with us in getting back into the mode we were in 1992.

I do think that is preferable to our withdrawing from the treaty. A substantial change in the treaty negotiated with the Russians is something I think we should definitely try, and I think it is definitely preferable to withdrawing from the treaty.

But at the present writing, I would see Mr. Primakov's zero sum attitude as the thing which is really dominating Russian thinking. And I think it is pretty simple and straightforward. They think if it is high-tech and we are doing it and they cannot, that is bad. Pretty much end of theory.

Senator HAGEL. Thank you.

Dr. Payne.

Dr. PAYNE. The economic pressures in Russia, particularly in the strategic field are enormous. I work on a fairly regular basis with some key members of the Duma on exactly these questions. Specifically, we have worked on a joint study that has been ongoing since 1994.

Ambassador Vladimir Lukin, the chairman of the Duma's Foreign Relations Committee has participated in this study, as has Dr. Alexei Arbitov, the deputy chair of the Defense Committee of the Duma.

So, we have some senior members of the Russian leadership participating in this study, looking at exactly these questions.

One of the points that has been consistent over the years is that the Russian Federation expects that for economic reasons, they will have to go down to 1,500 to 2,000 weapons, perhaps even lower.

Consequently, the main argument for Duma ratification of START II is that Russia will need to go down to those lower force levels for economic reasons, and they would rather the United States go down to those levels as well, even though the United States is not necessarily so constrained by economic pressure.

Interestingly, most recently Alexei Arbitov, the deputy chair of the Defense Committee at the Duma, proposed cooperation with the United States on deploying limited national missile defense as what Russian ought to do to keep the START arms control process going.

So it is not as if there is consistent and block-like opposition to cooperation with the United States on going forward with the limited national missile defense.

There is a good deal of support in the more progressive circles in the Duma for moving forward with the United States, not on the basis of any romantic, happy-face vision of our relationship with Russia, but for very pragmatic pro-Russian reasons.

Senator HAGEL. Thank you.

General Habiger.

General HABIGER. Yes, sir. There are two sectors of the Russian military that are as fully funded as you can get. That is their nuclear forces, which includes the 12th Directorate, which handles the maintenance of their nuclear weapons; and their special forces.

Their nuclear forces, I think for obvious reasons, are fully funded, and I am including their—their Navy ballistic missile submarines, their bomber force as well as their ICBM force. Their special forces being as—about as fully funded as you can get just because, in my view, of concerns over internal control.

I know for a fact that the—the senior Russian military folks have been pleading with the Duma to get on with START II, absolutely pleading, because they want to get on with getting rid of systems that are very costly to maintain.

So while economic pressures play a very large role in what we are talking about, in the arena of arms control, it is clearly, in my view, political pressures rather than economic providing the primary motivation.

If the politicians in the Duma were to vote START II and press on with START III, we would see some very rapid movement on the part of the military establishment.

Senator HAGEL. Thank you.

Senator Biden.

Senator BIDEN. Dr. Payne, I meet with those same fellows you mentioned and have over the last several years, and let me ask you a question.

What do you think their reaction would be if, by the next time you interview them for your study, the President of the United States has announced abrogation of the ABM Treaty?

Dr. PAYNE. I think we would have a very negative response.

Senator BIDEN. Yes. I think so too. I think that may be the single greatest understatement I have heard in the last couple of months, at least from witnesses.

And so it seems to me we got to figure out a way somewhere between the extremes. Actually, I am beginning to get worried; I am liking Lehman more and more every time he comes to testify.

And we have been doing this—how long have we been doing this, Mr. Secretary? I mean, years and years and years.

Secretary LEHMAN. Well, at least 20, I fear.

Senator BIDEN. That is right.

And all kidding aside, I think that, from my perspective anyway, Mr. Chairman, Secretary Lehman has put his finger on it.

And that is, what is the mix here? What is the balance? There are so many overstatements made by arms controllers, as well as by those who think arms control is fundamentally and basically flawed and a bad idea.

Do any of you disagree with the proposition that it would be better to amend the ABM Treaty with the Russians to accommodate whatever you think need be done—and that varies among you—than it would be to abrogate the ABM Treaty at this moment?

Ambassador WOOLSEY. I agree with that.

General HABIGER. I agree with that, too.

Dr. PAYNE. Better to amend.

Senator BIDEN. Amend?

Dr. PAYNE. Yes, sir.

Secretary LEHMAN. Well, I guess I would disagree.

Senator BIDEN. OK.

Secretary LEHMAN. But let me explain. Obviously, I am not opposed to amending the ABM Treaty, because, in fact, I was engaged in that process. But I think it would be better if we could find a new vehicle.

But in the—you said, "Be pragmatic. Be practical."

I would have preferred a new vehicle. But if we cannot negotiate a new vehicle, then I am prepared to work with a vehicle that may be more desirable to the Russians.

Having said that, though, I want to emphasize that, when you are trying to add onto something that already exists, it complicates the elaboration of what you really want to do.

Senator BIDEN. That is a valid point. That is a valid point. I think we would all agree, however, that it would be better to end up in a circumstance where the Russians and we agreed on how to proceed from this point on, whether it is within the context of the existing ABM Treaty, as amended, or whether it is a through replacement for the ABM Treaty. The point is they should, basically, be in on the deal here.

Ambassador WOOLSEY. Senator Biden, I agree with that. But I think there is an important point here.

I have been negotiating with the Russians off and on now for 30 years come this fall, and I would say that it is not always the case that the things that make them likely to work with you are the things that they say will make them likely to work with you.

Senator BIDEN. I agree with that.

Ambassador WOOLSEY. They got, I think, really rather cordial after President Reagan's SDI speech in fear that the United States might actually go ahead and do something in that area. And I think that sometimes demeanor and approach is very important with them.

They are a proud people and a proud country. And they do not like being treated as second class international citizens. It is important to show them respect. It is important to work with them on all these things that you mentioned, Nunn-Lugar and the brain drain and so forth.

And it is important to treat them in superficial matters, as well as in basic ones, as important, in spite of the state of their economy and so forth.

But I think that when they see the handwriting on the wall, when they see that we are likely to move forward with defensive systems, I think you will find that they will become more accommodating to amending the treaty rather than less.

Senator BIDEN. I would generally agree with that, assuming that I believed that there was somebody we were dealing with. This is not 1993 or 1994. It is certainly not 1989.

And I see no center from which to deal. I see no place that gives me any degree of certainty that there is some particular leadership at this moment that I would have great confidence would be likely to react in a rational way, in their own rational best interest.

In talking about Soviet leaders, we used the phrase "stodgy." We used the phrase "conservative." We used the phrase "self interested." The point is: For 50 years, even with the mistakes we have each made, Soviet leaders were relatively cautious and generally did what was in their best interest, because there has been—from an American perspective—a dictatorial center, a place from which decisions could be implemented and made. I do not see such a center at this moment.

I do not disagree with the thrust of what you are saying. I would just make the observation that it is a different playing field right now.

But let me move to a specific question, if I may. It seems to me that there is more than a shred of truth to what you have all said here. And you all have picked slightly different points of emphasis.

From the standpoint of a policymaker on a small scale—because I have no illusions about the Senate's role in this—it seems to me that we should be looking down the road and asking what our relationship with Russia should look like in the next 10 to 15 years, as well as dealing with the immediate interests that we have relating to the politically hot threat from rogue states.

General, you had numerous conversations with Russia's last two Strategic Rocket Force commanders, one of whom became Minister of Defense, when you were Commander in Chief of U.S. Strategic Command. I would like to ask you a few questions about that.

General HABIGER. Certainly.

Senator BIDEN. And I realize your information is arguably dated, even though it is only months old.

How would you assess that your two counterparts feel about the prospects of ratifying START II and making further reductions in the absence—in the absence of a U.S. national ballistic missile defense system? I think you have answered this, but I want it clearly on the record.

General HABIGER. I have discussed both issues at some length. And let me just make it as simple as I can make it.

Both my counterparts were—General Sergeyev and General Yakovlev—General Sergeyev, both when he was the Commander in Chief Rocket Forces and in his current position as the Minister of Defense—feel very strongly that we need to move out very quickly with START II, move out equally as quickly with START III. General Yakovlev feels exactly the same way. But every time we then transition the discussion to ballistic missile defenses, their—their comments to me were very, very emotional.

Their concerns relate to the fact that the U.S. had an opportunity to deploy a system, and we did not. They deployed a system. And now you want to deploy a system that is outside the—the treaty.

They did not use these words. These are my words. But they considered that to be a "technical foul."

At this point in time they would probably say, from a military perspective that "If you went with—if you walked out on the ABM Treaty, that we would not go forward with the arms control agreements."

My sensing is, based upon my conversations, that—that they would be reluctant to go along with arms control if we walked out of START II or the ABM Treaty. But——

Senator BIDEN. Well, let me ask you a sort of a takeoff on that. One of the things that President Reagan talked about in the grand style that he would do things—and I mean this in a sincere complimentary way—was this notion of sharing missile defense technology with the Russians.

Again today, in dealing with some of the same people whom Dr. Payne and all of us have dealt with over the last years—and it may sound strange to say this, and if I were brand new to this place, you could assume this was Pollyanna-ish, but as I said, like you, I have been doing this a long time—seems to me that the political circumstances may be more ripe than anyone is willing to acknowledge, or that we are allowing ourselves to believe, to sit with our counterparts, even though we are not certain as to who is calling the shots, and begin to pursue in a serious way, in a concrete way, what President Reagan spoke about in a hopeful way about sharing technology.

And the reason why I have become sort of fixated on something that is, I acknowledge, not an answer to any of the larger issues we have discussed here today, but on this notion of an agreement with the Russians related to a boost-phase defense system located on Russian soil or off the Russian coast, is that to use a phrase that Secretary Lehman almost invented—this would be not only in their interest, but confidence building, as well.

My view is that it may be a place to begin. I am not suggesting that there is anything automatic about their acceptance of this. I am not suggesting that it is not a hard sell. I am not suggesting that we are not going to have to go through the 12 layers of paranoia that exists. And I mean that sincerely.

I have found in my last three or four trips to Moscow, dealing with all of the people you have mentioned from Yavlinsky's party on down, that there is this incredible feeling of isolation. It is almost as if we have hurt their feelings in some way. There is this paranoia, in which—although most people, Mr. Secretary, acknowledge that we are not the great Satan—there are clearly some sectors of the political establishment that, in fact, view this as a grand scheme and plot to finally snuff out Russia.

And so, I am of the view that if this were done with a concerted effort, we may be able to begin to both protect against rogue states and repair U.S.-Russian relations. I realize this is going to come across as incrementalism, which is always seen as in and of itself bad, in the context of foreign policy, in the minds of most people. But it seems to me that we should go slowly here, in the sense that we should not make any significant change that is not negotiated in an ABM Treaty context, particularly since the system that is on the table is something that does not work yet. And looking at this "thin" system my view is, let us either go to a robust "thick" system

and do the whole deal, or wait for a little better technology than we have been shown exists now.

Ambassador Woolsey said that in the seventies and in the eighties, when there were real crises, real tensions, real capacity and capability, it was awfully hard to figure how to transition. It seems to me transition is still a big problem, not because we are on a hair trigger now, but because we are going to affect, in my view, or at least potentially affect, what Russia looks like in the next 20 years. this is something that we may come to rue if we do not do it right. This is a big deal, a big piece.

And so my question is—and I would like each of you to respond, if you can do it relatively briefly, so we do not take all the chairman's time—give us some sense of whether you would attempt now in negotiation to seriously try to engage both pieces of this equation, offense and defense; deterrence and offense here.

Secretary LEHMAN. Well, Senator Biden, I agree with, I think, almost everything you have said. But now let me define it. There is a bit of negotiating history.

I think it is very important, what you have just said about President Reagan's statement in 1983. Speaking for myself, I knew that a desire to deploy highly effective ballistic missile defenses was a big challenge and a vision. But in many ways the even greater challenge and the greater vision was this notion that somehow we could cooperate with the Soviet Union in doing that.

The world in which we could do that was going to have to be very different. What I find so important and amazing to understand is that what was Ronald Reagan's vision of cooperation with the Soviet Union in 1983 became a reasonable, pragmatic policy in 1992, and that is how we proceeded.

In fact, although I did not mention it in my testimony, one of the proposals we had with respect to changing the ABM Treaty had to do with cooperation on technology because it creates some hurdles. I think that is important.

I think you are absolutely right that if we treat Russia, as Jim has said, as a second-class citizen, we will get the kind of resentment and behavior that that kind of approach will always create.

Russia is on the ropes right now economically. But do not underestimate this country. This is a great country. And it is a country that in many ways would like to and can work with the United States to create that better world.

I think we should approach them on technology cooperation. I think we have to keep our feet on the ground. We have to be careful, step by step. It has to be something we all work together on. But, frankly, I am more forward-leaning than almost anybody else I know in the willingness to explore this.

I believe that Russian science and technology in many areas related to this is absolutely world class. I also believe that in some of their deployed systems, for example, in theater ballistic missile defense, I am not so sure we do not underestimate their capabilities.

And maybe it is not that we would procure them for ourselves, but maybe we ought to be a little more open-minded about who else gets involved in using defenses. At least, I am open to that. And I think that is important.

But I want to stress one thing, and I do not know whether I should take my shoe off and pound it on the table or what, but I want to emphasize something. I believe in the START II Treaty. I fought hard for that treaty. I fought hard for some of the provisions including the MIRV ban, which I think transforms how we think about these things.

Senator BIDEN. I agree.

Secretary LEHMAN. So I think that is very important. At the same time, though, I worry that every time people go to Moscow, somebody says, "Well, if you let Poland join NATO, we are going to kill START II," or "If you do not tolerate ethnic cleansing in Kosovo, we are going to kill START II."

At a certain point, we have to be careful that we are not feeding exactly the behavior that is wrong. So I would like to see us and more of the arms control community stand up for the START II Treaty the way they stand up for the ABM Treaty.

I mean it does not help to be running over their saying, "You have to demand more of the Americans for START II." That is not helping.

Senator BIDEN. I happen to agree with you. And as you know, I do not think there are any two people in this Congress who have been more in the face of the Russians—on NATO expansion as well as Bosnia, as well as Kosovo—than the two Members here. And I happen to view myself as thinking arms control is a very important component.

So I agree with you completely. I do not think we can allow the START II Treaty to be used as a leverage when, in and of itself, it is in their interests.

Secretary LEHMAN. Absolutely.

Senator BIDEN. So I have not, and I have never advised this President or, when asked, the Secretary of State or the Secretary of Defense to in any way yield on these other issues which are of great consequence in my view, on the grounds that, "Well, if we do not, then they will not ratify START II."

So we are in even more agreement than you think.

Secretary LEHMAN. I—in fact, I want to emphasize, START II is in their interests. It is in our interests. But we paid a good price for it.

Senator BIDEN. Yes.

Secretary LEHMAN. For example, on how we dealt with bombers, I had a long history of not liking that approach, but even I supported making those moves for a new Russian Government and a new relationship in the context of a treaty that gave us the MIRV ban.

Senator BIDEN. I agree.

Ambassador WOOLSEY. Mr. Chairman—I mean, Senator Biden, I agree with essentially what you said in the remarks that just preceded what Ron Lehman said. I believe that it is a different situation now with Russia, not as favorable as it was in 1992, but certainly not as bad as it was in 1983 with the Soviet Union.

And I think that there are some aspects of this technology we can share, and there are some features of a global system that we could work together with them on. I think it makes sense to work with those portions of the Russian institutions that are not en-

gaged in proliferation, for example. The portions that are not so engaged and are reasonable partners, I think we can do things with. And there is no reason not to do that.

Now, I think that this may not meet with immediate approval mainly because Mr. Primakov is prime minister. But I think a broad-gauged and rather generous approach toward this, along the lines of what the Bush administration did in 1992, is a perfectly reasonable approach under the current circumstances.

I think we do have a window of time here before the Duma and the Presidential elections coming up within the next couple of years in Russia. We have a very hostile reaction in Russia today, of course, because of NATO's actions in former Yugoslavia piled upon other problems of their own making, such as their economy and the like. But insofar as we can help turn things in these next few months toward a cooperative approach on something like resuscitating 1992, to use a shorthand formulation, I think it would be a very good move.

Now, it may not work. I am not as confident as General Habiger, who said that he was, I think, pretty sure that the Russians would step up to a global defense. I would put the probabilities considerably lower than that, but they are certainly not zero. There is a chance. And I think it is worth trying.

And I certainly agree with both you and Ron Lehman that we should not let them continue to sell the horse of START II ratification to us. I have had that up to here. They have tried to sell that horse as many times as Yasir Arafat has tried to sell revising the Palestinian Charter so it will not call for the destruction of Israel. I think each of those horses has been sold far too many times.

Senator BIDEN. Thank you.

Dr. PAYNE. Senator Biden, let me preface my answer by going back to an earlier point that you made about mutual deterrence because it is an important piece of this. I did not say that mutual deterrence or that deterrence is useless, far from it. Mutual deterrence can be very, very useful.

What I did say is that deterrence is far from reliable. And that is based not on theory, but a study of deterrence practice.

Senator BIDEN. I agree.

Dr. PAYNE. What that means to my mind, and I believe this goes back to something Ambassador Lehman said, is that we should establish a balance between deterrence and defense. We do not have that balance now. We have not had it for a long time. And, that imbalance was codified by the ABM Treaty.

In pursuit of establishing a balance between offense and defense, which means that we need to move forward on the defense, seeking a cooperative arrangement with the Russians is an idea whose time has come. In fact, the time came back with the Ross-Mamedov talks in 1992. Unfortunately, we, not the Russians, discontinued the Ross-Mamedov talks. We pulled our position off the table. We discontinued the talks, not the Russians.

And, in fact, in the U.S.-Russian study that I mentioned earlier, and in other similar studies, a Russian recommendation has been to reestablish something like the Ross-Mamedov talks. It does not necessarily have to be Dennis Ross and Mamedov, but we should

seek to reestablish a special high-level venue, a forum to look at how we can cooperate on national missile defense.

Senator BIDEN. Does that makes sense to you guys?

Ambassador WOOLSEY. Absolutely.

Secretary LEHMAN. Absolutely.

Dr. PAYNE. I am fairly optimistic that this could go somewhere, based on the work that I have done with the Russians. As Ambassador Woolsey said, the prospects are lower than they were 5 years ago to be sure. But I am a little more optimistic, given Primakov's position, than not, because Primakov—and here I am reflecting what my Russian colleagues, have told me—Primakov could actually deliver this. Much as Nixon could deliver the U.S. opening to China, Primakov could actually deliver cooperation, where a more liberal Russian leader probably could not.

So in many ways, the time is right for us to move back to Ross-Mamedov. The Russians have been asking to reestablish it; and again, we were the ones to walk away from it. In fact, Russians systematically and continually have reminded me, "You were the ones who walked away from Ross-Mamedov. This annoyed us to no end."

Senator BIDEN. Thank you.

General HABIGER. To answer your question specifically, yes, I agree. We ought to integrate the offense and defense. Now having said that—and what I am about to say, I am glad I am at the opposite end of the table of my good friend, Secretary Lehman—as we go forward with future arms control initiatives, I very strongly believe—and I included this in the report I sent to the Secretary last year—that operators ought to be involved in the negotiation process, rather than the professional arms control wonks, as I will call them, with all due respect.

Secretary LEHMAN. Never have I been more proud to renounce my "wonkhood" and support 100 percent General Habiger. I think that getting the operators involved, especially because there are early warning aspects, there are very serious issues involved. I think that that is an excellent proposal, and I support it.

Senator HAGEL. Thank you. Let me——

Senator BIDEN. We have settled everything now.

Senator HAGEL. Well done, Senator.

Let me move away from the Soviet dynamic here, because we know that there are now other players in this game. And we know that obviously we have to deal with the Russians, and for all the reasons that Senator Biden has laid out.

But I want to move, start with you, Mr. Ambassador, to the Rumsfeld Commission report. How do we now deal with the overall universe of the nuclear players here, as we factor in the Russian dynamic? And let us start with North Korea.

For example, according to the Rumsfeld Commission report, 5 years is not an unrealistic time line here. As the Russians then continue to drag this out, well, we have to factor this in, or if you do not do this, no START II; if you do this, maybe; up, down. And all that time the clock is ticking and ticking. And then we are at a year, we are at 2 years.

And if you agree, obviously you co-authored that report, that 5 years is realistic, well, what are we doing here? Are we not squan-

dering time? Are we not squandering time that we will never, ever get back here? And so therefore, how do we deal with these other nuclear nations?

Ambassador WOOLSEY. Mr. Chairman, I think that is right. And indeed, it is a little worse than that, because we said in the Rumsfeld Commission report that the 5 years may have already started. We may not know when it starts.

So given the fact that last August, the North Koreans had a partially successful three-stage test that overflew Japan for the Taepo Dong, there is at least some reasonable chance they could be a year or two or three away from a ballistic missile carrying a weapon of mass destruction capable of, for example, holding at risk an Alaskan city. It might be a biological weapon, rather than nuclear, but the blackmail threat is possibly closer than 5 years.

I think that it would be a very sound approach for us to begin now with respect to funding and the research and development steps that would be necessary for us to have a thoroughly effective theater defense. And I said earlier I do not agree with the limitations on theater defense that are implicit in the delineation agreement the administration negotiated in 1997.

I think it would be quite reasonable for us to begin to pick up whatever vigorous work in R&D we are not now doing that is constrained by the ABM Treaty. And certain systems, such as, I guess, SBIRS(low), which used to be called Brilliant Eyes, that would be necessary for a very effective theater defense ought to move out smartly instead of being stalled in budgetary scrapes in the Pentagon.

I think that those types of steps will help concentrate our Russian friends' minds. I think they will be more likely to deal with us realistically in a resuscitation of something like the Ross-Mamedov talks than if we wait and see whether or not they believe it is acceptable.

I think we have some months, perhaps a year or two or more, of work in a number of these areas ahead of us before we quite squarely and clearly violate any interpretation of the ABM Treaty. The timing of budget and approvals and scheduling tests and bending metal and the like takes time.

So to answer your question, I would move out smartly now. But I think that that still gives us time before and perhaps even immediately after the Duma and Presidential elections that are coming up in Russia to see whether or not that approach can be combined with working with Russia on a substantial set of changes to the ABM Treaty, together with technology sharing and the like along the lines of 1992. I think those can all go forward pretty much in step with one another.

Senator HAGEL. Thank you.

Secretary Lehman.

Secretary LEHMAN. I agree pretty much with that assessment. I think obviously it is an interactive process. We will have to keep our eyes open. I do not think we want to get ourselves in a situation where we give up our rights to do what we have to do. But at the same time, clearly, the cooperative approach is the better approach. We ought to give it a try.

I think Senator Biden's comment where we want to be 10 years from now, well, if you look at how Russians think about ballistic missile defense, I think it is important to remember that it is not just the so-called liberals and progressives who have an interest in this. In fact, a lot of hard-nosed Russian nationalists do not understand why what they have around Moscow is not covering more of the country. And in many ways, they live in a more dangerous world than we do.

So we ought to keep in mind that it is not going to be an easy process, that there are a lot of spoilers in the political process in both sides. It is going to be difficult. But in the long run, I think a consensus is emerging here. And the basis for such a consensus probably is latent in Russia for a cooperative approach that will create a sounder basis over the long term for our relations with Russia.

Senator BIDEN. Mr. Chairman, if we are worried about 30 Chinese ICBM's, I wonder why those who sit in the Duma and watch thousands and thousands of Chinese moving into Russian territory to take it over to live in it, why they are not worried. It seems to me the confluence of interests here is overwhelming.

Ambassador WOOLSEY. I agree. I do not think Mr. Primakov sees it that way, but I certainly agree with you, Senator Biden.

Senator HAGEL. Dr. Payne.

Dr. PAYNE. With regard to cooperatively negotiating changes to the ABM Treaty, it sounds like everyone at the table concurs with that. And I certainly do. Let me add only two caveats. And the two caveats come from statements that have been made by a number of Russians, and they are exactly to this point.

The first one was—and this point was made by Russians fairly repeatedly—we will accommodate only when we know the U.S. is serious about NMD deployment. That is when we will become willing to accommodate. Because until we know you are serious, we do not need to engage in accommodation. Once we know you are serious about NMD deployment, then you will see us become willing to accommodate. That is the first point.

The second point that Russians have made, interestingly enough, is that once negotiations have begun—and here I have a quote—"we will dissipate much of your energy to deploy NMD through negotiations."

And I think for those of us who are concerned about beginning a negotiation process, it is simply because we are worried that that this second point is true. Much of our energy to deploy NMD will be dissipated by the negotiations. And again, that point that was made to me by the Russians: We will dissipate much of your energy for deployment.

So as long as we guard against being less than serious, and as long as we guard against having our energy for deployment dissipated by the negotiations, it seems to me that moving ahead in a cooperative route clearly is the way to go.

Senator HAGEL. General.

General HABIGER. I agree. I have nothing further to add, sir.

Senator HAGEL. I am sorry?

General HABIGER. I have nothing further to add. I agree.

Senator HAGEL. Agree with what Dr. Payne just said?

General HABIGER. Yes, sir.

Senator HAGEL. Thank you, General.

Let me shift to what Senator Biden just mentioned, that we have not devoted any attention this morning to China. And we all are acutely aware of the recent developments and debate going on up here, especially in this town, regarding Los Alamos and technology that may have, did, maybe drift to the Chinese and who was involved and all the currents that are surging through that particular time.

Where do you see China rolling out on all of this? Should we be focusing more attention with the Chinese on this overall missile defense issue, the same way we are working with the Russians or not? Let us start with you, Mr. Secretary.

Secretary LEHMAN. I think there are some important similarities, both with respect to engaging China, not making what does not have to be a bad situation become a bad situation. We do have to engage. I think engagement should not be business as usual. It ought to be targeted and focused and hard-nosed. But I think it is important to engage, and I think specifically on the question of ballistic missile defense.

It will not help our future relations with China if we continue to emphasize a sort of mutual hostage climate as the basis for our future relationship. We have opportunities to do much better than that. And we ought not to feed that type of reaction.

China is going to grow economically. It is a big and powerful country in a very important and troubled part of the world. And I think that engaging with China is going to be important. We do not have quite the sophisticated interactions with the Chinese that we were able to develop over the years ultimately with the Russians, but we ought to be trying to develop them.

Senator HAGEL. Thank you.

Ambassador Woolsey.

Ambassador WOOLSEY. I do not know, Mr. Chairman, how to say "chutzpa" in Chinese, but the Chinese have shown a great deal of it by not being a signatory to the ABM Treaty and then pushing us very hard not to deploy ballistic missile defenses, and the Japanese not to protect themselves against North Korea and the like. China has invested heavily in ballistic missiles, not only short-range ones to threaten Taiwan, but ICBM's, of course, to threaten us. And we now know that through espionage, as well as some of the other technology transfers, they are going to be able to modernize their forces considerably and probably are moving to a submarine launched missile as well.

I think we are not likely to see the kind of chaos in the Chinese control of their military forces that threatens in Russia. And I am not particularly worried about an unauthorized launch and so forth from them, partially because of their doctrine, partially in their practices, but also partially just because I do not think their military is going to go that way.

But I do think we need to worry about their ability to, essentially, blackmail us in the event of a future crisis in the Taiwan Strait to hinder our being able to do what we did in 1996, send aircraft carriers and essentially insist on a peaceful settlement of any resolution of any dispute between them and Taiwan.

Back in 1996, my former counterpart, the head of Chinese military intelligence, General Tscong Guang Kai, is the one who said to Chas Freeman that the United States probably would not risk Los Angeles in order to defend Taipei. I think that is what they are really interested in. They are interested in putting us enough at risk and reliably at risk that they can try to have a free hand with Taiwan in any future crisis.

And I think it is very much not only in the Taiwanese' interest, but in our interest, to keep them from having that free hand. I think we are more likely to be able to insist on a peaceful resolution of the issue between them and Taiwan if we are not vulnerable to them.

I think that a missile defense of affordable and reasonable scope that would help us deal with North Korea and the like would also help us have a reasonable degree of confidence in being able to defend against a Chinese attack. And I think that would strengthen our hand in the future in dealing with China in something like a crisis over Taiwan.

So I think the situation with China offers an added rationale for our being able to tell General Tscong Guang Kai that the next time he threatens Los Angeles that he will not be able to do so successfully.

Senator HAGEL. Thank you.

Dr. Payne.

Dr. PAYNE. Just to agree with Ambassadors Lehman and Woolsey. My hope is that we would not seek to establish mutual vulnerability as a basis for our relations with the PRC because of the potential for deterrence and coercion of us that such vulnerability would possibly entail; that is, Chinese deterrence and coercion of us when trying to support our Asian allies and friends.

A second point that is a little bit different, concerns the connection between China and Japan with regard to our cooperation with Japan on TMD. China has been very forceful in telling us that Japan should not have TMD, and we should not cooperate with Japan for theater missile defense. If you get to the basis of the Chinese argument it is that it would be a bad thing if China could not target Japan.

It seems to me that we ought to accord the level of respect to that argument as it deserves, and essentially ignore it. It is part of the Chinese "friendship offensive," which is an amazing offensive to begin with. But you see these types of statements and arguments over and over again, because the Chinese know how influential such rhetoric can be on the Japanese perception of threat and the need for TMD.

Senator HAGEL. Thank you.

General.

General HABIGER. By all means, I think we ought to bring China into the equation. I would caveat that by saying we are talking about relatively small numbers of systems, about 18, that can hit the United States, very large warheads, relatively inaccurate systems. They would be city busters, as compared to having any kind of military value.

The Chinese deployed a sea-launched ballistic missile submarine in the mid-eighties. It went on one cruise and has been essentially

in dry dock ever since. They are building a new sea-launch ballistic missile, which tells me that they in the future need to come on our radar scopes.

But I will tell you, Mr. Chairman, there is another country I think we need to think about, if we are thinking about in the 20, 25 years into the future, and that is the Indians. India, as you well know, a couple years ago exploded a device or two. They have a very sophisticated space launch capability, which can be turned into an ICBM program very quickly.

The Indians also, in cooperations with the Russians, in accordance with the agreements, are developing a sea-launch ballistic missile with ranges less than 500 kilometers, which fits into the arms control accords. I see that as a stepping stone. And the Indians have also indicated they are going to build a research submarine that will allow them to launch these test objects.

So China for sure, and in addition we need to keep India on our horizon.

Senator HAGEL. Senator Biden, any last thoughts?

Senator BIDEN. I hesitate to even say it, but only if I can get a commitment that Secretary Lehman will not speak. I am only joking.

Secretary LEHMAN. You have it.

Senator BIDEN. Comprehensive Test-Ban Treaty: does it fit anywhere in this? Bad idea? Good idea? It seems to me, when you are talking about India, when you are talking about Pakistan, it has a place. When you are talking about North Korea, maybe it's less applicable. Where does it fit? Bad idea?

Ambassador WOOLSEY. Well, Senator Biden, I do not believe that the zero level is verifiable. Not only because it is so low. Partially because of the capability that a country has if it is willing to cheat on such a treaty, of decoupling its nuclear tests from the ground by setting them off in caverns or caves and the like.

I think I might have felt differently about a comprehensive test ban that was at a level of a kiloton, or even a few kilotons perhaps. That I think we had a reasonable chance of verifying. But I think the level of zero is, in my judgment, not verifiable. That makes it a treaty that we have to observe because of our open society, and the countries like China probably will not. And to my mind, that makes it worse than a weak read on which to rely.

Senator BIDEN. Secretary Lehman, there are a lot of rumors—I do not know if this true—that the Appropriations Committee plans to cut the Energy Department's nonproliferation programs in Russia, you know, the IPP, the Nuclear Cities Initiative, et cetera. Is that a good idea?

Secretary LEHMAN. No. I think if we are going to engage, we have to engage effectively. I am saying this as a private citizen.

Senator BIDEN. Of course. I understand that. And by the way, I truly appreciate, Mr. Chairman, you having this hearing, and the chairman having it, and the testimony of all of you. I think I walk away from it more optimistic than pessimistic about how we should proceed and about the prospects of 10 years from now being more secure, rather than less secure.

I thank you all, and I thank you, Mr. Chairman, for giving me so much time.

Senator HAGEL. Senator Biden, thank you.

We have a vote in 10 or 12 minutes, but since we have a couple of minutes, if I might get back to Senator Biden's question on CTBT. Any of the rest of you have a thought on that? Secretary Lehman, we will start with you. Good idea? Bad idea?

Secretary LEHMAN. I share Jim Woolsey's concerns about the verifiability of the treaty. I am concerned about the ability to maintain our deterrent without testing. Clearly in the past, when I was in government, we viewed this as a long-term objective. But the conditions were considerably different than what we experience today. There have been some positive developments, but there have also been some negative developments.

With respect to the specific question that Senator Biden mentioned, India, I do not know of any area in arms control and nonproliferation that I have found more frustrating than South Asia. It has been a slow motion train wreck coming. We have all seen it. We have all known it. We have all known it would be difficult to turn this ship around, and it would be a slow process.

But we—maybe just because it is so far away and so different, we just never figured out how to pull together a coalition of people within the American foreign policy community to do it.

So in many ways I view it as a great disappointment. And I hold all of us together responsible, including myself that we did not have a better way to deal with it?

But I have to say that in many ways, the way in which we handled the CTBT did not help. India had already become a country that could not take yes for an answer. Their domestic political situation was so complex that you had spoilers who would take almost anything and turn it negative.

And here is a case where India, long the advocate of the CTBT, in essence decided to test, because it was feeling the heat of this kind of pressure on them. It was not the sole cause. It may not have even been the primary cause, but it certainly was a factor in their calculations.

Senator HAGEL. Thank you.

General Habiger, do you have a thought on CTBT?

General HABIGER. Yes, sir. I think we ought to continue with it, continue to support it, recognizing its limitations.

Senator HAGEL. Dr. Payne.

Dr. PAYNE. I agree with the points made by both Jim and Ron.

Senator HAGEL. Well, gentlemen, thank you. This has been very helpful to the committee, and we are grateful.

Senator Biden, thank you.

[Whereupon, at 12:10 p.m., the committee adjourned, to reconvene at 10 a.m., May 13, 1999.]

ABM TREATY, START II, AND MISSILE DEFENSE

THURSDAY, MAY 13, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10:12 a.m., in room SD–562, Dirksen Senate Office Building, Hon. Chuck Hagel presiding.

Present: Senator Hagel.

Senator HAGEL. Good morning. This morning's hearing is the fifth in a series of hearings the Senate Foreign Relations Committee is holding on the 1972 ABM Treaty. Today's hearing will focus on the relationship between missile defense, strategic arms reductions, the 1972 ABM Treaty, and the national missile defense architecture that the administration is now developing.

Before introducing our witnesses this morning, I would like to summarize five key judgments that have come out of our last five ABM hearings to date.

First, the ballistic missile threat to the United States is present and growing. A number of countries such as Iran and North Korea could today inflict massive damage on the United States using a short-range, ship-launched missile with an unconventional warhead. We are threatened by further instability in Russia. The Chinese missile threat exists and is growing.

Second, the committee has heard compelling testimony that a national missile defense against these threats is technologically feasible. What is lacking is the political will. America is kept vulnerable by a commitment to the 1972 ABM Treaty with a country and a government that no longer exists.

Third, this committee has listened to numerous experts who advocate deployment of a national missile defense system despite Russian and Chinese objections. Ideally, we should seek to engage Russia so that we can deploy missile defenses without affecting our important bilateral relations. But we should never let the defense of our citizens be held hostage to diplomatic relations. The deployment process must move along its own separate track.

We can undertake confidence building, and that confidence building addresses Russian concerns. But at no time should Russia be given the impression that it has a veto over any aspect of U.S. missile defenses.

Fourth, an overwhelming number of witnesses have urged this committee to reject the Clinton administration's effort to expand the ABM Treaty. At a time when we need to move beyond the ABM

Treaty, it would be folly to extend it to new partners or to place new limits on the capabilities of missile defense systems.

Several witnesses have noted that the ABM Treaty is legally dead. Nevertheless, they have pointed out that the treaty remains a political question in our relationship with Russia and that it must be addressed in further discussions on missile defense and strategic arms reductions.

But all decisions relating to U.S. missile defense capabilities, system architecture, and deployment timeframes cannot be held captive to these talks. Some of our witnesses have testified that Russia will "get on board" with our missile defense plans only when they perceive that we are serious, deadly serious, and that they risk being left behind. It is time to get serious about missile defense.

Fifth, this committee has heard several recommendations relating to the subject of today's hearing. The shadow of the ABM Treaty continues to undermine U.S. missile defense plans. Several witnesses have noted that missile defense plans currently under development by this administration are designed more to tiptoe around the ABM Treaty than they are to actually intercept incoming ballistic missiles.

For example, the administration has chosen only those sites, radar configurations, interceptor numbers, and technologies that would fit most easily within ABM Treaty constraints. The administration has not selected sites and capabilities primarily on how well suited they would be for the task of defending America.

In sum, while there is clear consensus on the nature of the threat and the need for a national missile defense, the administration continues to adhere to an outdated treaty. As a result, we are squandering precious time in developing an effective system that will protect America's interests from missile attack.

The committee looks forward this morning to an examination of these issues by our distinguished witnesses. First allow me to introduce our two panels. Our lead witness is the Honorable Stephen Hadley who served from 1989 to 1993 as Assistant Secretary of Defense for International Security Policy under President Bush. Mr. Hadley was responsible for DOD nuclear weapons policy, ballistic missile defense, and arms control. Mr. Hadley is now a partner at Shea & Gardner law firm here in Washington, DC.

Our second witness is the Honorable David Smith who served as chief negotiator to the Defense and Space Talks from 1989 to 1991. In this role, he worked to negotiate an agreement with the Soviets to allow deployment of defenses against ballistic missiles. And I note that in 1985 and 1986, he served as a professional staff member on this committee where he advised Senator Lugar on arms control issues. Ambassador Smith currently serves as president of Global Horizons, an international consulting firm.

Our third witness is the Honorable Robert Joseph. Mr. Joseph served during the Bush administration as U.S. Commissioner to the ABM Treaty's Standing Consultative Commission. Ambassador Joseph has a distinguished background at the Defense Department where he worked on a wide range of arms control issues, including missile defense, nuclear testing, and nonproliferation. Since 1993, Ambassador Joseph has been on detail from the Office of the Secretary of Defense to the National Defense University.

On our second panel will be Mr. William Lee who served as senior analyst on nuclear targeting at the Defense Intelligence Agency from 1981 to 1985. From 1985 to 1992, Mr. Lee was the Senior Executive Service Officer at DIA charged with military production, R&D, and collection systems. Mr. Lee is now an adjunct fellow at the Center for Strategic and International Studies.

The committee welcomes all four of our distinguished witnesses and look forward to hearing from each of you. Gentlemen, thank you and we will ask you, Mr. Hadley, to begin the presentations.

STATEMENT OF HON. STEPHEN HADLEY, FORMER ASSISTANT SECRETARY OF DEFENSE, PARTNER, SHEA & GARDNER, WASHINGTON, DC

Mr. HADLEY. Thank you, Mr. Chairman. It is a great privilege to have the opportunity to appear before this committee today.

I want to begin by saying that I strongly support the effort to provide an effective national missile defense for the United States. It is true that the current provisions of the ABM Treaty prevent us from doing so, and hence the questions raised about the future of the treaty.

In your opening comments, you pointed out that there are those who believe that the United States should first seek to negotiate changes to the ABM Treaty with Russia so as to permit a national missile defense system. What is often overlooked is the fact that the United States made a serious effort in 1991 and 1992 to negotiate changes to the treaty to permit that deployment, and I thought it might be useful this morning for me to describe briefly those efforts, to discuss how the United States might go about renewing a discussion with Russia on ABM Treaty revision, and to assess the prospects for success.

I have a longer statement on this subject. If it is all right, Mr. Chairman, I will just go through and hit the highlights.

Senator HAGEL. That is fine. Your complete statement will be included in the record.

Mr. HADLEY. Thank you.

Many do not realize that on November 26, 1991, U.S. representatives met with representatives from the Soviet Union, Russia, Ukraine, Belarus, and Kazakhstan and tabled an outline for a new ABM Treaty regime. This new regime would have permitted ballistic missile defenses but limited to what was required to protect against small ballistic missile attacks. The proposal was very concrete. We proposed an upper limit on the number of ABM interceptors, a limited number of geographically dispersed sites at which they could be deployed, a limit on the number of interceptors at each site. We proposed eliminating the constraints of the treaty on development and testing of ABM systems, and we proposed a limited duration for the agreement.

These suggestions were listened to attentively by the participants and were followed in January 1992 by a public statement from President Yeltsin in which he called for a global system for ballistic missile protection of the world community that could be based on the reorientation of the United States SDI program, as well as high level technologies developed by Russia in its defense complex.

This was a real breakthrough. It was a Russian leader formally acknowledging that ballistic missile defenses have an important role to play in the post-cold war world.

The Bush administration informed President Yeltsin that it welcomed his suggestions, and indeed in a summit meeting in June 1992, President Yeltsin and President Bush formalized cooperations between their two countries on a global protection system. They established a high level working group to explore on a priority basis three issues: potential sharing of early warning information, potential cooperation in developing ballistic missile defense capabilities with Russia and our allies, and a legal basis for cooperation, including necessary amendments to the ABM Treaty.

Considerable progress was made. A number of working groups were established. Progress was made in defining a workable concept for a GPS system, in defining specific areas of technical cooperation, in developing means for sharing of early warning information, and even undertaking the planning for a joint deployment of the theater missile defense capabilities of the two sides.

Regrettably, these discussions ground to a halt in October 1992 when it became clear that the outcome of the upcoming Presidential election would not be the reelection of President Bush.

Under the Clinton administration, discussions continued between the United States and Russia on the subject of ballistic missile defenses, but with a completely different focus. Instead of trying to lead to a revision of the ABM Treaty that would have facilitated deployment of ballistic missile defenses, the administration's discussions instead focused on the so-called demarcation issue and, as you noted in your opening statement, resulted in, in fact, extending the constraints of the ABM Treaty to our ability to deploy theater ballistic missile defenses.

It is very regrettable that the Clinton administration did not build on the work that had been done in the Bush administration on a global protection system and on a U.S./Russian dialog on how to amend the ABM Treaty to permit national missile defense. In the intervening 6 years, we have lost valuable time, and it may simply be too late for negotiated amendments to the ABM Treaty. Obviously, the political situation, particularly in Russia, is much more difficult to deal with than it was 6 years ago.

My own view is, however, that it is worth making the effort but we need to think very concretely about how we restart the dialog with Russia.

In the balance of my statement, I describe in some detail the kind of framework we need to pursue in order to have any chance of successful discussions with Russia. It really has three parts.

First, we need, I think, to put national missile defense in a context of a global effort against the proliferation of weapons of mass destruction and the means to deliver them. That has to involve our allies, but it also has to involve Russia and, to some extent, China because the reality is they are potentially the biggest proliferators on the block. And we need to see ballistic missile defense as one piece and, indeed, a contribution that we can make to this global initiative against weapons of mass destruction.

Second, we need to have a new concept of deterrence that is more appropriate for the post-cold war world. In the cold war, when we

had a single overwhelming Soviet military threat, deterrence based on threat of retaliation with offensive nuclear forces made sense. It is not clear that simply relying on deterrence through threat of retaliation is sufficient any longer, and I talk in my statement as to why that is the case. I would argue we need to have a new concept of deterrence that is based on both offensive nuclear forces to provide traditional deterrence and the ability to protect against weapons of mass destruction and the means to deliver them should deterrence fail. And this is a concept that ought to be attractive both to the Russians as well as to us.

Finally, I would propose, consistent with that concept, that we go to the Russians with a so-called package deal in which we would propose to Russia a coupling of significant reductions in the numerical ceilings in the START II treaty with a revision of the ABM Treaty to permit the deployment of numerically limited, but still capable ballistic missile defenses to protect the territory of the two nations. I think that is something that is both in the United States' and Russia's national interest, and it is in that context that we might have an opportunity of some success in those discussions.

I agree with you that the only way to go into those discussions is making it clear that our NMD program is going to go forward, and if at the end of the day, those discussions are not successful, then we are not going to let the ABM Treaty prevent us from protecting the country against these threats. But I think the possibility of negotiations is something we should pursue.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Hadley follows:]

PREPARED STATEMENT OF HON. STEPHEN J. HADLEY

Mr. Chairman and Members of the Committee.

It is a great privilege to have the opportunity to appear before you today to testify concerning national missile defense and its impact on the 1972 Anti-Ballistic Missile Treaty.

I strongly support the effort to provide an effective national missile defense for the United States. The current provisions of the ABM Treaty prevent the United States from doing so. Hence the serious questions being raised about the future of the Treaty.

Some experts argue that the United States should act now to withdraw from the ABM Treaty or that the ABM Treaty effectively lapsed with the dissolution of the Soviet Union. Other experts argue that before adopting either of these courses of action, the United States should first seek to negotiate changes to the ABM Treaty that would permit the deployment of a national missile defense system. What is often overlooked is that the United States made a serious effort in 1991–1992 to do precisely that—to negotiate changes to the ABM Treaty with the Russian government.

I thought it might be useful this morning to describe briefly these earlier efforts, to discuss how the United States might go about renewing a discussion of ABM Treaty relief with the Russians, and to assess the prospects for success.

THE GLOBAL PROTECTION SYSTEM OR "GPS" CONCEPT

The process began on September 27, 1991, when President Bush publicly called on the leadership of the then-Soviet Union to "join us in taking immediate, concrete steps to permit the limited deployment of non-nuclear defenses to protect against limited ballistic missile strikes whatever their source." On October 5, 1991, then-Soviet President Gorbachev responded by stating that "we are ready to discuss the U.S. proposal on non-nuclear ABM systems" and suggested that the two countries examine the possibility of creating joint ballistic missile warning systems. This statement was a clear recognition by the Soviets, and confirmed by the Russians, that the proliferation of ballistic missiles and weapons of mass destruction ("WMD") represented as big a threat to them as to the United States.

Encouraged by this response, on November 26, 1991, U.S. representatives met with representatives of the Soviet Union, Russia, Ukraine, Belarus, and Kazahkstan to table an outline for a new ABM treaty regime. This new regime would have permitted deployment of ballistic missile defenses but limited to what was required to protect against small ballistic missile attacks. The proposal envisioned an upper limit on the number of deployed ABM interceptors; the deployment of ground based interceptors at a limited number of geographically dispersed sites; a limit on the number of interceptors at each site; elimination of the ABM Treaty's constraints on development and testing of ABM systems; and a limited duration for the agreement so as to permit deployment in the future of more advanced systems such as space-based interceptors.

Meanwhile, dramatic events were occurring in Moscow which led ultimately to the dissolution of the Soviet Union and the emergence of an independent Russia with its first democratically elected president, Boris Yeltsin. In speeches on January 29 and January 31, 1992, President Yeltsin called for "a global system for protection of the world community [that could be] based on a reorientation of the U.S. [Strategic Defense Initiative] to make use of high technologies developed in Russia's defense complex."

This was a real breakthrough that stunned even the most committed U.S. advocates of ballistic missile defense. A Russian leader formally acknowledged that ballistic missile defense had an important role to play in the post-Cold War world.

The Bush Administration informed President Yeltsin that it welcomed his proposal for a "global protection system" (or "GPS")—that the United States shared his bold vision and was prepared to work with him toward that goal. The United States moved quickly to consult with its friends and allies in Europe and Asia to make clear that they would be in on the ground floor and included in any such system. The United States sought specifically to reassure the British and French that such a system would not undermine the credibility of their own strategic nuclear deterrents. The United States particularly sought to enlist the NATO alliance in the cooperative GPS effort.

Everyone understood that to deploy a global protection system would require changes to the ABM Treaty. It was believed that cooperation in developing the system would allow Russia to accept its deployment and the changes in the ABM Treaty that such deployment would require. This approach would change thinking in the United States as well, for if the world community in general and Russia in particular were ready to develop and deploy defenses against limited ballistic missile attacks, then even the most skeptical critics in the United States would have to give way. Thus cooperation on a global protection system offered the hope of breaking the log jam on the ABM Treaty that plagued the U.S. domestic political system.

U.S. RUSSIAN DISCUSSIONS ON A GLOBAL PROTECTION SYSTEM

At their summit meeting in June, 1992, President Yeltsin and President Bush formalized cooperation between their two countries on a global protection system. In the joint summit statement issued on June 16, 1992, the two Presidents agreed that "their two nations should work together with allies and other interested states in developing a concept for a system [to protect against limited ballistic missile attacks] as part of an overall strategy regarding the proliferation of ballistic missiles and weapons of mass destruction." To this end, they established a high-level group to explore on a priority basis:

- The potential for sharing of early waming information through the establishment of an early warning center.
- The potential for cooperation with participating states in developing ballistic missiles defense capabilities and technologies.
- The development of a legal basis for cooperation including new treaties and agreements and possible changes to existing treaties and agreements necessary to implement a global protection system.

The high-level group established by the two Presidents met twice, during July and September of 1992, and established working groups to pursue specific subjects. Considerable progress was made in developing a workable concept for the GPS system, in defining specific areas for technical cooperation, in developing means for sharing of early warning information, and even in undertaking a joint deployment of the two sides' theater missile defense capabilities. The activity of the high-level group was suspended in November of 1992, however, with the outcome of the U.S. Presidential election.

Under the Clinton Administration, discussions continued between the United States and Russia on the subject of ballistic missile defense. But the primary object of those discussions changed dramatically. Instead of leading to the revision of the

ABM Treaty to facilitate the deployment of ballistic missile defenses, these discussions instead resulted in extending the Treaty's limits and imposing constraints on the ability of the United States to deploy systems to defend against theater ballistic missiles. This is ironic because the ABM Treaty does not by its terms impose any limits on defenses against theater ballistic missiles systems. The results of these Clinton Administration discussions are now before this Committee.

RESTARTING THE DIALOGUE WITH RUSSIA

It is extremely unfortunate that the Clinton Administration did not build on the work done during the Bush Administration on a "global protection system" and on the U.S./Russian dialogue on how to amend the ABM Treaty to permit national missile defense. If it had, we might be a lot closer today to the consensual deployment of such a system. In the interim, the political climate for anything positive in the U.S./Russian relationship has deteriorated badly. We have lost valuable time and it may simply be too late for negotiated amendments to the ABM Treaty.

My own view, however, is that it is worth making the effort, for all the reasons that caused the Bush Administration to undertake the dialogue in the first place. But how we go about restarting the dialogue is very important.

WHAT IS THE RIGHT FRAMEWORK FOR WORKING THE PROBLEM?

The U.S. national missile defense effort and the issue of revision of the ABM Treaty have been extremely sensitive issues for Russia. They have been as divisive within the U.S. domestic political debate. In truth the U.S. is unlikely to be successful in getting Russian support for any revision of the Treaty unless it can demonstrate strong bipartisan political support for the U.S. approach.

What is needed is a framework in which to view national missile defense that offers the prospect simultaneously of creating a new consensus within the U.S. political debate, offering an acceptable way for the Russians to accept our ABM Treaty proposals, and reassuring our own allies who are in some instances quite skeptical about U.S. national missile defense efforts. The framework also needs to provide a basis for dealing constructively with China on this issue.

This framework also needs to reconcile three competing U.S. policy priorities: discouraging (if not preventing) the proliferation of WMD and the means to deliver them, reducing the Russian nuclear posture in ways that are stabilizing, and pursuing the development and deployment of ballistic missile defenses.

Within the U.S. domestic political debate, these three priorities have often been at war with one another. The partisans of non-proliferation have seen the pursuit of national missile defense as evidence of lack of commitment to and confidence in the non-proliferation effort. The partisans of reducing the danger posed by Russian nuclear weapons have seen national missile defense as fatally undermining the prospects for START II in the Russian Duma and any hope for a START III. The partisans of national missile defense have felt stymied by both of the other two groups.

Conflict among these policy priorities has also bedeviled our approach to these issues in dealing with other governments. The Russians have made clear they will link any START II ratification to continued U.S. adherence to the ABM Treaty as written. Even some of our closest allies are worried that the U.S. national missile defense program represents either a neoisolationist retreat from the world or a vehicle for U.S. intervention "anytime/anywhere."

Finally, by appearing to be a unilateral initiative providing a capability available only to the United States, national missile defense threatens U.S. leadership of the global effort against the proliferation of WMD.

1. Embed Missile Defense Firmly in a U.S. Strategy Against WMD

The starting point for resolving these conflicts is to treat the U.S. ballistic missile defense effort as part of a comprehensive U.S. strategy for dealing with weapons of mass destruction ("WMD") and the means to deliver them. That strategy of necessity must be a global strategy, one in which the U.S. can lead but cannot dictate. Such a strategy can succeed only if the U.S. can enlist its closest allies despite increasing economic competition and trade frictions between these allies and the United States. It can succeed only if the U.S. can enlist Russia and China, two of the greatest potential sources of both WMD and the means to deliver them.

But in engaging these parties the U.S. has on its side the fact that proliferation is a serious challenge that threatens each of these countries as well as the United States. Europe cannot feel sanguine about an Iraq with WMD and long-range ballistic missiles any more than Japan can feel sanguine about North Korea. Russia and China should also be concerned about North Korea and would certainly be con-

cerned about the nuclear-armed Japan that could follow if the North Korea problem is not managed properly.

The United States needs to go to its key allies, to Russia, and perhaps even to China at the highest levels to propose a revitalized effort against WMD jointly led by these key nations. Particularly with respect to Russia, such an undertaking would provide both a positive element in the U.S./Russian relationship and the best approach for obtaining Russian cooperation—assuming the Kosovo crisis is resolved without a total breach between the U.S. and Russia.

Success of a joint effort against WMD will require probably lengthy strategic consultations between the United States and these governments to develop a common assessment of the risks posed by countries as Iran, Iraq, and North Korea and the list of measures that will need to be pursued. These measures need to include:

- Better means of collecting and analyzing intelligence information about potential proliferators.
- Regional strategies to try to resolve underlying tensions and disputes that provide part of the motivation for WMD proliferation (such as in the Middle East).
- Security strategies that deter the acquisition and use of WMD and the means to deliver them by states seeking to coerce their neighbors (such as Iraq).
- Enhanced export controls on a multilateral basis with real sanctions for noncompliance.
- Improved capabilities to deal with both the military and civilian consequences of WMD use (including improved detectors, vaccines, antidotes, protective clothing, and emergency response procedures and practices).
- Improved technical and operational means to detect and defeat the various means of delivery of WMD (including ballistic missiles, cruise missiles, aircraft, and unconventional means).
- Improved conventional capabilities (including weapons and sensors) to locate and destroy production, storage, and support facilities for WMD and associated delivery systems (though with obvious limitations on what could be shared with other countries).

Partisans of ballistic missile defense must recognize that BMD is only one of several measures that need to be pursued in dealing with WMD risks, while partisans of nonproliferation (or the risks of WMD delivery by unconventional means) must acknowledge that ballistic missile defense needs to be pursued as well.

This framework allows the U.S. to offer to contribute ballistic missile defense capability to those countries joining in this comprehensive effort against the proliferation of WMD. The U.S. is already making such a contribution to some degree in its cooperation with Israel on the Arrow program, its sale of Patriot missile systems to close allies, and certain technology sharing with allies under existing cooperative agreements. But significant technology transfer restrictions prevent wider sharing.

The foregoing framework also provides a better basis for dealing with China on the issue of ballistic missile defense. It would allow the U.S. to offer China a leadership role in this initiative if China were willing to commit itself to the key elements of the overall strategy—in particular, tough export control limitations, an end to transfer of Chinese WMD and missile technology to key countries of concern, and a halt to its own ballistic missile threat to its neighbors.

2. Define a new Concept of 21st Century Deterrence

In a Cold War world of a single overwhelming Soviet military threat, deterrence could be based in large measure on the threat of retaliation by offensive nuclear forces. With a post-Communist Russia no longer a global threat to U.S. interests, there is a real question about the continued requirement for this concept of deterrence as to Russia. With respect to the rest of the 21st century world, even more questions can be raised.

A principal U.S. national security concern is to keep countries like North Korea and Iraq from threatening U.S. regional allies, vital U.S. interests, or critical resources. To deter or defend against this challenge, the United States and its allies must be capable of bringing conventional military power into a region and of using it against a threatening state if necessary. The principal threat to this ability is WMD directed against U.S. military forces and allies in the region—and against the U.S. homeland, in hopes that a U.S. President will be deterred from putting U.S. forces into the region or using them against the offending country.

It is an open question whether the threat of even nuclear retaliation represents a credible deterrent to the use of WMD in this context. Is a regime as unstable and paranoid as the North Korean leadership susceptible to "rational" deterrence? How credible is the threat of nuclear retaliation against even states like North Korea and Iraq—especially if they were to use WMD not against the U.S. but a U.S. ally?

Would we really respond to a chemical weapon attack on a U.S. ally with U.S. nuclear weapons? To a chemical attack even on U.S. forward deployed forces?

There is still a role for deterrence by threat of retaliation—even nuclear retaliation: to help deter a North Korea from using its overwhelming conventional military capability against South Korean and U.S. forces; to help dissuade Saddam Hussein from using chemical and biological weapons such as in the Gulf War. For this purpose, however, the United States does not need anything like the number of deployed nuclear weapons that it had during the Cold War. But it increasingly needs to enhance deterrence by coupling the threat of retaliation with the ability to deny an opponent the benefit of any WMD capability. This is the contribution that active defenses (such as ballistic missile defense) and other measures can make to deterrence.

The United States needs to develop a concept for deterrence in the 21st century based on both offensive and defensive forces, on a balance between threat of retaliation and ability to deny, on a combination of dissuasion, defense, and counterforce. A great deal of thinking is required to develop this concept. But it should already be influencing U.S. national security strategy and policy. It can help support the case for ballistic missile defense.

3. Propose to Russia a "Package Deal" on Nuclear Forces and Deployed Defenses

This concept of deterrence based on a mix of offensive and defensive forces also makes sense as an approach to Russia's own national security requirements. It would permit Russia to reduce the number of its nuclear forces to a level that it could sustain economically while still maintaining parity with the United States. It would mark a return to the more traditional Russian emphasis on defensive forces.

To operationalize this concept, the United States should propose to Russia a "package deal" coupling a significant reduction in the numerical ceilings in the START II Treaty with a revision of the ABM Treaty to permit the deployment of numerically limited but still capable ballistic missile defenses protecting the territory of the two nations. The theater missile defenses of the two sides should remain unconstrained.

Further analytical work would be required to determine the proper level for strategic nuclear forces of the two sides. The establishment of any such level would also have to be contingent upon no significant increase in the forces of other nuclear weapons states (particularly chemical) that might threaten either country. But the level might be expected to be significantly below the 2,500 level set as a target for START III.

Similar analysis would be required to determine the nature of the limits to be contained in an amended ABM Treaty. But it is fully expected that the national missile defense system that could be deployed by either country under these limits would not undermine the credibility or effectiveness of either the U.S. or Russian strategic nuclear deterrents even at reduced levels. The U.S. should insure that this is also true for the French and U.K. strategic deterrents, which are likely to represent a much more sophisticated capability than can be handled by the current U.S. national missile defense system design.

While such a "package" approach would reduce the economic burden of Russia's nuclear forces, it could mean a significant new economic burden for Russia in the form of ballistic missile defense deployments. Ironically, however, Russia already maintains the world's only operating ABM system, still has extensive air defenses, and produces its own theater missile defense systems.

Still, the United States could consider as part of the "package deal" the possibility of cooperative efforts in the field of ballistic missile defense—as part of a comprehensive global strategy involving U.S. allies and other countries in dealing with WMD and the means to deliver them. Such potential cooperation—again, also involving U.S. friends and allies—might include:

- Expanded ballistic missile launch notification, sharing of sensor early warning data on ballistic missile launches, and a joint ballistic missile warning center.
- Interoperable theater missile defense systems—the U.S. PAC III and the Russian S300—that could be offered for sale in tandem as agreed between the two countries by a U.S./Russian joint venture to countries threatened by proliferating neighbors. (This could both provide an important contribution to a comprehensive global WMD strategy and offer U.S. support for Russian access to a legitimate export market for its TMD systems.)
- A possible U.S./Russian joint venture to develop a ground-based national missile defense system that the U.S., its allies, and Russia could deploy, thereby assisting Russia in meeting its own needs for ballistic missile defenses.

This latter proposal raises the controversial issue of sharing of ballistic missile defense technology with the Russians. This is not a new proposal. President Ronald

Reagan offered to share just such technology with the Soviet Union as part of his SDI initiative, and the Bush Administration defined several joint development activities to be pursued by U.S. and Russian scientists in the field of ballistic missile defense.

Given the number of strategic ballistic missiles that the Russians would continue to possess, they would not need to be able technologically to defeat a U.S. national missile defense system but could simply overwhelm it. Perhaps a greater risk is that the Russians might provide critical technological information to countries against which the U.S. system really was directed, such as Iraq or North Korea. The issue warrants greater study. But such a technology sharing program with Russia would help to rebut the argument that by pursuing a national missile defense program the United States was simply seeking unilateral advantage over Russia.

Thank you for your time and attention.

Senator HAGEL. Mr. Hadley, thank you very much.

Mr. Smith.

STATEMENT OF HON. DAVID J. SMITH, FORMER CHIEF U.S. NEGOTIATOR TO THE DEFENSE AND SPACE TALKS; PRESIDENT, GLOBAL HORIZONS INC., ANNANDALE, VA

Ambassador SMITH. Mr. Chairman, thank you very much for inviting me. I would also like to thank you particularly for recalling my service here at the committee. Unfortunately, we were dealing with many of the same issues on the ABM Treaty when I was a staffer here in the mid-1980's, and it is a shame that we cannot get over that.

Second, I would like to say that I would wholeheartedly associate myself with your remarks at the outset. I think you are absolutely right, and I hope that my statement here will perhaps reinforce some of the points which you have made.

Your staff has asked me to take a look at a rather long and complicated list of issues, and I have put together a fairly comprehensive statement. With your permission, Mr. Chairman, I would like to submit it for the record and summarize what I have to say.

Senator HAGEL. It will be included in the record.

Ambassador SMITH. Thank you, Mr. Chairman.

My remarks this morning will focus on five areas, and I would like to take them in turn.

First, while it has been said both by my friend, Mr. Hadley, and by yourself at the outset, I think it is important to set the stage. I think it is very important the United States proceed apace with national missile defense. That is the first point that I think lays the groundwork for everything else I have to say.

I would refer to the July 15, 1998 report of the bipartisan Rumsfeld Commission, and I will not go over all of their conclusions, but I think two of them bear repeating.

One is that concerted efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear payloads pose a growing threat to the United States. It seems to me that that is about all we need to conclude that we have a problem here and we need to do something about it.

The second conclusion that I think ought to be highlighted—and I do not think it has gotten enough attention since the commission's report was published—is that plausible scenarios include rebasing or transfer of operational missiles, sea and air-launch options. The implications of that are clear. That means that the system that we deploy tomorrow is not going to be good enough the

day after tomorrow. It is like anything else in human history. I do not know why we should be so shocked, but the fact is we need to start thinking about what we are going to do next.

Now, if the Rumsfeld Commission was not enough, recall that not 6 weeks after the Rumsfeld Commission issued its report, the North Koreans gave us a practical demonstration with the launch of their Taepo Dong–1. This overflew Japan on August 31, 1998. And let us remember, it was a three-stage missile. Our intelligence community was shocked that it was a three-stage missile, and one of those stages was solid fuel. This is a broke, hermetic State that has managed to go from a basic Scud infrastructure to building a three-stage missile, including solid fuel technology. I think we better watch out out there.

Mr. Chairman, it seems to me that there remains no doubt that a ballistic missile threat to the United States is developing rapidly, nor is there any doubt that national missile defense is the right answer. And I offer you three reasons.

The first is the most basic. "Security against foreign danger," wrote James Madison in Federalist Number 41, "is one of the primitive objects of civil society, an avowed and essential object of the American Union." Every American citizen should have the defense that our technology and our wealth can afford.

The second reason for national missile defense is geopolitical. Now, there are dedicated opponents of national missile defense who will revel in telling you that why would anybody go to ballistic missiles when there are 100 other ways someone could harm the United States. And, of course, there are 100 other ways someone could harm the United States. We have seen embassy bombings in Dar-es-Salaam and Nairobi. We have had some homegrown problems here in the United States. Clearly there are ways to do harm to the United States and to Americans. That is terrorism. We need to make the distinction between terrorism and geopolitical tools, and ballistic missiles are geopolitical tools.

The Rumsfeld Commission makes it very clear that there are plenty of countries out there who are willing to spend their scarce resources on developing ballistic missiles. Now, it is unlikely those countries are doing that just to create some kind of a space-age car bomb. The fact is they see some other use, and the use they see is they want to create an asymmetrical capability with which to threaten the United States, frankly to keep us from projecting our power into their regions. They want to affect our calculations. It is a geopolitical reason.

If somebody wants to throw a suitcase bomb at us, obviously they can do that, and our Government ought to be working on that. Do not misunderstand. But let us not confuse the two issues.

The final reason I think we need to proceed with national missile defense is to echo what my friend, Mr. Hadley, has said, to complement our nonproliferation efforts. It seems to me that if we make clear to countries who are thinking about getting into this asymmetrical game, that the United States is going to use its technology and its wealth to thwart their plans, they might think twice. We might dissuade them. Not all of them, but it seems to me that it is a necessary ingredient of a serious nonproliferation effort.

Now, I think those are good, solid reasons why we need to proceed with national missile defense. But we have a problem. The fact is that national missile defense is blocked by the ABM Treaty as it stands today. Mr. Chairman, there will be people who will come in here and tell you that that is not the case, that they have found ways to make things treaty compliant. The three of us know exactly how the United States makes treaty compliance decisions for its own behavior, and let me assure you that in the end of the day, there is no such thing as a treaty compliant national missile defense deployment.

Let me be clear. The only thing that we can deploy is a second Safeguard system from the 1960's. That is all we can deploy. We need to understand that even the so-called C–1 architecture, even confined to 20 missiles, even deployed at Grand Forks, North Dakota is going to involve some kind of a negotiation with the Russians. There is simply no such thing as a treaty compliant NMD.

Let me give you three of the issues that will come up in these kinds of discussions on the ABM Treaty.

The first is territorial defense. It is found in article I. The root of the problem here is this. Over the years, when it did not look like we were going to do much, we developed a kind of shorthand, a common parlance with which we said what the ABM Treaty permits. It permits 100 interceptors at one site. And that shorthand grew up as lingua franca. That is what we decided it meant. Well, we were not really doing much, and so it was a good textbook description, but there are some problems.

The notion that there is a treaty compliant defense forgets that the 100 interceptors at one site was not an object in itself. It was a tool to implement the treaty's object and purpose, and the treaty's object and purpose is to prohibit a territorial defense. Now, that stands in stark contrast with the stated purpose of our current deployment readiness program for national missile defense, and it is—I quote—"The NMD system will provide defense of all territory of all the 50 States."

Now, anyone who has stood in front of a TV camera or run for elected office, as you have, Mr. Chairman, would understand that we might be able to weave other arguments around this, but it is going to be a real tough sell to stand up and say that territorial defense is not territorial defense. I can do it but not in a 15-second sound bite. It is not going to go over well.

Moreover, when you get in the room with the Russians, they have absolutely no obligation or any interest to make this easy for us. So, when you hear administration witnesses telling you we are just going to go over and get the Russians to nod their heads up and down to something like this, it is not going to be that easy.

The second issue that is going to arise on any NMD deployment under the ABM Treaty is the issue of radars. Now, this may sound elementary, but I think it really does bear repeating. The world is round. The United States territory is rather large. From Calais to Key West to Kure to Attu and back again, it is a large piece of that globe. And electromagnetic waves travel in straight lines. The reason that the ABM Treaty requires that the one, single ABM radar be deployed in a 150-kilometer radius surrounding your launch site was to use those elementary physical principles to make sure you

only had a territorial defense. It is not a game to see if American scientists can somehow defend the country from North Dakota. They cannot, by the way. But that is not the purpose of it. The purpose is to keep that one radar in North Dakota, knowing that the electromagnetic waves have to go straight so that you cannot get out there and defend the whole territory.

It is not that easy just to say, oh, it is a matter of a radar. Once again, I hear administration witnesses saying things like that. We will just get the Russians to agree to the radar. They are going to go right back to the purpose of the treaty, and the reason for the prohibitions on the radars is the object and purpose of the treaty: to prevent a territorial defense.

What I am really getting at here is there is no such thing as a modest treaty amendment.

Now, the third issue that is going to arise is where do you put the NMD system. We have a problem even if you want to go to Grand Forks. The ABM Treaty requires that your ABM system be in a 150-kilometer radius that contains ballistic missiles. Well, the idea here was—these are the concepts of mutual assured destruction and crisis stability—that if you defend just the missile field, or just the national command authority, you assure stability because you are assuring some kind of survival for a second strike capability. If you defend the entire territory, that becomes destabilizing. That is why the missile defense is supposed to be in either a missile field or the national capital. There is a reason for that.

Well, guess what? We have shut down our missile field at Grand Forks. The BRAC wanted it closed. It is shut down and the missiles have been moved to Malmstrom, Montana. There are no missiles at Grand Forks.

Now, what I am hearing now is the Pentagon has come up with the latest plan that they are going to draw a new circle which will take in the eastern-most silos that belong to Minot Air Force Base, draw their 150-kilometer circle, and say that that is the Grand Forks ABM deployment area. It just seems to me it is too clever by half, Mr. Chairman. If the Russians did something like that, we would be raising it with them. I do not think that is going to float in the American compliance context.

Finally, let me note that coverage of all 50 States, if you are going to do that, really requires a deployment from a single site in Alaska, not in Grand Forks, North Dakota. It is my understanding that consequently that is what the administration is currently—and I stress currently—planning to do. Now, it should go without saying that if you are going to put your single site in Alaska, everything I said does not matter. You have to change article III because you cannot now put your single site in Alaska.

Multiple fixed ground base sites, sea or space-based national missile defense, the development of sea or space-based national missile defense, and advanced sensors which could substitute for what the treaty calls an ABM radar are altogether prohibited by the ABM Treaty as it stands today.

Mr. Chairman, basically we have an urgent dilemma. What I have tried to set up before you is this. We have to do national missile defense. The ABM Treaty, as it stands today, blocks national missile defense. So, what do we do?

Frankly, Mr. Chairman, continued U.S. adherence to the 1972 ABM Treaty is of no strategic value to the United States. The ABM Treaty is not a cornerstone of stability for the new millennium. It is a delicate diplomatic problem for today.

Now, that said, I wholeheartedly agree with those who say that our security relationship with Russia is important, that Russia is in a crucial transition, and I do not see any reason needlessly to provoke them into some kind of a diplomatic rift over the ABM Treaty. I favor trying to negotiate something, although I recognize, as Mr. Hadley pointed out, today that is not going to be easy. But the fact is the date at which we are going to need some ABM Treaty modifications in place is fast approaching. In fact, it is in about 18 months. That is not me speaking. That is the schedule of the Clinton administration's national missile defense program. We have got to have something done in about 18 months.

There were better times as Mr. Hadley pointed out. There were times when we had better relations with Russia. There were times when there was less confusion in Moscow. There were times when there was no Kosovo crisis. There were times when we had more time. Unfortunately, the administration abandoned the Ross-Mamedov talks in 1993, and 6 years during which we could have been talking have been squandered.

I think it is still worth a shot, but it is going to be difficult. As a former negotiator, let me offer some points on how to do it if we do it.

First, the United States should carefully resolve what national missile defense it needs. And there I mean deployment of the near-term system, as well as development and testing of follow-on systems. We should then craft an integral negotiating position accordingly and then approach the Russians. I will not go into it in detail here, but I do have some ideas on what it is we ought to be negotiating if you are interested when we get to questions.

The one thing I want to say, though, is the worst thing we could do is to do this piecemeal and run off to Moscow and negotiate some kind of a deal, pay some kind of a price, just to get them to nod their heads up and down to the C–1 or C–2 architecture. That is the absolute worst negotiating mistake we could make.

Second, we need to announce an NMD deployment decision now.

Third, we need to embark upon a vigorous research, development, and testing program for national missile defense systems which may follow our initial fixed, ground-based deployment.

Fourth, in addition to our deployment announcement, we need to realize that we do have some leverage. The fact is that Russia's economic plight is sending their strategic forces down regardless of what we do. They would like an agreement for future reduction of strategic offensive forces. This is different from the cold war. They want an agreement for further reductions. We can get creative, roll this all into one negotiation. We may actually be able to turn this into a win-win because there may be some other things the Russians would like, like real cooperation on early warning or cooperation on theater missile defense. This does not have to be just the United States getting its way. There are things the Russians want. We could come to an agreement.

Fifth, politely, reasonably, but firmly we have to put a time limit on negotiations.

And sixth, we should make no commitments on longevity of the agreement beyond the time during which we think we can live with what it is we have negotiated.

Now, I cannot tell you what the outcome is going to be, Mr. Chairman. I think it is worth a try. If the effort comes to naught, at least we can say we have prepared the way by leaving no stone unturned. I do not believe the American political system will do any less than that. I think we have got to give a try on this negotiation. I cannot guarantee you that in the end we may not be faced with the stark reality of having to withdraw from the treaty. We may.

Now, there is a myth here that I would like to explode, and that is that somehow deploying defenses, negotiating on the ABM Treaty somehow ipso facto makes agreements for reductions of strategic offensive weapons go away. It is simply not the case. As I have stated, the Russians have a greater interest than we do right now in reducing nuclear weapons and doing that in a negotiated agreement with the United States. It is not clear that if we go into a negotiation, we take their security concerns into account, we offer them something that maybe they perceive a stake in, and we can have some kind of a negotiation to go down, which is right now their paramount concern is that we go down equally, that we cannot have some kind of an agreement here. I think we need to get over this myth that just because the Russians scream and say that is the end of START, that somehow that necessarily needs to be true.

My guess is that if we were really serious, very much like NATO expansion, they will scream till the moment they realize we are really serious, and then they will deal with reality and they will try and negotiate something.

It seems to me that is a pretty good foundation for the kind of talks that we ought to have here.

Now, since I am suggesting that we have some kind of talks, I think I have to tie up one other loose end, and that is the agreements on the ABM Treaty signed at New York on September 26, 1997 on succession and demarcation.

These agreements should have been sent to the Senate for advice and consent, and in his absence, I would like to commend the distinguished chairman of this committee for insisting upon that. Assuming that you are successful, Mr. Chairman, in that venture, I respectfully suggest that these agreements are not in the interest of the United States and the Senate should reject them. I will offer you three main objections. Once again, I will summarize and if you care to get into it in questions, I would be glad to do that.

First, the memorandum of understanding adding Belarus, Kazakhstan, and Ukraine as parties to the ABM Treaty is a strategic absurdity. Whatever you think of the ABM Treaty's merits, you have to agree that the ABM Treaty was designed to regulate a particular relationship between the United States and the Soviet Union during the cold war. We have no strategic relationship with Kazakhstan. I have the utmost respect for the people of

Kazakhstan, but we do not have a strategic relationship with that country.

My second concern is the New York package not only fails to achieve so-called demarcation between ABM Treaty limited ABM systems and unlimited TMD systems. It actually leaves matters worse than they had been. I will not go into all the details, but the fact is that we have gotten ourselves into a literal quagmire and we do not have demarcation. If you are an interceptor with a velocity between 3 kilometers per second and 5.5 kilometers per second, the fact is you still have to go through the same old U.S. internal compliance review, now putting all of this stuff that the New York agreements have superimposed into the mix. And if you have to go and debate this with anybody in the SCC, you now not only have to discuss it with Russia, you also have to discuss it with Kazakhstan, Belarus, and Ukraine.

Finally, Mr. Chairman, my third objection to the seven documents in the New York package is that they form literally a new TMD treaty, in all but name. Once again, I will not go into the details, but if you add up all of the requirements, all of the declarations, it clearly becomes a whole set of new obligations, a literal obstacle course for U.S. theater—I stress theater—missile defense which has nothing to do with the ABM Treaty.

Mr. Chairman, I know I have gone on at some length. My conclusion is very brief.

Today it is imperative that the United States proceed apace with national missile defense, and by that I mean deployment of the near-term system and research, development, and testing of follow-on systems. These are actions blocked by the 1972 ABM Treaty as it stands today. We have two choices: withdraw in accordance with article XV or seek to negotiate the changes we need—and I emphasize the changes we need—in accordance with article XIV. I recommend that we attempt to negotiate.

Thank you, Mr. Chairman.

[The prepared statement of Ambassador Smith follows:]

PREPARED STATEMENT OF HON. DAVID J. SMITH

Mr. Chairman: It is indeed an honor to appear before the Committee on Foreign Relations which I once served with great pride. I thank you and your colleagues for inviting me to share my views on missile defense and the ABM Treaty. In accordance with your invitation, my remarks this morning will address five key points:

—First, it is imperative that the United States proceed apace with National Missile Defense (NMD) to protect every American citizen, maintain freedom of action in defense of our worldwide interests, and complement our non proliferation efforts.

—Second, the ABM Treaty as it stands today blocks even the most modest NMD—there is no such thing as Treaty compliant NMD.

—Third, we face an urgent dilemma. To proceed with NMD, we must soon realize at least substantial modifications to the 1972 ABM Treaty. Frankly, continued U.S. adherence to the 1972 ABM Treaty is of no strategic value to the U.S. That said, however, it is in the interest of the United States to attempt to negotiate such ABM Treaty changes as we need. As a former negotiator, I offer six recommendations:

1. Carefully resolve what NMD we need.
2. Announce an NMD deployment decision now.
3. Embark upon a vigorous research, development and testing program for NMD systems which may follow our initial fixed, ground based deployment.
4. Recognize that we have considerable leverage—carrots and sticks—in a broad strategic negotiation which includes ABM Treaty issues.
5. Set a time limit on negotiations.

6. Make no commitments beyond the period during which we think we can live with what we negotiate.

—Continuing with the five points of my testimony, fourth, substantial modifications to the 1972 ABM Treaty need not inexorably halt agreements to reduce strategic offensive weapons, consistent with U.S. interests.

—Fifth, the ABM Treaty agreements signed at New York on September 26, 1997—on succession and demarcation—are not in the interest of the United States. These agreements should have been sent to the Senate for Advice and Consent and I commend the distinguished Chairman of this Committee for insisting upon it. Assuming success on that count, I respectfully urge the Senate to reject them.

I shall address each point in turn.

THE U.S. MUST PROCEED APACE WITH NMD

On July 15, 1998 the bipartisan Commission to Assess the Ballistic Missile Threat to the United States chaired by former Secretary of Defense Donald H. Rumsfeld issued a watershed report. The Commission's principal findings bear emphasis in the context of this hearing:

—"Concerted efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear payloads pose a growing threat to the United States . . . to inflict major destruction on the U.S. within about five years of a decision to acquire such a capability.

—"During several of those years, the U.S. might not be aware that such a decision had been made.

—"The threat to the U.S. posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been reported in estimates and reports by the Intelligence Community.

—"The Intelligence Community's ability to provide timely and accurate estimates of ballistic missile threats to the U.S. is eroding.

—"Plausible scenarios [include] re-basing or transfer of operational missiles, sea and air-launch options.

—"The U.S. might well have little or no warning before operational deployment."

If the Rumsfeld Commission left any doubt about the imminence of the ballistic missile threat, the final jolt had to be from the roar of North Korea's Taepo Dong–1 (TD–1) missile as it overflew Japan on August 31, 1998. Even if we accept Pyongyang's explanation that the rocket was a space launch vehicle, it is less than a hop, skip and jump from space launch to ICBM capability. Our attention should not be diverted from the startling news that the North Korean missile consisted of three stages: liquid fuel first and second stages, which the Intelligence Community had thought to be the entire TD–1, plus a solid fuel third stage. Never mind that the test was not fully successful—beginning with just a SCUD-based single stage missile infrastructure, hermetic and destitute North Korea has flight tested a three stage missile with solid fuel technology! A TD–1 with a small payload could reach Alaska, and North Korea is known already to be working on a TD–2.

Mr. Chairman, there remains no doubt that a ballistic missile threat to the U.S. is developing rapidly, or that NMD is the right answer for three reasons.

The first is the most basic. "Security against foreign danger," wrote James Madison in Federalist Number 41, "is one of the primitive objects of civil society . . . an avowed and essential object of the American Union." Every American citizen, from sea to shining sea, should have such defense as our technology and wealth can afford.

The second reason for NMD is geopolitical. Dedicated NMD opponents revel in telling us that there are ways easier than ballistic missiles to hurt the United States. Why, they ask, would an enemy resort to ballistic missiles? In light of some of the recent violence which has gripped our nation, this question deserves particular attention.

Last year, attacks upon U.S. embassies in Nairobi and Dar-es-Salaam reminded us that simple bombs aboard trucks, cars or vans can be deadly terror weapons. A home grown kook took the lives of two Capitol Police officers, reminding us that no security system is risk free. And just a few weeks ago, our nation was forced to look into its very soul by two troubled teenagers in Littleton, Colorado. Unfortunately, Mr. Chairman, whether directed by trenchies, Aum Shinrikyo, Osama Bin Laden or some hostile state, there could also be suitcase bombs, vials of anthrax, malicious computer hackers, commonplace airplane hijackings, ship boardings and automatic weapons spraying busy city streets. These are all perils against which a responsible government should guard its people. But they are tools of terrorism, not of geopolitical strategy—and we must not confuse the two.

We must not confuse them because clearly our adversaries do not. As the Rumsfeld Commission detailed, and as the North Korean TD–1 flight underscored, there are plenty of countries willing to devote scarce resources to building ballistic missiles. Since it is unlikely they plan to use these as space age car bombs, they must calculate some other benefit. Indeed they do. Regimes which perceive their interests at odds with ours want ballistic missiles to wield in regional crises to alter America's calculation of the costs and benefits of involvement—in other words, to keep us out.

A remark of Chinese General Xiong Guang Kai during the 1996 Taiwan Strait crisis is instructive in this regard. The United States would not defend Taiwan, argued Xiong, because China would "rain nuclear bombs on Los Angeles." No two crises are identical and the outcome of any future crisis will certainly be situation dependent, but—make no mistake—a threat to the American homeland would indeed alter our cost-benefit calculations. Xiong's remark, and others like it by Saddam Hussein and Muammar Qaddafi, reflect not a reckless obsession to hurt America but, in the words of William R. Graham and Keith B. Payne—both recent witnesses before this Committee—"a well thought out strategy to 'trump' the West's capability to project overwhelming conventional power into their regions."

Anyone who sees the global power projection capability of America and its allies and friends as stabilizing should see all missile defense—theater and national—as stabilizing. Just as we do not want Japan intimidated by North Korean missiles, neither can we tolerate the same tactics applied directly to the United States by China, North Korea, Iran or whomever. And best way to thwart such tactics is to "trump" them with NMD.

The final reason I shall mention today for the U.S. to proceed now with a robust NMD program is to complement our non proliferation efforts. Let us not forget that we are the world's only superpower. Enemies fear our military might, our training, our experience, our wealth and, most of all, our technology. They know they cannot take us on on our terms, so they reach for asymmetrical capabilities such as long range missiles to alter the playing field. So long as we remain undefended, the price of entry to the club of countries able to affect U.S. calculations is but a single long range missile with a nuclear or biological payload. And as long we appear likely to remain undefended, a lot of countries will consider joining that club. On the other hand, if we send an unequivocal signal that we will apply our technology and wealth to thwarting this particular asymmetrical threat, some countries will be dissuaded from embarking upon or continuing long range missile programs. Like any non proliferation effort, this will not be 100% effective, but it would be a potent dimension of a serious non proliferation effort.

Mr. Chairman, throughout the Cold War, the U.S. maintained deterrence with the Soviet Union not only with the force in being, but also with the so called "R&D deterrent." Moscow's ambitions were checked by the certainty that America's best and brightest would be a step ahead at just about every turn. Ultimately, it was the "R&D deterrent" which drove Marshall Akhromeyev and the Soviet military to despair, a major contributing factor to the implosion of the Soviet Union. It is time we reclaim our confidence and apply American strengths to the challenges of the next century.

These are three solid reasons why the U.S. must proceed apace with NMD. Unfortunately, the ABM Treaty as it stands today blocks even the most modest NMD.

THE ABM TREATY BLOCKS NATIONAL MISSILE DEFENSE

Mr. Chairman, there are those who assert otherwise, but understanding the way the U.S. goes about decisions on its own Treaty compliance, I assure you there is no such thing as an ABM Treaty compliant National—and I stress National—Missile Defense. About the only system we can deploy under the ABM Treaty as it stands today would be a Safeguard II. Let me be clear. Even the so called C–1 architecture of 20 NMD interceptors, even deployed at Grand Forks, North Dakota, would require negotiation with Russia of some clarifications, understandings or amendments. Today, I will outline for you the three biggest ABM Treaty issues which any NMD deployment will raise: territorial defense, radars and deployment area.

The root of the territorial defense issue is the shorthand description which developed over the years of what the ABM Treaty permits: 100 interceptors at one site. As the controversy over SDI raged, people of good will sought a consensual path forward with a Treaty compliant system which, applying the shorthand, came to mean up to 100 interceptors at one site. In 1988, the distinguished past Chairman of the Armed Services Committee, Senator Nunn, recognized that a space based version of his Accidental Launch Protection System (ALPS) would require ABM Treaty

amendment, but he also spoke of defensive deployments that "might be possible within the terms of the treaty or, at most, require a modest amendment." A few years later, the Missile Defense Act of 1991 called for a ". . . cost effective, operationally effective and ABM Treaty compliant ABM system at a single site . . .".

President Clinton vetoed the FY-96 Defense Authorization Act and threatened to veto the 1996 Defend America Act on the grounds that these bills would have set the United States on a path to violate the ABM Treaty. At the same time, Administration spokespersons claimed that their so called "3 + 3" NMD program would not violate the ABM Treaty. More recently, the Administration has realized that while "3 + 3", or now "3 + 5", development can probably be carried out in compliance with the Treaty, deployment would require some amendment.

The fact is that if we ever proceed with the "plus" part of "3 + 5", significant amendments or understandings to the ABM Treaty will have to be sought. The notion of Treaty compliant NMD ignores that the 100/1 limitation was not an object in itself, but a tool to implement the Treaty's object and purpose as set forth in Article I: ". . . not to deploy ABM systems for the defense of the territory . . ." Thus the objective of our current NMD deployment readiness program—"the NMD system will provide defense of all territory on the 50 states"—stands in apparent contrast to the Treaty's object and purpose.

The question, then, is not the technical one of whether the territory of the United States can be defended with 100 interceptors from one site in North Dakota (it cannot, by the way). Rather, the relevant ABM Treaty question is whether limited defense of the entire territory—even with 100 interceptors at one site—is territorial defense.

The traditional U.S. view, consistently held across administrations, is that Article I is hortatory, establishing the framework for the substantive provisions that follow. Thus, in the U.S. view, a side would have to violate some provision of Articles Ill, V, VI or IX in order to violate Article I. In other words, Articles Ill, V, VI and IX specify what actions would be technologically necessary for a side to move toward a territorial defense. If this traditional U.S. view is maintained and sustained with the Russians, the issue of territorial defense would not arise.

But this is uncharted water. The issue of territorial defense has never arisen in a major way because, until now, the United States had not been discussing deployment of an operational ABM system. Although the Soviets raised Article I a number of times in connection with our SDI program, we were always able to respond, as we did with the 1984 Homing Overlay Experiment (HOE), that the activity in question was a technology demonstration, not deployment of an operational system. This time, the U.S. would be deploying an operational system whose stated purpose is to cover the entire territory.

I do not deny that a sound argument can be made that territorial defense of the type we are now contemplating would not be a territorial defense which would impinge upon the object and purpose of the ABM Treaty. That is, a thin defense against third countries or accidental or unauthorized launch would not detract from a Russian second strike capability, even under projected START Ill offensive force levels. Nevertheless, anyone who has stood in front of TV cameras or run for elected office will appreciate that arguing that "territorial defense is not territorial defense" is going to be a tough sell. This may be a hurdle which can be overcome, however, it will require the U.S. at least to seek some clarification or understanding in the Standing Consultative Commission (SCC), the ABM Treaty's joint implementation body. And the Russians have neither an obligation nor an interest in making this easy for us.

There is one further liability which NMD raises in the context of territorial defense. ABM Treaty Article I also commits us ". . . not to provide a base for [territorial] defense . . ." If the thin NMD system itself would not constitute a territorial defense in violation of Article I, does it lay a base for such a defense? The U.S. may establish that an NMD deployment of 20, or even 100, interceptors cannot possibly be a territorial defense in the meaning of the ABM Treaty, that is, a defense which could leave us invulnerable to a Russian retaliatory attack. However, once even a minimal NMD system is deployed at Grand Forks, long lead items such as radars and BM/C3 will be in place and interceptor missiles and Kinetic Kill Vehicles (KKVs) will be under production.

There are no doubt Treaty amendments and confidence building measures which could address this issue, but these will have to be negotiated. And this is precisely my point; we are in for a negotiation which is going to involve the Article I issue of territorial defense.

The second issue, radars, is intertwined with the issue of territorial defense. This issue is so complex and architecture dependent that I shall confine my remarks to a general description.The world is round; U.S. territory—from Calais to Key West

to Kure to Attu and back to Calais—occupies a large bit of it; and high frequency electromagnetic waves travel in straight lines. By confining ABM radars to one 150 Km. radius ABM deployment area, the authors of the ABM Treaty used these elementary physical facts to implement the Treaty's object and purpose, that is, to prohibit a territorial defense.

With today's technology we can do a lot more from that one site than we could in 1972 but, still, a single ABM radar in North Dakota just cannot cover the territory of the United States. Consequently, every candidate NMD architecture I have seen features some combination of upgraded Early Warning Radars (EWRs), including EWRs outside U.S. territory, space based sensors, X-Band radars deployed outside the ABM deployment area, and a highly capable sensor aboard the NMD interceptor. Such sensor suites don't fit into the ABM Treaty's framework.

But the problem is only partly that today's technology does not match yesterday's Treaty terms. The greater issue is that our objective for today's technology does not match the object and purpose for which yesterday's Treaty terms were written. In other words, to proceed with NMD we will have to seek ABM Treaty adjustments and understandings on radars and these will be directly related to the issue of territorial defense. This will involve wrenching the Russians and the American arms control community from positions with which they have grown quite comfortable. Consequently, there will be no such thing as a "modest" Treaty adjustment or understanding.

Yet a third ABM Treaty issue is the deployment area, and this too is related to the issue of territorial defense. The ABM Treaty requires the 150 Km. radius ABM deployment area at Grand Forks to contain ICBM silo launchers. But the 1995 Base Closure and Realignment Commission (BRAC) recommended that the 321st Strategic Missile Group at Grand Forks AFB be deactivated and its Minuteman III missiles relocated to Malmstrom AFB, Montana. The missiles have now been moved, but START Treaty accountable silos will remain at Grand Forks for three more years. The Department of Defense is apparently taking the view that it can now locate a Grand Forks ABM deployment area within a 150 Km. radius circle drawn to include some missiles assigned to Minot AFB, ND. In a strict legal sense this may be correct. However, deactivating the missile field in which we have said our ABM system would be located, and redrawing a circle to encompass a few missiles from a different base to satisfy Treaty obligations could easily be portrayed as a sham which is not the way the U.S. complies with its legal obligations. It is too clever by half and we would surely question an analogous Russian move. Proceeding in this way would only further underscore the territorial defense issue.

The idea underlying this ABM Treaty provision was that defense of a single missile field in order to guarantee survival of at least some retaliatory capability would be stabilizing, unlike territorial defense which was seen as destabilizing. Now, if the U.S. deploys an NMD system in North Dakota which is only perfunctorily related to an ICBM field, it must be "up to" something else—again, we return to the matter of territorial defense.

Finally, I note that achieving coverage of all fifty states from a single site, particularly if the fastest emerging threat is in Northeast Asia, requires that single site to be in Alaska. It is my understanding that, consequently, the Administration's current plan would be to deploy our first NMD site in Alaska, if President Clinton decides to deploy in June, 2000. Clearly, deploying an NMD site in Alaska would require amendment of the Treaty's Article Ill.

Multiple fixed ground based sites, sea or space based NMD, the development and testing of sea or space based NMD, and advanced sensors which could substitute for what the Treaty calls an "ABM radar" are altogether prohibited by the ABM Treaty as it stands today.

WE MUST SOON REALIZE AT LEAST SUBSTANTIAL MODIFICATIONS TO THE 1972 ABM TREATY

We face an urgent dilemma. Frankly, continued U.S. adherence to the 1972 ABM Treaty is of no strategic value to the U.S. Setting aside discussion of the Treaty's value during the Cold War, we must now recognize that it is indeed an artifact of the Cold War. It was conceived to preserve deterrence and crisis stability between two superpowers locked in an ideological struggle which, from time to time, erupted into crises. Now, the Soviet Union is gone and with it the Marxist-Leninist ideology which was the root cause of the Cold War. Russia, whatever its problems or even faults, is not dominated by a Marxist-Leninist ideology which impels it into conflict with us across the globe. It does not keep twenty divisions in East Germany poised to strangle Berlin. It does not operate a worldwide network to spark conflict in places like Korea, Vietnam and Angola. Admiral Gorshkov's blue water navy is rust-

ing, tied up in decaying ports. And the major issue for Russian strategic forces today is how to manage inevitable economically driven decline. Quite simply, the potential crisis which the ABM Treaty purported to stabilize no longer looms. The ABM Treaty is not a cornerstone of stability for the new millennium; it is a delicate diplomatic matter for today.

That said, I wholeheartedly agree with those who say that our security relationship with Russia remains important, that Russia is in a crucial transition and that we should not needlessly provoke a diplomatic rift over the ABM Treaty—the Treaty remains important diplomatically and strategically to them. Therefore, I favor attempting to negotiate such changes to the ABM Treaty as the U.S. needs, although I recognize it will not now be easy.

Given even the schedule of the "3 + 5" program, the time at which we will need ABM Treaty modifications in place is fast approaching. President Clinton has said he will decide whether to deploy in June of 2000. For the reasons outlined above, it would be inconceivable to me that he would decide otherwise. Then, the kind of construction which would raise ABM Treaty issues would begin in mid 2001, at the start of the short Alaskan construction season. Understanding that our only alternative to negotiated modifications would be withdrawal from the Treaty in accordance with Article XV, requiring six months notice, we would have to achieve those negotiated modifications by the Fall of 2000—about eighteen months from today. That would be a tall order in the best of times and these are not the best of times. The crisis in Kosovo has created a major rift in U.S.-Russia relations. Moreover, Russia faces elections to the State Duma this December and presidential elections in June, 2000. Soon thereafter, the U.S. faces a general election.

There were once better times when there was more time to negotiate. Unfortunately, the Administration has squandered six years since 1993 when it abandoned the Ross-Mamedov Talks and discussion of President Yeltsin's proposal for a Global Protection System.

Still, I think an attempt at negotiation should be made. If it is, allow me as a former negotiator to suggest a few guidelines.

First, the U.S. should carefully resolve what NMD it needs—deployment and development and testing—for the next few years, craft an integral negotiating position accordingly, and then approach the Russians. Nothing should be excluded from consideration, including space based defenses. Of course, the more we seek, the tougher the negotiation will be. On the other hand, there is no sense in seeking or agreeing to less than is needed. We should not conform our NMD requirements to the ABM Treaty or to what we expect to be "negotiable." And the worst thing we could do is negotiate piecemeal, rushing off to negotiate Russian assent to, say, just the C–1 or C–2 architecture. There will be a price to pay and we are likely to have to live with what we negotiate for a few years.

Second, announce an NMD deployment decision now. Funds to support the decision should be put into the FYDP and the Congress should authorize and appropriate the funds necessary to ramp up to a deployment. Without these, the Russians will not recognize any urgent need to treat our approach seriously. This is all the more important in the current political turmoil in Moscow because we will have to work extra hard to gain their attention which is almost entirely focused on economics and internal power struggles.

Third, embark upon a vigorous research, development and testing program for NMD systems which may follow our initial fixed, ground based deployment. There are no constraints on the evolution of the ballistic missile threat to the U.S. We should expect MIRVs, MaRVs, decoys, penetration aids, lower radar cross sections and higher velocity re entry vehicles. Moreover, a principal finding of the Rumsfeld Commission is that "plausible scenarios [include] re-basing or transfer of operational missiles, sea and air-launch options." Fixed, ground based interceptors cannot respond to such threats. We should not despair and be self deterred from deploying the NMD system we are developing and getting into the business of missile defense. But neither should we become complacent and neglect to prepare for the challenges of tomorrow. Consequently, our foreseeable development and testing needs must figure into careful resolution of what NMD we need for the next few years.

Fourth, in addition to the NMD deployment announcement, we must recognize that we do have other points of leverage. Russia's economic plight dictates dramatic reductions in strategic forces and their calculus dictates a negotiated mutual reduction with the United States. With START II almost certainly dead, we have an opportunity to discuss force levels and structures appropriate for the new millennium from START I levels. Moreover, there may be other things Russia would like to have such as real early warning sharing and cooperation on theater missile defense. In short, creative strategic negotiations which include ABM Treaty issues could result in a "win-win outcome."

Fifth, politely, reasonably, but firmly put a time limit on negotiations. The luxury of protracted talks having been squandered, we must now demand closure in the near term. In a sense, we could turn a weakness into a strength by using the current NMD schedule as a point of leverage.

Sixth, while the Russians will demand some longevity for whatever they negotiate, we should not make any commitments beyond the period during which we think we can live with the new agreement. One of the major lessons of the ABM Treaty is that it is absolutely impossible to predict world events and technology a quarter century down the road. The ABM Treaty is already of unlimited duration so, to seek further changes in the future, we would again be faced with renegotiation or withdrawal from the Treaty. These are guarantees enough. Moreover, assuming we really negotiate for what we need over the next few years, I believe there is an excellent chance that by the time we need to face the issue again, both sides will have moved to a whole new strategic paradigm in which we no longer base our security on threats of mutual nuclear annihilation. The ABM Treaty just won't matter any more.

I cannot tell you what the outcome of a negotiation on the ABM Treaty might be. In the end, if a negotiating effort comes to nought and we are faced with withdrawal from the ABM Treaty, at least we will have prepared the way by leaving no stone unturned. We will demand no less of ourselves.

MODIFICATIONS TO THE 1972 ABM TREATY NEED NOT INEXORABLY HALT AGREEMENTS TO REDUCE STRATEGIC NUCLEAR WEAPONS

One myth which has dogged NMD for years is that U.S. missile defenses beyond the limits of the ABM Treaty as it stands today will inexorably bring agreements to reduce strategic offensive arms to a screeching halt. This need not be the case. The ABM Treaty's Article XIV provides for amendments—otherwise how could the Treaty's authors have purported to write a document of "unlimited duration?" If the U.S. has amendments to propose, we should offer them. Russia has an obligation to engage seriously on our proposals although, of course, no obligation to agree. However, I would suggest that once it becomes clear that U.S. NMD is inevitable, Russia—as it did with NATO expansion—will douse the rhetoric and deal with reality. This is especially so if we are willing to negotiate, take Russian security concerns into account and offer benefits in which they perceive a stake. Today, Russian strategic offensive forces are declining for economic reasons—some authoritative Russians have even suggested to the hundreds of warheads. Different from Cold War days, Russia now wants agreed reductions more than we. Indeed, START II is almost certainly dead, languishing in the State Duma not over concerns about American NMD, but over concerns about Russian offensive force structure. This would appear to be about as promising a foundation for talks as we are likely to get.

THE NEW YORK ABM TREATY AGREEMENTS ARE NOT IN THE INTEREST OF THE UNITED STATES

Since I have recommended that the U.S. seek needed modifications to the ABM Treaty in the context of wider strategic negotiations and suggested that START II is almost certainly dead, it is incumbent upon me to address one more loose end—the ABM Treaty agreements signed at New York on September 26, 1997 on succession and demarcation. These agreements should have been sent to the Senate for Advice and Consent and I commend the distinguished Chairman of this Committee for insisting upon that. Assuming success on that count, I respectfully suggest that these agreements are not in the interest of the United States and I urge the Senate reject them.

When I refer to the New York package, I am referring to seven ABM Treaty documents, the first three of which should be submitted for the Senate's Advice and Consent, signed on September 26, 1997:

—A *Memorandum of Understanding* adding Belarus, Kazakhstan and Ukraine as ABM Treaty parties.

—The *First Agreed Statement and Second Agreed Statement* which purport to demarcate between ABM Treaty limited ABM and unlimited TMD.

—An *Agreement on Confidence Building Measures* (CBMs).

—A *Joint Statement* on annual updates to information on TMD systems covered by the CBMs Agreement.

—A unilateral *Statement by the United States of America* that "it has no plans" to test TMD of a velocity greater than 3 Km/sec. before April, 1999, to develop TMD with velocity greater than 5.5 Km/sec. (4.5 for sea based), or to test TMD against MIRVs or strategic RVs.

—New *Regulations of the Standing Consultative Committee* which reflect the addition of Belarus, Kazakhstan and Ukraine.

I offer three main objections to the New York ABM Treaty package.

First, the *Memorandum of Understanding* adds Belarus, Kazakhstan and Ukraine as parties to the ABM Treaty—a strategic absurdity. Whatever one's opinion of the merits of the ABM Treaty, we could all agree that its purpose was to regulate a unique strategic relationship between the U.S. and the USSR. No such relationship exists or can exist between us and Belarus, Kazakhstan or Ukraine. These newly independent states had to be added, the Administration argues, because Treaty limited radars and an ABM test site now lie in Belarus, Ukraine and Kazakhstan. This is a specious argument. The Treaty limited Skrunda Radar lies in Latvia, but Latvia is not being added to the Treaty. The U.S. operates Treaty limited radars on the territories of Denmark and the United Kingdom and an ABM test site in the Republic of the Marshall Islands (which attained sovereignty just a few months before the 1991 dissolution of the USSR). Yet we never felt a post Cold War itch to add these countries to the ABM Treaty.

It doesn't make sense. But the Administration has persisted so on this that one cannot escape the thought that its purpose is to consign negotiations such those proposed here to a pentalateral quagmire. Moreover, adding Belarus, Kazakhstan and Ukraine will cloud the issue of which country to address on future compliance matters.

I would add that because of the way the New York documents are written, everything turns on the succession Memorandum. Defeat it, and the entire package falls.

My second concern is that the New York package not only fails to achieve so called demarcation between ABM Treaty limited ABM and unlimited TMD systems, it actually leaves matters worse than they had been.

The *First Agreed Statement,* that is, the demarcation agreement on lower velocity TMD, confirms what we could have, and should have, simply asserted: U.S. TMD with interceptor velocities not exceeding 3 Km/sec. are not subject to the ABM Treaty so long as they are not tested against targets with a velocity exceeding 5 Km/sec. or of a range greater than 3,500 Km.

The harder question of higher velocity TMD—interceptor velocities 3 to 5.5 Km/sec. (4.5 for naval systems)—is murkier under the New York agreements than it was before President Clinton headed to Helsinki in March, 1997. For higher velocity TMD systems, compliance with the target velocity and range criteria applied to lower velocity TMD is necessary, but not sufficient, to determine ABM Treaty compliance. There is no demarcation! Higher velocity TMD systems would still undergo an internal U.S. Government compliance review and we would now be committed to consult not just with Russia, but with four ABM Treaty parties on any TMD matter. Worse, both internal and pentalateral deliberations would be clouded by vague new restrictions: TMD may "not pose a realistic threat to the strategic nuclear force of another party," may not be deployed "for use against each other" and may not be inconsistent "in number or geographic scope" with the ballistic missile threat. We have even agreed to provide our missile threat assessment to the other parties for discussion!

The Administration emphasizes that the New York agreements would allow all U.S. TMD programs to go forward. Well, there's "forward" and there's "not exactly." One U.S. program, Space Based Laser, would be preemptively prohibited, as would anything else that can intercept a theater ballistic missile from space. Aside from that, the New York package would freeze traditional TMD technology at its 1997 level, grandfathering five U.S. TMD programs—Navy Area, THAAD, PAC–3, HAWK and MEADS—in their current state. Navy Theater Wide (NTW) standing alone would be grandfathered too. But add an improved radar, space cueing or Cooperative Engagement Capability (CEC) fire control data, and NTW would fall into the murky waters of internal compliance review and bilateral consultation. Airborne Laser would have to traverse the same murky waters. So would an evolved THAAD if its interceptor velocity exceeded 3 Km/sec. So would just about anything new—something as simple as an airship launching a kinetic boost phase interceptor. Finally, TMD with more capable interceptors—the global missile threat remaining unconstrained—would be handicapped by a unilateral statement that the U.S. "has no plans" for interceptors faster than 5.5 Km/sec. (4.5 for naval systems).

Mr. Chairman, I have suggested that we negotiate substantial modifications to the ABM Treaty. If that effort were successful we would still have an ABM Treaty, albeit substantially modified. That means we would still have to have some guidelines to distinguish Treaty limited ABM from unlimited TMD. Having criticized the Administration's demarcation agreement I feel I should add just a few more words on demarcation. Demarcation is a fleeting concept. In the early days of the ABM Treaty the gap between the ranges of short range or Theater Ballistic Missiles

(TBMs) and those of Strategic Ballistic Missiles (SBMs) was fairly wide. Therefore, the gap between the capabilities of systems designed to counter each was also fairly wide—it was easy to "demarcate" between Treaty limited ABM and unlimited TMD. As TBM ranges increased, TMD capabilities had to increase. But, for a time, the gap was preserved because older, less capable SBMs were being removed from service.

Today, it is still possible to discern a gap between TBMs and SBMs and hence between TMD and ABM systems. This is reflected in attempts at demarcation over the quarter century between the ABM Treaty and the 1997 New York agreements. During ABM Treaty ratification hearings, Director of Defense Research and Engineering John Foster suggested that an air defense interceptor of a velocity greater than 2 Km/sec. would require U.S. Treaty compliance review. Leaving aside the New York Agreed Statements' many defects, they draw a line calling for U.S. compliance review at an interceptor velocity of 3 Km/sec. and they allow that interceptors with velocities between 3 Km/sec. and 5.5 Km/sec. (4.5 for naval systems) could be found not subject to the ABM Treaty. This reflects the increased capabilities of TBMs and, therefore, of TMD.

But there is every indication that TBM ranges will continue to increase. Just a few weeks ago India tested a 2,000 Km. range Agni–2, followed by Pakistan's test of an 1,100 Km. range Ghauri–2. India claims the Agni–2 has a range of 2,000-2,500 Km. and the Ghauri–2 is credited with a range between 2,000 and 2,300 Km. During 1998, Iran tested the 1,300 Km. range Shahab-3. Iran is reportedly working on Shahab–4 and 5 and we should not exclude the possibility that North Korea could export the TD–1. As the ranges of TBMs increase, the distinction between TBMs and SBMs will begin to blur. Consequently, the capabilities of TMD and ABM will blur and demarcation will become impossible. At that time the concept of a treaty which limits ABM systems will become untenable. Only interim fixes are possible.

There are two essential ingredients to an effective interim—and I stress interim—demarcation. First, the U.S. must adopt a true "demonstrated capability" standard, that is, we would limit TMD testing to targets with re entry velocities of 5 Km/sec. or ranges of 3,500 Km. or less. Other considerations, including calculations of "inherent capability" would become irrelevant. Second, we must adopt a realistic "force-on-force" approach with which to evaluate ABM Treaty compliance of U.S. TMD systems. This would eliminate the altogether theoretical and exaggerated capabilities which our current "one-on-one" methodology attributes to U.S. TMD systems. I suggest that we not repeat the Administration's mistake of trying to negotiate demarcation criteria, and simply announce that henceforward these are the criteria the U.S. will use. The Russians can always seek clarification in the SCC.

Returning to the New York agreements, my third objection is that, all seven documents added up, the New York package is a new TMD Treaty in all but name. In addition to the measures I have just sketched, consider the vast declarations of TMD information that will be required:

- launch notification;
- name, designation & basing mode of TMD systems and components;
- concepts of operations;
- plans and programs;
- launchers per battalion for land based TMD;
- class and type of ship & launchers per ship for sea based TMD;
- TMD interceptors per launcher;
- aircraft type & interceptors per aircraft for air based TMD;
- TMD radar frequency band and potential.

It is an elaborate new obstacle course for American TMD. Consider as just one example how this sort of thing could afflict the U.S. Navy.

It does not require too vivid an imagination to foresee fishing expeditions for more and more information on the Aegis system which is, in reality, a system of systems whose purposes vastly exceed missile defense. Then, add in commitments to limit "number and geographic scope," not to "pose a realistic threat to the strategic nuclear force of another party," not to deploy TMD "for use against each other" and declarations of interceptors per launcher, launchers per ship, and class and type of ship, and we are right around the corner from naval arms control and restrictions on U.S. Navy surface ship deployments.

CONCLUSION

Mr. Chairman, my conclusion is as brief as my presentation has been long. Today, it is imperative that the U.S. proceed apace with NMD—deployment of the near term system and research, development and testing of follow on systems. These actions are blocked by the 1972 ABM Treaty as it stands today. We have two choices:

withdraw in accordance with Article XV or seek to negotiate the changes we need in accordance with Article XIV. I recommend that we attempt to negotiate.

Senator HAGEL. Mr. Smith, thank you.

Mr. Joseph.

STATEMENT OF HON. ROBERT G. JOSEPH, FORMER AMBASSADOR TO THE ABM TREATY'S STANDING CONSULTATIVE COMMISSION; DIRECTOR, CENTER FOR COUNTER PROLIFERATION RESEARCH, NATIONAL DEFENSE UNIVERSITY, WASHINGTON, DC

Ambassador JOSEPH. Senator, thank you very much for the opportunity to testify today. It is a pleasure and an honor to be here.

It is necessary at the outset for me to say that the views that I will express are entirely personal. They are not the views of the National Defense University, the Department of Defense, or any agency of the U.S. Government.

I have submitted a statement that addresses three highly dubious propositions or myths that are frequently asserted in the context of supporting the ABM Treaty and maintaining that treaty with either no change or minimal change. You touched in your opening statement on all three of these, a statement that I, like the previous two witnesses, would like to associate myself with.

The three propositions that I will, with your permission, summarize in my opening comments are, first, any attempt to alter or to withdraw from the treaty will lead to the end of offensive nuclear reductions and in fact the overall deterioration in the U.S./Russian strategic relationship.

Second, the rogue state long-range missile threat is still years distant, and if it does emerge, it will consist of very few unsophisticated weapons.

And third, the ABM Treaty does not impede the current development of a national missile defense and will require only slight changes to permit the deployment of a limited but nevertheless effective national missile defense.

In assessing the first proposition, I think looking back can be very instructive. Following the Gulf War and the attempted coup in the then Soviet Union, as Mr. Hadley points out, the Bush administration put forth both a national missile defense deployment plan, as well as an arms control initiative to support that deployment. The concern was twofold: a rogue state armed with long-range missiles able to strike the United States, and an accidental or unauthorized launch, perhaps from a breakaway military commander.

To deal with this threat, the United States declared its intention to deploy GPALS, or global protection against limited strikes. For the near term, this architecture consisted of up to six fixed land-based sites with up to 1,200 interceptors, a very robust space-based sensor capability, as well as robust theater missile defenses. In the longer term, as the threat evolved, many looked to space-based interceptors as the key capability.

On the arms control side, in the summer and fall of 1992, the United States formally proposed fundamental changes to the ABM Treaty that were consistent with this architecture. These changes included the elimination of all restrictions on testing and develop-

ment, the elimination of all restrictions on sensors, the elimination of restrictions on the transfer of systems and components in order to allow cooperative relationships, including with Russia, and finally, the right to deploy additional land-based interceptors at additional sites.

These positions were presented to the Russians in a nonconfrontational and straightforward way. The Russians were told that we could work together on defenses, but that with or without them, the United States must protect itself from the emerging threat. If modifications to the treaty could be agreed, it could be retained. If not, the United States would need to consider withdrawal, legally and in accordance with the provisions of the treaty.

We also made clear to the Russians at that time that the level of defenses that were to be deployed by the United States with or without the ABM Treaty, would not threaten the offensive capability of the Russian force at START levels or even well below those levels. At the same time, the U.S. team stressed that with the end of the cold war, the United States and Russia should base their new relationship on common interests and on cooperation and not on the cold war suspicions and distrust that was the foundation for the doctrine of mutual assured destruction.

I think the Russian reaction was very telling. They did not threaten and they did not posture. They did not say yes, they did not say no. They mostly asked questions to explore our position.

Most important and I think relevant to keep in mind in terms of today's discussions, while the United States was insisting on fundamental changes to the ABM Treaty, the Russian START negotiators in the very next room in the very same building in Geneva were concluding the long sought after START agreements that provided for the first time for fundamental reductions in offensive forces. That the U.S. position on the ABM Treaty did not affect the Russian willingness to agree to offensive reductions was evident in the signing of both START I and START II in quick succession.

Nevertheless, in 1993, the new administration reversed course on national missile defenses and the renegotiation of the ABM Treaty. NMD programs, as you know, were downgraded in priority and funding was significantly reduced, and the treaty was proclaimed to be the cornerstone of strategic stability. For years this policy position has prevailed, often justified by the assertion that we must choose between offensive reductions and even limited defenses.

And in particular, we are told that this approach is necessary to save START II, a treaty that Moscow has held hostage so many times over so many years for so many different purposes that few now believe it will ever be ratified, or if it is to be ratified, that it will have much significance.

Yet, irrespective of START II, how Russia will react to the deployment of national missile defenses by the United States does remain an important question. A number of U.S. and Russian officials have predicted dire consequences if the United States insists on amending the ABM Treaty or withdraws from that treaty. Such assertions I believe lack supporting evidence and ignore Russia's own approach to arms control and its own security policies. Similar predictions were voiced in the context, as Ambassador Smith has

pointed out, of NATO enlargement. One could give any number of other examples such as air strikes on Iraq and some of the talk over Kosovo. Yet, in all of these cases, Russia has acted on the basis of its interests, not on the basis of its press statements.

The same is true regarding arms control experience, where the most recent example of Russia pursuing its own interests in the context of changing strategic realties is also the most instructive. When the breakup of the Soviet Union led Russia to conclude that the legal limits on deployed forces in its flank regions, as established under the Conventional Armed Forces in Europe Treaty, or CFE Treaty, were no longer in its interest, Russia's approach was very straightforward: It insisted that the treaty be changed. And the United States, as well as the other parties to that treaty, accommodated the Russian demands in the Flank Agreement. Since then, Russia has again insisted on additional modifications to the CFE Treaty and the other parties are certainly going to go along.

The principle I think is very clear. Russia assesses arms control agreements in the context of its defense requirements. When security conditions change, it acts with determination to change those treaties. For us, the parallel to the ABM Treaty is evident and the principle I believe ought to be the same.

Today the United States faces a long-range ballistic missile threat that was not envisioned when the ABM Treaty was negotiated. Although Moscow will certainly seek to delay and minimize changes to the treaty and will seek a high price for accommodation, it will understand the U.S. need to defend against this new threat. And, as we have done with Russian demands in the CFE context, it will accommodate.

I believe accommodation is possible because Russian interests and U.S. interests are not mutually exclusive. Even at the lowest levels of offensive forces speculated for Russia in the future, a U.S. missile defense deployed to protect against a limited attack would not undermine its offensive capability. And this is the critical point: If Russia knows that U.S. defenses will not call into question the credibility of their nuclear offensive force, they will have what they believe they need. And in this context, given the choice between a modified ABM Treaty and no treaty, Moscow will almost certainly follow past practice and choose to renegotiate the treaty because that is in its own best interests.

Finally, the future of offensive nuclear reductions more generally is less likely to be tied to formalistic arms control negotiations than to the realities of the post-cold war world. The Russians, according to almost all assessments, will be compelled by economics to go to much lower levels of offensive forces, independent of arms control outcomes.

I think I can be very brief with regard to the second proposition. As you stated in your opening statement, the Rumsfeld Commission and the launch of the North Korean Taepo Dong missile—this multi-stage, long-range missile—underscore that the threat is here now and that it is likely to become ever more sophisticated. The national intelligence estimate that concluded that we would have warning and that we would likely not face a long-range ballistic threat for 15 years has been widely repudiated. That we are near

consensus on the missile threat is reflected in the Senate's recent overwhelming passage of the National Missile Defense Act.

The third proposition that the ABM Treaty does not impede the development of U.S. defense capabilities and that deployment of defenses will require only modest changes to the treaty is in my view more akin to a self-limiting, self-fulfilling, self-deluding proposition than an objective assessment of U.S. missile defense requirements in light of the threat that we face.

It is very difficult for me to conclude that, absent the treaty, the United States would be considering the contrived ground-based architectures being contemplated as primary candidates. If the treaty did not exist, we would most surely be aggressively exploring sea and space-based options that offer much greater potential in terms of cost effectiveness and flexibility for expanding our defense capabilities as the threat expands. This is not being done because our programs must be compliant with the treaty.

Moving from development to deployment, one must also question the proposition that even very limited defenses could be fielded with only modest changes to the implementing provisions of the treaty.

The words of article I are very clear and, if one applies plain and ordinary definitions, the language makes evident the need to confront the basic contradiction between today's imperative to deploy defenses, to protect our population against ballistic missile attack from rogue states, and the underlying strategic rationale of the treaty.

Designed in the bipolar context of the cold war confrontation with the then Soviet Union, the express objective of the treaty was to severely limit defenses so as to preserve the credibility of strategic offensive forces. Few would advance this same deterrent concept today for states such as North Korea or Iran. Yet, the treaty does not provide an exception for defense against these threats.

This leads to two final observations. The first is on timing. Given the stated Russian goal of retaining the ABM Treaty without change, any negotiation, if that is the option we pursue, can be expected to be long and difficult. Yet, if the United States acts with determination and avoids mixed signals, such negotiations could be in my view successful, but only if we have both, as you say, Senator, a clear deployment objective and the perceived resolve to move forward, even if that requires withdrawal from the treaty under the supreme national interest clause of the treaty. In light of the pace of missile programs in countries such as North Korea and Iran, we simply do not have the luxury to devote years to renegotiate the ABM Treaty.

The second observation is that in attempting to resolve treaty issues to permit limited defenses, we need to ensure flexibility for the future to counter missile threats as they continue to evolve, taking full advantage of new technologies. Narrow treaty relief to allow for fixed ground-based interceptors to protect against a very small and crude threat in the near term must not be purchased at the price of fixing in concrete a future that does not permit us to adapt our defenses to meet the threat as it evolves. For example, we must not compromise now on a defense against a small handful

of missiles from North Korea but leave ourselves totally defenseless when they add one or two missiles more.

Senator, in conclusion, let me say that my personal view is that the best option is to exercise our right under the treaty for withdrawal. I have two primary reasons for this.

First—and I have touched on this—the treaty is currently inhibiting us from exploring sea and space-based approaches that in my view offer the greatest potential in terms of cost effectiveness and flexibility for the future. There is a high risk that even under a modified treaty, we will foreclose options that build on new technologies that will be essential to counter the threat as it develops.

And second, I believe we should discourage the proposition that mutual assured destruction forms a solid basis for our strategic relationship with Russia. The ABM Treaty in my view has a very corrosive effect on how we see each other. It is a treaty that is unhealthy for both the United States and for Russia. We simply should not maintain this cold war artifact at the center of our relations. I believe we can address our differences with Russia and reconcile those differences outside of the ABM Treaty.

That said, I believe that the option to renegotiate the treaty and change it fundamentally, as we attempted to do in 1992, is a viable option and is, in fact, the most likely option that we will pursue.

As I said in my comment earlier and as you have said in yours, we must, if we pursue this approach, be serious and be perceived as serious. In order to do so, we must have a real deployment program and the willingness to leave the treaty if in fact that is necessary.

Senator, thank you very much. That concludes my comments. I look forward to your questions.

[The prepared statement of Ambassador Joseph follows:]

PREPARED STATEMENT OF HON. ROBERT G. JOSEPH

Mr. Chairman, distinguished Members, thank you for the opportunity to testify today. It is an honor to be able to present my views on the ABM Treaty and, specifically, on the central Treaty-related issues that surround the debate over the deployment of a national missile defense.

It is necessary to emphasize at the outset that the views expressed in this statement are entirely personal and do not necessarily reflect those of the National Defense University, the Department of Defense or any agency of the U.S. Government.

My statement addresses three highly dubious propositions that are frequently asserted in support of maintaining the ABM Treaty either without change or with only minor modifications. These are: First, any attempt to alter or withdraw from the Treaty, although consistent with our legal rights, will lead to the end of offensive nuclear reductions and to an overall deterioration of the U.S.-Russian relationship. Second, the rogue state long-range missile threat is still years distant and that, if it does emerge, it will consist of very few unsophisticated weapons. And, third, the ABM Treaty does not impede current development programs and will require only slight changes to permit deployment of limited but effective national missile defenses. Experience and evidence stand in stark contrast to all three of these propositions.

In assessing the first proposition, looking back can be very instructive. Following the Gulf War and the attempted coup in the then Soviet Union, the Bush national security team put forth both a deployment plan and an arms control initiative to support this deployment. The concern was twofold: a rogue state armed with a small number of ballistic missiles able to strike American cities, and an accidental or unauthorized launch, perhaps from a breakaway military commander.

To deal with this limited threat, the United States declared the intention to deploy GPALS—Global Protection Against Limited Strikes. For the near term, this architecture consisted of up to six ground-based sites with up to 1200 interceptors, a space-based sensor capability, and robust theater missile defenses. In the longer

term, as the threat evolved, many looked to space-based interceptors as the key capability.

On the arms control side, in the summer and fall of 1992, the United States formally proposed fundamental changes to the ABM Treaty consistent with the GPALS concept. These included:

First, the elimination of restrictions on the development and testing of ABM systems. These restrictions both directly and indirectly had impeded our ability to field effective strategic and theater defenses, just as they do today.

Second, the elimination of restrictions on sensors. Disagreements in this area had for years dominated the contentious compliance debate. Moreover, it was recognized that no missile defense architecture that would permit even a limited territorial defense could be deployed without Treaty relief on sensors. This also remains the case today.

Third, the elimination of restrictions on the transfer of ABM systems and components to permit cooperative relationships on missile defenses with other countries, including Russia. And

Fourth, the right to deploy additional ABM interceptor missiles at additional ABM deployment sites.

In Washington, Moscow and Geneva, American representatives presented these positions to the Russians, stating that the emerging threat of long-range missiles compelled changes to the ABM Treaty. In a non-confrontational but straightforward way, the Russians were also told that we could work together on defenses but that, with or without them, the United States must protect itself from limited attacks. If modifications to the Treaty could be agreed, it could be retained. If not—and the implication was direct—the United States would need to consider withdrawal, legally in accordance with the provisions of the Treaty.

American representatives also made clear that the level of defenses to be deployed by the United States, with or without the ABM Treaty, would not threaten the offensive capability of the Russian force at START levels or even well below those levels. At the same time, the U.S. team also stressed that, with the end of the Cold War, the United States and Russia should base their new relationship on common interests and cooperation, and not on the distrust that was the foundation of the doctrine of mutual assured destruction that had defined relations as Cold War enemies.

The Russian reaction was telling. They did not threaten or posture. They did not say yes or no; they mostly listened and asked questions to explore the U.S. proposals. Indeed, in a speech to the United Nations in January 1992, President Yeltsin had called for the joint development of a "Global Protection System" to defend against ballistic missile attack.

Most important, and relevant to keep in mind in today's discussions, while the United States was insisting on basic changes to the ABM Treaty, the Russian START negotiators were concluding the long sought START agreement providing, for the first time, for substantial reductions in offensive forces. That the U.S. position on the ABM Treaty did not affect the Russian willingness to agree to offensive reductions was evident in the signing of both START I and START II in quick succession.

Nonetheless, in 1993, in one of its most substantial departures from the Bush Administration security policy, the new Administration reversed course on national missile defense and the renegotiation of the ABM Treaty. National missile defense programs were downgraded in priority and funding was significantly reduced. For years this policy position has prevailed, often justified by the assertion that we must choose between offensive reductions and even limited defenses.

Most recently, in the context of the Senate's consideration of the National Missile Defense Act of 1999, the Administration reaffirmed at the highest level that the United States has not made a decision to deploy and continues to uphold the 1972 ABM Treaty as the "cornerstone of strategic stability." This approach, we are told, is necessary to save START II—a Treaty that Moscow has held hostage so many times to so many different objectives over so many years that few now believe it will ever be ratified by the Duma or, if it is ratified, that it will have much significance.

Yet, irrespective of the fate of START II, how Russia will react to the deployment of national missile defenses by the United States remains an important question. A number of U.S. and Russian officials have predicted dire consequences if the United States insists on amending the ABM Treaty or withdraws from the Treaty. Such assertions lack supporting evidence and ignore Russia's own approach to arms control and its own security policies. Similar predictions were voiced in the contexts of NATO enlargement and air strikes on Iraq. Yet, in both of these examples, Russia

acted on the basis of its interests, not its press statements. Russia's actions spoke louder than its words.

The same is true regarding arms control experience. When NATO decided to deploy intermediate-range nuclear forces in the early 1980s, while simultaneously negotiating for the elimination of this entire class of nuclear weapon, the Soviet Union made stark threats to test the Alliance's resolve. Moscow promised to walk out of the negotiations when the first NATO missiles were fielded, and did so in November 1983. But when it became clear that the determination of the Allies would not be shaken, the Soviet negotiators returned to the table and the result was a total ban on these weapons.

The most recent arms control example of Russia pursuing its own interests in the context of changing strategic realities is also perhaps the most instructive. When the breakup of the Soviet Union led Russia to conclude that the legal limits on deployed forces in its flank regions—as established in the Conventional Armed Forces in Europe (CFE) Treaty—were no longer in its interest, its approach was straightforward: it insisted that the Treaty be changed. The United States and the other parties accommodated the Russian demand in the Flank Agreement. Since then, Russia has again insisted on additional modifications to the CFE Treaty. That the other parties will again go along is apparent in the recent Washington NATO Summit Communique that reads: "The CFE Treaty is the cornerstone of European security. We reaffirm our commitment to the successful adaptation of the Treaty reflecting the new security environment . . .".

The principle is clear. Russia assesses the value of arms control agreements in the context of its defense requirements. When the security conditions change for Russia, it acts with determination to change the treaties. For us, the parallel to the ABM Treaty is evident and the principle should be the same.

Today the United States faces a long-range ballistic missile threat that was not envisioned when the ABM Treaty was negotiated. Although Moscow will certainly seek to delay and minimize any changes to the Treaty, and as always will seek a high price for accommodation, it will understand the U.S. need to defend against this new threat and, as we have done with Russian demands in the CFE context, it will accommodate. Accommodation is possible because Russian interests and U.S. interests are not mutually exclusive.

Even at the lowest levels of offensive nuclear forces speculated for Russia in the future, a U.S. missile defense deployed to protect against a limited attack would not undermine its offensive capability. And this is the critical point: at the end of the day, if Russia knows that U.S. defenses will not call into question the credibility of their nuclear offensive force, they will have what they believe they need. In this context, given the choice between a modified ABM Treaty and no Treaty, Moscow will almost certainly follow past practice and choose to renegotiate the Treaty consistent with its own best interests.

Finally, the future of offensive nuclear reductions is less likely to be tied to formalistic arms control negotiations than to the realities of post-Cold War world. The Russians, according to almost all assessments, will be compelled by economics to go to much lower levels of offensive forces, independent of arms control outcomes. If this forecast is accurate and Russia does go to lower numbers, perhaps even well below those being discussed for START III, the United States could make appropriate adjustments in our own posture—a posture that must be structured to meet our global interests, which are much different from those of Russia.

With regard to the second proposition—that the rogue state missile threat to the United States is still years away—the findings of the Rumsfeld Commission and the North Korean launch last August of the multi-stage, long-range Taepo Dong missile underscore that the threat is here now and will become increasingly sophisticated. There is an apparent consensus within the defense community that the proliferation of nuclear, biological and chemical weapons represents a major security challenge to the United States. We are also near consensus on the missile threat, as reflected in the Senate's overwhelming passage of the National Missile Defense Act of 1999. The National Intelligence Estimate that concluded that we would have warning and that we likely would not face a long-range missile threat for fifteen years has been widely repudiated.

Here, two points should be made. First, in the area of proliferation shocks and surprises, we have a long record of intelligence failures. From Sputnik and missiles in Cuba to the recent Taepo Dong launch, there is every reason to believe that we will be surprised in the future about the size, scope and speed of adversaries' missile programs. The same applies to their programs to develop weapons of mass destruction. Second, it seems to me that the North Korean launch settles the debate. We now have a desperate, totalitarian regime, that could we are told have a couple nuclear bombs, in the possession of long range missiles.

The third proposition—that the ABM Treaty does not impede the development of U.S. defense capabilities and that deployment of defenses will require only modest changes to the Treaty—is more akin to a self-limiting, self-fulfilling proposition than an objective assessment of U.S. missile defense requirements in light of the threat we face.

One can argue technically that the fixed, ground-based national missile defense architectures being contemplated can be developed consistent with the Treaty. Yet, it is very difficult to conclude that, absent the Treaty, the United States would be considering these architectures as the primary candidates. If the Treaty did not exist, we would likely be aggressively exploring sea- and space-based options that offer much greater potential in terms of cost effectiveness and flexibility for expanding our defenses as the threat expands. This is not being done because our programs must be compliant with the Treaty.

Moving from development to deployment, one must also question the proposition that even very limited defenses could be fielded with only modest changes to the implementing provisions of the Treaty. Article One embodies the purpose of the Treaty by committing each party "not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense." Coupled with the 1974 Protocol that reduces the number of permitted sites from two to one, Article One limits a compliant defense to the sole purpose of protecting the former ICBM field near Grand Forks, North Dakota.

The words of Article One and their meaning are very clear and, if one applies plain and ordinary definitions, the language makes evident the need to confront the contradiction between today's imperative to defend our population against ballistic missile attacks from rogue nations and the underlying strategic rationale of the Treaty.

Designed in the bipolar context of the Cold War confrontation with the then Soviet Union, the express objective of the Treaty was to severely restrict defenses so as to preserve the credibility of offensive deterrent forces. Few would advance this same deterrent concept today for states such as North Korea or Iran. Yet, the Treaty does not provide an exception for what is often referred to as a light territorial defense against these and other ballistic missile threats.

This leads to two further observations. The first is on timing. Given the stated Russian goal of retaining the ABM Treaty without change, and given their fears that any U.S. deployment program will provide the base for a robust national missile defense that could threaten the viability of their nuclear arsenal, any negotiation can be expected to be long and difficult. Yet, if the United States acts with determination and avoids mixed signals, such negotiations could be successful if we have both a clear deployment objective and the perceived resolve to move forward to meet the threat from rogue states, even if that requires withdrawal from the Treaty under the supreme interest clause. In light of the pace of missile programs in countries such as North Korea and Iran, there simply is not time to devote years to the renegotiation of the ABM Treaty.

The second observation is that in attempting to resolve Treaty issues to permit limited defenses, we need to ensure flexibility for the future to counter missile threats as they continue to evolve, taking full advantage of developments in technology. Narrow Treaty relief to allow for fixed ground-based interceptors to protect against a very small and crude missile threat in the near term must not be purchased at the price of fixing in concrete a future that does not permit us to adapt our defenses to meet the threat as it evolves. For example, we must not compromise now on a defense against a small handful of missiles from North Korea but leave ourselves totally defenseless when they add one or two more.

In conclusion, I will end by describing three alternative futures for the ABM Treaty. The first, advocated by Russia and China, would have the United States abide by the Treaty without change. At the core of this approach—although often disguised by such noble sounding phrases as "the cornerstone of strategic stability" or "the cornerstone of world stability"—is the perpetuation of the Cold War concept of mutual assured destruction that bases national security policy on the vulnerability of our society to nuclear destruction.

That the United States would remain vulnerable to the rogue nation missile threat is either discounted or prized. For Russia, the status quo best protects the nuclear force that it increasingly relies on in both defense planning and declaratory policy. Moscow gives little indication of concern about U.S. vulnerability to rogue state attacks, such as from North Korea. For China, the ABM Treaty is considered critical to its national interest because, without U.S. defenses, Beijing can credibly threaten the United States with unacceptable destruction of our cities. While not a party to the Treaty, China certainly sees itself as an interested beneficiary, especially in the context of its designs on Taiwan.

The second ABM Treaty future rejects the three propositions assessed in this statement and calls for the United States to withdraw from the Treaty consistent with our legal rights. Here, the clear imperative is to deploy an effective national missile defense against the rogue threat in a manner that permits our defenses to evolve as the threat evolves. Under this approach, the ABM Treaty is acknowledged to be strategically obsolete and counterproductive to long-term relations with Russia. Differences with Russia—and specifically assurances to Moscow that U.S. missile defense deployments would not undermine the Russian offensive force—could be reconciled outside of the Treaty, through informal confidence building measures or perhaps even in a more formal way.

The third ABM Treaty future accepts as a national security imperative the need to defend against the rogue threat. It also sees the ABM Treaty as obsolete and counterproductive. Yet, under this approach, there is a willingness to attempt to renegotiate the Treaty if Moscow believes it essential and is willing to accept fundamental changes that permit the United States to pursue defenses that are sufficiently robust and flexible to protect against the threat. If this attempt is unsuccessful, the United States would be forced to withdraw from the Treaty, legally and consistent with our security requirements. This was the approach taken in 1992. It may well provide a way ahead today.

Senator HAGEL. Mr. Joseph, thank you. Thanks again to each of the three of you.

I would like to take each of you through a series of questions, realizing that there is a significant technical aspect to all of this which the three of you are far more prepared to deal with than I am, but seeing if I can keep this in the jargon that most of us understand. But nonetheless, all three of you have touched on important dynamics of the ABM Treaty as we currently understand it and interpret it. And I want to match that up a little bit in a series of questions with what you all have laid out as to where you think we need to go, how you suggest we get there, and what the consequences are for not dealing with this, especially as we have to deal with the reality of this over the next 18 months.

So, with that, I will suggest some questions, and take as much latitude as you wish in embroidering around the question as well. If there are some things that you want to add, please feel free to do so.

Mr. Secretary, may I ask you? We have heard from both Ambassador Smith and Ambassador Joseph this morning some references to the Rumsfeld Commission, which all three of you are thoroughly familiar with. I would like to begin by asking each of you whether you believe that the timeframe that the Rumsfeld Commission came up with, the 5-year timeframe, before a serious North Korean or Iranian missile threat would emerge is correct. Are they understating it? I would be interested in getting your evaluation of that dynamic of the Rumsfeld report.

Mr. HADLEY. I have not gone into the intelligence behind that report. I have read the report, talked to some of the people who participated in it. All I can say without that kind of technical review is it sounds right to me.

I spent some time looking at the 1995 CIA estimate which seemed to me really did not hold up particularly well, and I think that the Rumsfeld Commission has really done a remarkable service by what it has done. And I would point out that my understanding is that the CIA analysts really are pretty much in accord with where the Rumsfeld Commission comes out. I have talked to those analysts and heard briefings from them. I have concluded that Rumsfeld had it about right.

Senator HAGEL. Thank you.

Ambassador Smith.

Ambassador SMITH. Well, Mr. Chairman, I had the privilege of serving as a consultant and reviewer of the Rumsfeld Commission report, and I think I can assure you that they are basically correct. Obviously what they are saying is, to a certain extent, things cannot be predicted. So whether it is 4 years or it is 6 years, or maybe it is wrong in one case it is 10, but in another case it could be 3, they have got it just about right.

And our official intelligence community has gotten it wrong pretty consistently. Let me just give you a few examples. Look how quickly North Korea went from a No Dong to a Taepo Dong with not two stages, with not liquid fuel, but a three-stage Taepo Dong with a solid fuel stage. That is an important advance in a couple of years.

Just 2 years ago, the intelligence community told us that the Iranians were a long way away from the Shahab 3. Not 9 months later, the Director of Central Intelligence was here in the Senate testifying that actually they had been wrong, and now we are looking at a Shahab 4 and a Shahab 5.

I would also point out that the Indians and the Pakistanis went very quickly from their first missiles to their second missiles and we saw I think just last month both tests of the Indian Agni and the Pakistani Ghauri.

It seems to me that 5 years is about right. And remember what they said. It is 5 years from the time a country makes that decision. They did not say there was going to be an onslaught in 5 years from today. They said that given technology transfer, given that these countries do not have to reinvent the wheel, given that they can beg, borrow, and steal technology in bits and pieces all over the world, if and when a country makes a decision, it would take it about 5 years. And there are plenty of countries doing just that, Mr. Chairman.

Senator HAGEL. Thank you.

Ambassador Joseph.

Ambassador JOSEPH. Senator, I do not know what I can add. Let me say that I, like many other people, was very impressed with the individuals that formed the Rumsfeld Commission—very competent, very experienced individuals with a wide variety of views. They had access to a great deal of intelligence, and I think the findings—in this case, the findings in terms of the 5 years—does reflect the best assessment that can be made.

I would point out that, in that finding, the report says we may not know when that 5-year clock begins. We may not have indicators and warning. So, it is not necessarily 5 years from now or 5 years from a time in the future in which a decision is made by a State to acquire this capability. We may be well along that path already.

And I would also emphasize what Ambassador Smith just said about the history of being surprised, of intelligence failures, as some would call them. We have often been surprised by the speed and the scope of adversaries' missile programs, as well as their nuclear, biological, and chemical programs. One can go back to Sputnik or to missiles in Cuba. The Taepo Dong and the Iranian pro-

gram are just more recent examples. In terms of nuclear, biological, and chemical programs, we were surprised with the Indian test last year. We were also shocked at the scope and size of the Iraqi biological and chemical weapons program.

This uncertainty is something that we need to take into account in terms of our own sense of timing for moving forward. I believe it is urgent that we move forward with the national missile defense, and that is supported by this history of surprises.

Senator HAGEL. Thank you.

Let me ask each of you. You all touched on this in some way. The ship-based threat, the sea-based threat. Recently we became aware of the fact that the Iranians towed a barge out in the middle of the Caspian Sea and on that barge was a Scud missile, and they test fired a Scud off the barge. What our intelligence shows is that the result of that test was rather accurate where they placed the missile.

In response to the three of your analyses of what not only our limitations are presently under the ABM Treaty constraints, but more importantly, as we are looking out into the future, how do we prepare ourselves—and can we—to deal with this kind of a threat? Obviously, the Iranians, a terrorist group, anyone can get a hold of a cargo ship and put a Scud type of missile in the hold and run it around out in the bay somewhere and get it close to our shore where we have very little time to respond and fire it. What is your response to that specific threat, Mr. Secretary?

Mr. HADLEY. Mr. Chairman, I have not gone through or reviewed military analysis or technical analysis about how you deal with that threat, but let me give you a couple suggestions.

I think one of the things that is unfortunate about this debate about ballistic missile defense is that in some sense the partisans of ballistic missile defense have had to focus all their efforts on this one instrument because the resistance to it has been so great. While the critics of ballistic missile defense are prepared to do a lot of things to deal with weapons of mass destruction—almost anything but ballistic missile defense. I think we have got to try and bridge that gap and recognize that ballistic missile defense is an active element, but only one element of what has to be a broader strategy.

In my testimony and elsewhere, you can find a long list of the things we need to do to deal with the challenge of weapons of mass destruction. And I think the Iranian case is an example of that. We may have a role for active ballistic missile defense in that case, but it is also a situation where we are going to need good intelligence about what kinds of ships are approaching our shores and what they contain. We are going to need capability based on that intelligence to preempt, if necessary, and take out some of those threats.

So, I think what we need to do is look for a comprehensive strategy which has a variety of elements, and of course, in those instances where appropriate, ballistic missile defense will be one. But that is why I mentioned this need for a really comprehensive approach to the weapons of mass destruction threat. We have got a lot of tools in our arsenal. It is a serious threat and we have got to use them all.

Senator HAGEL. Thank you.

Ambassador Smith.

Ambassador SMITH. Mr. Chairman, let me try and respond to that. First of all, with regard to the possibility, the likelihood of this, I think we should not scare ourselves to the point where we think we are going to be overwhelmed with this tomorrow. But the fact is there are countries working on this, as we have just stated. They are making breakthroughs and I think we should expect this. They know what kind of defenses we are thinking about. They clearly go and look for something else, for the same reason people built submarines years ago.

You noted the Iranian barge incident. There are some other things in the Rumsfeld report. I would just note a couple things that I think are common knowledge.

One, the Israelis launch the targets for their Arrow missile from a barge at sea. It is clearly done and that is a fairly accurate trajectory that they are following.

Two, the Boeing Corporation has just launched a Ukrainian booster from something called Sea Launch quite successfully for commercial purposes. The technology is basically there.

The problem that used to lead people to say it cannot be done is a problem basically of navigation. It was the challenge that our SLBM program had to face at the outset. To know where you are going, you need to know where you are. That is why it makes it very hard to launch a missile at sea. Well, guess what? If you have GPS or you have GLONASS or you have both—and these countries do—you can go to any sport shop and buy a GPS device for $1,000, $2,000. If you are willing to spend a little more, you get a real sophisticated one. The missile knows where it is, sir.

The other problem is the roll and yaw of a ship. As you launch something, obviously the ship is on the sea. It is not a completely stable platform. But once again, if you know where you are, the missile can correct for its position.

And remember there is a big difference with these kind of countries. They are not going for high accuracy, hard target kill the way the United States and the Soviet Union were. What if they are 5 miles off? What we are talking about is a missile on some kind of a ship, 500 miles at sea in the Atlantic Ocean. They are aiming for Charleston, South Carolina, sir, and if the roll and yaw gets it at the wrong moment, they hit Hanahan instead of Charleston. They still achieve their objective. So, it is very possible and we need to think about that.

Now, what do you do? I have to underscore what Mr. Hadley suggested. We need a comprehensive program. We need better intelligence. We need to double nonproliferation efforts. We need to think about interdiction or preemption, and we need to think about defense.

Now, when you think about defense, the fact is that if the ships can be out there, you can track them. And the Coast Guard, by the way, has a very interesting program that has just been reinvigorated to keep track of significant ships out there for various reasons. But the fact is ships move. That is why countries want them. Well, you cannot fix that with a fixed, land-based system in Grand Forks, North Dakota or in the middle of Alaska. If it is 500 miles

off the coast of South Carolina and it launches at Charleston, believe you me, you will not get a missile that is leaving North Dakota there in time.

The fact is if we are worried about this—and I think we should be—we need to start looking at space-based defenses. That is the answer, Mr. Chairman.

Senator HAGEL. Thank you.

Ambassador Joseph.

Ambassador JOSEPH. Senator, just very briefly. There are, as you point out, many different avenues for missile attack, both ballistic and cruise. All are technologically challenging. Some, in fact, may be countered only by future capabilities such as boost-phase interceptors or the space-based interceptors, as Ambassador Smith just said.

Senator HAGEL. Thank you.

The intercept of a missile carrying a biological warhead, for example, is obviously risky for many reasons. If that intercept is not done during the missile's boost phase, the intercept occurs over a friendly nation, fallout, casualties. Does, in your opinion, the current administration proposal for intercept deal with this, deal with it in a way that addresses this possibility, calling for a boost phase, for example, of the intercept capability in the three-tier C–1, C–2, C–3? Would you each comment on that?

Mr. HADLEY. I am not aware that the C–1, C–2, or C–3 architecture for national missile defense has any boost phase capability to it. My colleagues can correct me on that.

That is obviously for a lot of reasons the intercept moment of choice. I think one of the things that we should do from a deterrence standpoint is to be working on and try and demonstrate that kind of capability for deterrence purposes. I am not fully briefed in the airborne laser program. That is one which would provide that capability, and there an advantage to moving it along even if it is fairly primitive and demonstrating it because it makes it clear to countries of concern that we are working that problem much the same way that we dumped an MX missile out the back of a 747 in the 1980's simply to show there were technical fixes out there available to us for MX vulnerability so that countries that did not wish us well had to take them into account.

I think that is the kind of thing we need to be doing—the kind of robust research and development program we need to support national missile defense, and that is one of the reasons all three of us have argued that part of the ABM Treaty relief we need is to get out from under the restrictions on research and development.

Senator HAGEL. Would you like to add anything?

Ambassador SMITH. Mr. Chairman, first of all, I agree with Mr. Hadley. The current administration, the 3 + 3 or what I guess has now become 3 + 5—we are not talking about boost phase. We are talking about fixed, ground-based interceptors in the United States. Obviously, the people engineering that system are trying to build it such that the interceptor can get to something high enough, fast enough so that they can vaporize that kind of warhead. Depending on the distance they have to travel and the angle of attack, that could be problematic or not. They are working the problem as best they can with that stricture.

If you want to be sure about it, you are quite correct. You need to go to boost phase. The United States does not now have any programs—does not now have any programs—for strategic defense in boost phase. We have an airborne laser program, but I need to underscore airborne laser is theater missile defense. The ABC concept of operation does not permit that to be in the right time and the right place to carry out a strategic mission.

Senator HAGEL. Thank you.

Ambassador Joseph.

Ambassador JOSEPH. Senator, I would add that I have had a number of discussions with Israeli colleagues. Israel as a nation is very concerned about the problem, the threat that you just raised. The Israeli approach is a comprehensive approach. It is an approach that emphasizes active defenses against ballistic missiles. It emphasizes a whole range of passive defense capabilities to protect not only forces, but the population should active defense fail. And it emphasizes counter force capabilities and options in that category. That sort of comprehensive approach is the type that I believe we should be looking at.

Senator HAGEL. Thank you.

As the three of you look at the administration's concept for national missile defense, as you understand it, what are your concerns about the elements of that concept that might make the time table slip even more than what we have discussed this morning? You all three have identified some of those areas. But if you would like to add to that part of your testimony, the committee would be interested in hearing anything further on this.

Mr. HADLEY. I do not have anything to add.

Ambassador SMITH. Mr. Chairman, the only thing at this point, having stretched out from 3 + 3 to 3 + 5, I think the program manager probably has the latitude that he needed. It is a high risk program. Obviously something could go wrong. But frankly the biggest risk to our NMD program right now is it gets delayed for political reasons, not technical reasons.

Ambassador JOSEPH. I have nothing to add, sir.

Senator HAGEL. Some have criticized the administration's missile defense concept because they say it seems to concentrate more in keeping within the ABM Treaty, as you have all noted, I have noted, others, rather than focusing on providing the essential effective defense that this debate should be about, the purpose of all this should be about.

And setting aside for a moment the question, which we continue to deal with and will, whether the ABM Treaty is legally in force and all the dynamics and consequences of that, would each of you comment on whether you believe that even the limited defense contemplated under the administration's C–1 concept would be a violation of article I of the ABM Treaty which bans any defense of the territory or regions of the United States?

Mr. Secretary.

Mr. HADLEY. I think for the reasons that Ambassador Smith laid out, I would associate myself with the statement that even C–1 presents an ABM Treaty problem.

Senator HAGEL. Mr. Ambassador.

Ambassador SMITH. Well, I can only repeat what I have said. I think there are arguments one could make, but the fact is we are getting at the object and purpose of the treaty. It seems to me that you are going to have to negotiate something, otherwise it will at least be construed by a lot of significant people in both countries to be a violation of the ABM Treaty, particularly of article I.

Ambassador JOSEPH. Senator, as I said—and I certainly would agree with Ambassador Smith—article I is very clear. It is a very short article. If you use plain and ordinary definitions of terms, then I think the language makes very clear that a national missile defense, even a very limited national missile defense, is not permitted and, in fact, expressly prohibited by article I.

Senator HAGEL. A follow-on to this question. The administration's C–1 concept—and this again has been touched upon here this morning by each of you—calls for a missile defense site in central Alaska. Would this, again in your opinions, violate the protocol to the ABM Treaty as well as article III?

Mr. Secretary.

Mr. HADLEY. Yes, sir.

Ambassador SMITH. Unequivocally.

Ambassador JOSEPH. Yes, sir.

Senator HAGEL. The central Alaskan site that I am referring to being considered now by the administration would rely upon the Shemya X-band radar, with which I think all three of you are very familiar. Is this again legal under the ABM Treaty given the distances involved?

Mr. Secretary.

Mr. HADLEY. I am going to defer to my two colleagues on that issue. They have struggled with that issue much more than I.

Senator HAGEL. Mr. Ambassador.

Ambassador SMITH. Mr. Chairman, Mr. Hadley defers for a good reason. That is a very complex question, and it hinges on whether that Shemya radar is an ABM radar. Now, the way it parses out is basically this.

The ABM Treaty imagined a world in which there would be one, big, giant radar like we had at Cavalier, North Dakota, and that was an ABM radar. And the treaty specifies where it can be. Now, if it is an early warning radar, it can be out on the periphery of the territory, but if it is an ABM radar, it needs to be in a 150-kilometer radius that contains the launch site. And clearly Shemya to central Alaska is more than 150 kilometers. There is absolutely no doubt about that.

The question is, is that X-band radar an ABM radar? Now, it seems to me that if you argue that it is not, you then fall into the quagmire of answering the question, all right, then what is? Is some other early warning radar out there an ABM radar? Is something on board the system an ABM radar? Something has to be an ABM radar or a substitute for an ABM radar.

I think the most likely conclusion that people will reach is that the X-band radar that is being built expressly for the purpose of national missile defense at Shemya is the ABM radar, and if that is the ABM radar, it cannot be at Shemya as the ABM Treaty stands today.

Senator HAGEL. Thank you.

Ambassador Joseph.

Ambassador JOSEPH. I agree with Ambassador Smith. I think article III would have to be addressed and changed in order to permit an ABM radar to be at Shemya.

Senator HAGEL. Thank you.

Ambassador Smith, I wanted to get back to a point you raised in your testimony, inviting me essentially to followup with you on some additional thoughts you might want to share with the committee on negotiating points. I would like to avail you of that opportunity at the present time, and with your colleagues on either side of you, as they listen to your insightful commentary on this, if they would like to add anything, we would welcome their thoughts as well.

Ambassador SMITH. Mr. Chairman, thank you.

I suggested that what we need to do before we run off and talk to the Russians is consider exactly what we need and go and try and get no more or no less than that. As I look at what we are going to do over the next few years, over what we should do over the next few years, on the one hand, you do not want to err on the side of caution and go and ask for less than you need. That is ridiculous because you are back in the same situation—you have jumped from the pot to the frying pan. On the other hand, if this is a negotiation, there is no point of overplaying your hand and seeking things that you really do not need for maybe another 10, 15 years.

The way I parse it out is this. First of all, we are moving along on the fixed, ground-based system. If we could go back a few years and I could do it differently, I might not do it that way. But the fact is that is where we are. I think it would be a real shame to derail that system. We have got to get in the business of missile defense. It will give us a minimal capability. It will get us into the production business. It will get us into the operational side of operational concepts, training, et cetera, et cetera. And most importantly, we will demonstrate to ourselves and the rest of the world that when you deploy a missile defense interceptor, the sun will actually come up the next day, and a lot of these bugaboos will go away. So, I think we need to do that.

Can we get by with one site? No, sir, we cannot. I think we need to start thinking about multiple sites. It seems to me that the option would be three or six. When we were talking about a ground-based component of the GPALS architecture, we were talking about six, but there was a sort of GPALS light for three sites. When you think about it, it makes sense. You put something in Alaska, something in the north central United States, and something in New England. If someone is going to launch a missile at the United States from, let us say, Iran or from Libya, the great circle route from that part of the Middle East really brings you to Boston. That is the logical target. So, if you are worried about that, not just North Korea, logically you are somewhere in Maine. So, you need to get multiple sites. So, that would be my first point. We need to get multiple sites.

Second, we need to get sensors go free for several reasons. One, that is what glues the whole system together.

Two, you just touched upon it with the Shemya radar. Sensors are a source of never-ending argument. I do not know what an ABM radar is, Mr. Chairman. We do not really know what 1972 terms mean anymore as we hit the new millennium. What is an ABM radar? What if we can make something on the interceptor itself to do the whole job? Is that an ABM radar? We are just going to go on and on. We are going to have endless compliance problems, not just for ourselves, but look at the compliance problems we have had with the Russians. Sensors go free is the way we not only can go forward now but we can start laying the groundwork for what we are going to need to do in another decade. We need to get out of the business of limitations on sensors.

The third thing we need to do you raised with the idea of the ship-borne missiles. If we need to have follow-ons—and I cannot imagine a situation in human defense for 10,000 years in which there has not been a follow-on to something—then we need to start looking at things like space and sea based NMD. We do not even know if we can do those things yet. We have not even got a proof of concept. We do not need to deploy them. We do not need deployment rights for that. We do need development and testing to go free.

Those would be my three basic elements. I would go for multiple sites, sensors go free, and development and testing go free.

Senator HAGEL. Thank you.

Mr. Secretary.

Mr. HADLEY. I would agree with that.

I would put two cautions down, and they are political cautions actually. The first explains why I mentioned in my testimony that we need to put ballistic missile defense in the context of a global effort against weapons of mass destruction in which we would invite our friends and allies and even countries like Russia and maybe even China to participate. It is not just an issue of the ABM Treaty. There is a political aspect that even our allies are concerned about, and that is whether a national missile defense is a vehicle for one of two things, both of which give even our friends pause. One is a sort of fortress America—that we can withdraw behind a national missile defense and be safe from all the threats that some of our friends and allies have to face.

Or two is it in some sense a protection that is going to allow us to deploy forces anywhere, anytime. I think one of the consequences of Kosovo is going to be some real questions about what the United States is doing in the world. I think if we are going to move forward on national missile defense in a way that is not going to be disruptive of relations not just with Russia but also with some of our friends and allies, we have to put it in the broader context of a global effort against weapons of mass destruction.

Second, I think we have got to make sure that we'd not let the best be the enemy of the good. If we were going to throw out the ABM Treaty, we would probably have a different NMD architecture. But the architecture of national missile defense has been changed too many times. We need to stabilize an architecture, get something deployed and get in the business, as Dave Smith said, of defending the country.

So, I would urge us to have a political context as we go forward, ask for what we need in ABM Treaty relief, but not let the best be the enemy of the good because the objective here has to be to get into the business of defending the country. We are already late. That is the message of the Rumsfeld Commission. We have got threats and no capability to deal with them. We are already late. If we start changing baseline architectures and the like, we are going to be even later. We have got a defenses gap not a missile gap, and we do not want to make that gap any bigger.

Senator HAGEL. Thank you.

Ambassador Joseph.

Ambassador JOSEPH. Senator, I think that if we do choose to renegotiate the ABM Treaty, then the experience of 1992 provides a very good model. In fact, the components that Ambassador Smith has just mentioned were the very components of our negotiating position back then. These included:

Elimination of all restrictions on sensors. Very straightforward and very simple.

Elimination of all restrictions on development and testing. Again, very straightforward and very simple. This would allow for flexibility for the future whether it be space-based approaches or sea-based approaches or any other approach, including mobile land-based.

Elimination of restrictions on the transfer of ABM systems and components to allow for the type of cooperative relationships that underly Mr. Hadley's last point on the context in which we conduct these negotiations and move forward with defenses. This is particularly the case given the concerns of our allies, which, in fact, may pose obstacles equal to those are that posed by Russia.

And finally, relief on the number of fixed land-based sites and interceptors that are permitted. Our position then was six sites, and up to 1,200 interceptors.

I think in fact we do know the basic components of what our negotiating position should be and we do not need to take a whole lot of time doing the inevitable. In my experience it is inevitable in arms control that we will negotiate among ourselves before we take our position to Russia. This is a luxury that we cannot afford. We need to move forward now and we need to move forward recognizing that whatever agreement we make with Russia must provide flexibility for the future, given that the threat is going to continue to change and become more challenging. We cannot fix now on a compromise that permits us to defend only against the threat of today. We need to look beyond that.

Senator HAGEL. Gentlemen, you have all been very helpful, and the committee appreciates your individual contributions. I might also add thank you for what you have done for this country over the years, and hopefully at some point you will have renewed opportunities to bring new leadership in this area. Thank you very much.

Mr. Lee, welcome. You have been patient. I know that you will probably add on to what some of your colleagues have said, and I know you have some very specific points that you wish to make. On behalf of the committee, thank you very much for coming this morning, and please proceed with your testimony.

STATEMENT OF WILLIAM T. LEE, FORMER ANALYST FOR THE DEFENSE INTELLIGENCE AGENCY; ADJUNCT FELLOW, CENTER FOR STRATEGIC AND INTERNATIONAL STUDIES, WASHINGTON, DC

Mr. LEE. Well, thank you, Senator. I very much appreciate the opportunity and I want to thank you personally and all members of the committee for this opportunity.

I am going to concentrate on the new evidence, the bottom line of which is the ABM Treaty is not and was not from the beginning a valid contract.

Since the publication of my book on this subject a year ago, we have had a lot of additional evidence that has confirmed the conclusions of that book. The Soviets violated article I prohibiting national ABM defenses by deploying more than 10,000 dual purpose, anti-aircraft and anti-missile, SAM/ABM, missiles supported by 17 huge radars on the Soviet periphery. Moreover, Russia is now developing yet another new SAM/ABM.

Based on what they had been told by the Secretary of Defense and other senior U.S. officials, the Soviets most likely entered the SALT negotiations expecting two things: they could negotiate a treaty banning national ABM defenses in both superpowers while continuing to develop and deploy their dual purpose SAM/ABM systems; and second, U.S. satellites would not detect the violation. The treaty certainly confirmed such expectations.

The key to this whole thing, one of the keys to their whole approach to it, was these large radars, which I can talk to in some detail, but they provide what is called battle management, target tracking data. That mode of operation was dictated by the technology constraints on the Soviet Union at the time and continued through the cold war. With the exception of one late model, the maximum velocities of Soviet ABM missiles were a fraction of that of the targets. Thus an ABM interceptor with a velocity of 2 kilometers a second had to be launched with an ICBM warhead with some 1,200 kilometers from its target. The big radars on the periphery and those at Moscow provided the long-range tracking data so that the ABM's could launch in time. This applied to all Soviet ABM systems, both the legal systems at Moscow that we call a Galosh and ABM–3, as well as to the SAM/ABM's that we call SA–5 and SA–10.

The general staff wrote the script for the Soviet treaty negotiators, five of whom belonged to the military-industry cabal that had secured Politburo approval of national ABM defenses by mid-1962. To keep it short, the Soviet Union was in violation of article I of the ABM Treaty when they signed it. They had been in violation at that point 10 years.

The new evidence that I submit is now conclusive fills in the intelligence gaps that we had from our national collection systems. The sources for this are very credible. They include the former Premier of the Soviet Union, Mr. Kosygin; General Colonel Vitintsev, who was the former commander of Soviet ABM and space defense forces for 20-odd years; a gentleman named Kisun'ko who was the chief designer of the Moscow system and general designer of ABM systems for the Soviet Union; a number of other very credible sources.

The essential part here is that all of these Russian sources agree on three critical issues in the intelligence record. The SA–5 and the SA–10 were designed from the beginning as dual purpose SAM/ABM's from relatively low cost air defense components.

The big radars that we call the Hen House and LPAR, the first and second generation respectively, were designed to provide target tracking data to make these systems work. They were not initially designed just as early warning radars. As far as the record from Russian sources is concerned, the early warning function was recognized only later, some years later, after they had designed these for the battle management target tracking function.

Furthermore, these sources provide the information, though in less detail than on other things, that by the mid-1970's the Soviet Union had a national ABM and space defense command-control system to make it all work. We ourselves by the early 1970's verified that the dual purpose missiles, the SAM/ABM's had the nuclear warheads they required.

Russia is now developing and is about to deploy a major update to this system, their national defenses, called the S–400. It represents a major improvement in all respects—I can go into details some other time—on the capabilities of the ABM defenses that they inherited from the Soviet Union.

I want to say something briefly about the implications of this, that modernizing the Russian national ABM systems with the S–400 will challenge the credibility of the U.S. nuclear deterrent, especially if our arsenal is reduced from the 6,000 warhead level permitted under SALT I to 3,500 under SALT II that the Senate already has ratified. Existing Russian ABM defenses probably nullified the small British and French nuclear deterrents and would be able to exact some significant attrition on our forces. Even before Kosovo, Russia was committed to maintaining its strategic advantage in this respect. They understand very well that the side that has both offenses and defenses has an advantage over the side that only has offenses. It is like we have two boxers, one with one hand tied behind his back. The guy with both hands free has an advantage.

In sum, the 1972 ABM Treaty was neither a valid contract nor the cornerstone of strategic stability. Amended by these 1997 protocols, the treaty would be a monument to strategic instability by legalizing major improvements in Russia's ABM defenses while the U.S. and our allies remain totally vulnerable. There simply is no excuse for failing to protect the United States population, our military forces, and our allies in the name of a treaty that never was a valid contract with a State that no longer exists.

Now, I can use these graphs here and so forth to illustrate some of these points, if you wish, or I understand you are under considerable time pressure. Do you want to go directly to questions?

[The prepared statement of Mr. Lee follows:]

PREPARED STATEMENT OF WILLIAM T. LEE

Thank you Senator Hagel. I wish to thank you and all Committee members for the opportunity to testify on this issue. My testimony represents the findings of my own research and should not be construed as the position of any organization with which I am associated.

Since the publication of my book, "The ABM Treaty Charade: A Study in Elite Illusion and Delusion," in May 1997 additional evidence has confirmed the conclusions in my 1997 book: the Soviets violated Article 1 prohibiting national ABM defenses by deploying more than 10,000 dual purpose, anti-aircraft and anti-missile (SAM/ABM) missiles supported by 17 huge radars on the Soviet periphery. Moreover, Russia is developing yet another SAM/ABM.

Based on what they had been told by Secretary of Defense McNamara and other senior U.S. officials, the Soviets most likely entered the SALT negotiations expecting: a) they could negotiate a Treaty banning national ABM defenses in both superpowers while continuing to develop and deploy their SAM/ABM systems; and b) U.S. satellites would not detect the violation.

The Treaty certainly was consistent with such expectations by permitting, among other things, deployment of 18 large phased array radars—Hen House and LPAR (Krasnoyarsk type)—that delivered target tracking data to the SAM/ABMs under the guise of providing only early warning of ballistic missile attack.

The battle management mode of operation was dictated by technology constraints. With the exception of one late model, the maximum velocities Soviet ABM missiles were a fraction of that of the targets. Thus an ABM interceptor with a velocity of 2 km./sec. had to be launched when an ICBM warhead was some 1,200 km. from its target. The big radars—on the periphery and at Moscow—provided the long range target tracking data so that the ABMs could launch in time. This applied to all Soviet ABM systems—Galosh and ABM–3 as well as to the SAM/ABMs.

The General Staff and KGB wrote the script for Soviet Treaty negotiators, five of whom belonged to the military-industrial cabal that had secured Politburo approval of national SAM/ABMs defenses by mid-1962. When the Soviets signed the ABM Treaty banning such defenses in 1972, much of their first generation national SAM/ABM defense system—the SA–5 and Hen House radars—was in place, and construction was about to begin on the first LPARs for the second generation SA–10 SAM/ABM system. The Soviets were in violation of Article 1 of the ABM Treaty when they signed it.

In the U.S. national intelligence estimates (NIEs) the issue of whether the Soviets were deploying national SAM/ABM defenses turned primarily on four questions. First, were the SA–5 and SA–10 designed to be only (anti-aircraft) SAMs, or dual purpose SAM/ABMs? Second, were the Hen House and LPAR radars passing only early warning data, or battle management target tracking data as well? Third, was there a central ABM command authority with an adequate command-control system? Fourth, did the SAM/ABM missiles have nuclear warheads? All NIE participants agreed that if the answers to these questions were "yes", then the Soviets were deploying national SAM/ABM defenses.

Until 1967 CIA and other NIE players agreed that the SA–5 could be a SAM/ABM. Similarly, in the 1960s the NIEs stated that Hen House radars were providing "early tracking and prediction data for use by ABM launch units" and "initial (target) track data" for the Moscow ABM, which is tantamount to saying that the Hen Houses were battle management radars. Then CIA switched its position—the SA–5 was only a SAM, the radars were only for early warning—and the majority soon followed.

Neither of these changes in CIA assessments was the result of evidence on either SA–5 and Hen House design, or actual radar operations. In rare moments of candor, CIA acknowledged that there simply were too many "intelligence gaps" in the evidence from U.S. technical collection systems to resolve these issues. The CIA and the NIE majority simply systematically violated the rule that absence of evidence is not evidence of absence, e.g. if satellites did not detect the Soviet radars passing battle management target tracking data, therefore, only early warning data were being passed. When the U.S. identified nuclear warhead storage at the SA–5 complexes in the early 1970s NIE positions remained the same.

Conclusive evidence filling in the "intelligence gaps" began to surface publicly from U.S. and Russian sources only in 1992. The principal Russian sources for that evidence are:

—A.N. Kosygin, former Premier and Politburo member for over three decades;
—Gen. Col. Yu.V. Votintsev, Commander ABM (PRO) and Space Defense (PKO) Troops, 1967–85;
—G.V. Kisun'ko, Chief Designer of the Moscow ABM system 1954–75, General Designer of the Soviet Empire's ABM systems from 1956 until the mid-1970s, and two of his colleagues;
—two Soviet Military Attaches—one a military intelligence (GRU) general officer; and
—various books and articles from the Russian press.

The top three Russian sources—Kosygin, Votintsev, Kisun'ko—had unique access to all Soviet ABM programs. All the Russian sources are consistent on three critical points refuting CIA's position:

—the SA–5 and SA–10 were designed as dual purpose SAM/ABMs from relatively low cost air defense components;

—the Hen House and LPAR radars were designed to provide target tracking (battle management) data to the SAM/ABMs; and

—a national ABM and space defense command-control system was installed by the mid-1970s.

In 1991 a U.S. inspection team independently confirmed the LPAR battle management role. The de-classified NIEs and the Russian sources confirm the same function for the Hen House radars. There are no factual contradictions between the NIEs and the Russian sources. For the most part, the Russian sources simply fill in the intelligence gaps. Tables 1 and 2 list the major milestones for the Moscow ABM and national SAM/ABM programs. Table 3 gives the sequence of flight tests for all Soviet ABM programs (excluding directed energy systems).

In sum, the evidence now is conclusive: the ABM Treaty was DOA. Russia inherited most of the illegal Soviet national ABM defenses and is trying to maintain and modernize them. The Russian military understands that the side with both strategic offensive and defensive forces has a great advantage over the side that relies only on offensive weapons, and that the advantage multiplies as offensive arsenals are reduced by START agreements. Meanwhile, Russia's national ABM defenses can protect them from the nuclear and missile proliferation to which they are contributing so much.

To this end, over the past decade Russia has developed a new SAM/ABM, the "S–400", which is scheduled for deployment next year. Both the S–400 SAM/ABM and its predecessor, the SA–10, can operate with the same interceptor missiles.

The new long range S–400 missile can engage ballistic missiles with ranges of (at least) 3,500 km., as compared to about 2,000 km. for the latest model SA–10 missile, even without target tracking data from battle management radars. The new "supermaneuverable" short range S–400 missile provides two layers of ABM defense instead of one layer for previous SAM/ABMs (SA–5 and SA–10), and has the potential for non-nuclear kill of strategic ballistic missiles.

Given long range target tracking data from Russia's battle management radars and nuclear warheads, the S–400 should be highly effective against all types of strategic ballistic missiles—medium range through ICBMs. Furthermore, production of three new radars of various ranges is underway.

Inasmuch as S–400 missile characteristics correspond to the limits set in the 1997 protocols to the ABM Treaty, Russia obviously negotiated those protocols to legalize modernization of its illegal national ABM defenses. Nevertheless, the Clinton administration persists in the illusion that the protocols only defined the technical boundaries between "theater" and "strategic" ABM systems.

Modernizing Russian national ABM defenses with the S–400 will challenge the credibility of the U.S. nuclear deterrent, especially if our arsenal is reduced from the 6,000 warhead level permitted by SALT I to 3,500 under the SALT II Treaty that the Senate already has ratified. Existing Russian ABM defenses probably nullify the small British and French nuclear deterrents. Even before Kosovo Russia was committed to maintaining its strategic military advantage in this respect.

In sum, the 1972 ABM Treaty was neither a valid contract nor the "cornerstone of strategic stability." Amended by these protocols the Treaty would be a monument to strategic instability by legalizing major improvements in Russia's ABM defenses while the U.S. and our Allies remain totally vulnerable. There simply is no excuse for failing to protect the U.S. population, our military forces, and our Allies in the name of a Treaty that never was a valid contract with a State that no longer exists.

TABLE 1—MOSCOW ABM SYSTEM MILESTONES

1953	Seven Marshals: need ABM
	Politburo charges KB–1 with proposal
1954	"System A"—competing battle management radar designs, non-nuclear "V–1000" interceptor, 25km altitude
1956	Begin construction Sary Shagan ABM polygon
	Test nuke air blast ABM warhead
1959	V–1000 interceptor flight tests
	Moscow defended area requirements specified
1960	V–1000 simulated SS–3/4 intercepts
	Neutron & x-ray kill mechanisms understood
	ABM at Moscow by October 1967

1961	V–1000 direct hit SS–4 RV, battle management mode
	11 intercepts SS–4 RVs
	Simulated nuke warheads test on V–1000 missile
	ECM decoy & terminal guidance tests of system A
	''Operation K–1/2'' nuclear tests
	System ''A–35'' with Galosh interceptor instead of system A
1962	Deploy Galosh system (A–35) at Moscow by October 1967
	Operation ''K–3/4/5'' nuke tests
	Develop x-ray nuke warhead
1963	Project ''Battering Ram''—SS–11 as ABM with 10 MT
1964	Reduce Galosh (A–35) radars and launchers
	Cancel ''Battering Ram''
1966–67	Galosh flight tests begin at Sary Shagan
1967	Develop ABM X–3 (''A–135'') (copy U.S. 1966 Nike–X)
1972	''Experimental Exploitation'' Galosh system
1973	Modernize Galosh, some anti-MIRV capability
1975	Engineering development ABM–3 (derivative of X–3)
1978	Modernized Galosh ABM system Aaccepted into Service
1982	Extraordinary Strategic Force Exercise
1987	ABM–3 accepted into services

TABLE 2—SA–5/I0 NATIONAL SAM/ABM PROGRAM MILESTONES

1953	Split in KB–1 on ABM feasibility
1954	''Zonal ABM'' alternative to system A
	Design Hen House and Dog House battle management prototypes
	Military set on semi-mobile systems for the future
	PVO Strany Mission = Aerospace Defense
1956	Begin construction Sary Shagan ABM test range
	Reject SAM/ABM to replace system A at Moscow
1957	Project ''Saturn'' (SA–5) SAM/ABM
1960	Developing ''Universal SAM/ABM'' (SA–5)
1961	Politburo approved SA–5/Hen House deployment
1962	Program entrenched in Politburo, VPK, MOD, MIL industry
	Cancel Leningrad SAM/ABM, Replace with SA–5
	Project ''Battering Ram'' (SS–11 ABM with 10 MT warhead)
	SA–5 SAM/ABM flight tests begin
1963	Three ABM systems for Moscow: Galosh, SA–5, & SS–11
1964	Canceled project ''Battering Ram''
1967	SA–5 accepted into service at least as SAM (anti-aircraft)
	Reconfirmed SA–5/Hen House program, modernize SA–5
	Develop: SA–10 (''S–300'') SAM/ABM and LPAR radars
	Rejected project ''Aurora'' national ABM (ABM–X–2)
	Formed ABM/Space Defense Command
1973	SA–5 Modernization flight tests in ABM mode
1974	Nuke storage appears at SA–5 complexes
1975	Acceptance SA–5 into service as ABM (SAM/ABM)
1977	Deployment SA–5/Hen House national ABM virtually complete
1980	First LPARs operating but unreliable
	SA–10 (SAM/ABM) deployment begins
1982	Extraordinary Strategic Forces exercise with ABM
1985	1st SA–10 modernization (''S–300PMU''), LPARs reliable
1992	SA–10 modification (''S–300PMU–1'')
1995	SA–10 modification (''S–300PMU–2'')

TABLE 3—APPROXIMATE SEQUENCE OF ABM SYSTEM TESTING AT SARY SHAGAN RANGE

1958–60	System A (original Moscow ABM), Griffon (Leningrad SAM/ABM), SA–2 as tactical ABM ?
1961–62	System A, Griffon (SAM/ABM), SA–5 (SAM/ABM)
1963–65	SA–5 (SAM/ABM)*
1966–67	SA–5, Galosh
1967–70	Galosh, SA–5 (1st modernization)
1971–75	Galosh, SA–5 (2nd modernization), probably ABM X–3
1976–80	Galosh, SA–5, ABM X–3

*A few Griffon tests—the Leningrad system—could have continued into early 1963.

ANNEX 1: QUESTIONS SUBMITTED BY THE HONORABLE CURT WELDON TO THE CIA AND CIA'S RESPONSES

SUBJECT: RESPONSES TO THE HONORABLE CURT WELDON'S QUESTIONS

QUESTION 1. The ABM Treaty was based on acceptance of Russian declarations that the large phased array radars located on the periphery of the former Soviet Union are only early warning radars. How confident are we of that assessment?

ANSWER 1. We are confident in our assesment that Russia's large phased array radars (LPARs), as well as the older Hen House radars, perform a ballistic missile early warning (BMEW) function against strategic and shorter-range missiles from potentially hostile countries. NOTE: The ABM Treaty was signed before the first LPAR was constructed, although the Hen House radar network was aready in operation.

QUESTION 2a. I would like to know the current operational and maintenance status of the Hen House and LPAR radars in Russia and the CIS states.

ANSWER 2a. General Sokolov, Russia's commander of the missile attack early warning system group, has recently claimed that his deployed forces continue to function "with the utmost reliability and operational efficiency." The press has touched on the same theme with coverage of the Pechora, Russia, and Lyaki, Azerbaijan, LPARs, specifically singling out the Pechora facility for the role it played in correctly identifying the Norwegian sounding rocket as non-threatening in the January 1995 incident. At the same time, the Russian press has noted the difficulties introduced by having many of these radars now located outside Russia's borders. In particular, the press has covered extensively Azerbaijan's continuing efforts to pressure Russia into large annual payments for operating the Lyaki LPAR, and has also commented on the serious loss of the Skrunda LPAR in Latvia, razed in 1995 before completion as a result of negotiations with the newly independent Latvian government.

QUESTION 2b. In light of the Administration's official [policy] on Russian nuclear targeting, changes in U.S. strategic forces, and Russian military budgets, why does Russia want to continue to operate those radars?

ANSWER 2b. Russia continues to rely on its ballistic missile early warning network, in conjunction with its launch detection satellites, to assure the viability of its strategic nuclear deterrent forces. These radars and satellites provide Moscow with its warning capability against strategic ballistic missile attack from the United States, the UK, France and China, as well as warning of tactical ballistic missile attack from other neighboring nations. Despite public statements that recognize significantly reduced tensions and the greatly reduced likelihood of a future nuclear confrontation, Russian military planners appear unwilling to accept the risk to Moscow's nuclear deterrent that the absence of an eary warning capability could pose.

QUESTION 3. Since only the SA–12 is identified as a theater missile defense (TMD) system, how confident are we that the SA–10 is not a TMD?

ANSWER 3. The SA–12 is the only Russian, Ukrainian and Belarusian system subject to the Confidence-Building Measures Agreement; however, this does not imply that the SA–12 is the only TMD system possessed by former Soviet states. The SA–10 has in fact been advertised by the Russians as a TMD system.

QUESTION 4. I would like to know how many of the SA–10 complexes in Russia and the CIS states have been retrofitted with the later models of that system?

ANSWER 4. We are unable to supply an unclassified response to this guestion.

QUESTION 5. There have been recurring concerns that SA–5 and SA–10 systems were ABMs as well as SAMs. Has any new evidence of this issue appeared over the last decade? If so, what is the assessment of such evidence?

ANSWER 5. We are unable to supply an unclassified response to this guestion.

QUESTION 6a. What was the velocity and range of the target missiles employed to test the Galosh and ABM X–3 systems prior to IOC?

ANSWER 6a. We are unable to supply an unclassified response to this question. NOTE: The ABM–X–3 system never attained IOC.

QUESTION 6b. What are the maximum velocities [of] the Galosh, Gorgon, and Gazelle missiles?

ANSWER 6b. We are unable to supply an unclassified response to this guestion.

QUESTION 6c. How do these numbers compare with the definition of low and high velocity TMD systems in the amendments and agreed statements?

ANSWER 6c. As ABM interceptor missiles, none of these missiles is subject to either the First or Second Agreed Statement of 26 September 1997. The First Agreed Statement addresses, *inter alia,* interceptor missiles other than ABM interceptor

missiles, whose demonstrated velocity does not exceed 3.0 km./sec. The Second Agreed Statement addresses, *inter alia,* interceptor missiles other than ABM interceptor missiles whose demonstrated velocity exceeds 3.0 km./sec.

QUESTION 7a. When was the last NIE on Soviet or Russian/CIS strategic defense published?

ANSWER 7a. The last NIE on strategic air defenses in Russia and other states of the former Soviet Union was published in May 1994. The last NIE to address the ABM system was NIE 11–3/8 in 1991.

QUESTION 7b. When is the next NIE on this subject scheduled to be completed?

ANSWER 7b. In May 1997, the National Intelligence Officer for Strategic Programs and Nuclear Proliferation sponsored a two-day conference to assess the status of Russian ballistic missile defenses. The review of current activity did not appear to indicate the need for a new NIE at this time.

ANNEX 2: IMPLICATIONS OF THE ABM TREATY PROTOCOLS AND AGREED STATEMENTS

The ABM Treaty Protocols and agreed statements that the U.S. signed with Russia and three successor States in 1997, and which are to be submitted to the U.S. Senate for ratification, have a number of implications that may not be apparent at first glance. The demarcation between strategic anti-ballistic missile systems (ABMs) and theater missile defense systems (TMDs) is the most complex issue, hence is treated first in some detail. Other implications may be treated in a summary fashion. Essentially, the Protocols and agreed statements border on the absurd.

TMD DEFINITIONS

In 1972 Dr. John Foster told Congress that a TMD is any interceptor with a maximum velocity of about 2 km./sec., tested against a target with 40 km. maximum altitude, which is typical of a Scud missile—flight range 150-300 km. However, the 1972 ABM Treaty did not address this issue.

In the ABM Treaty Protocols TMD parameters are defined as:

Low velocity TMD

—"demonstrated" interceptor velocity not to exceed 3 km./sec.;

—target velocity not to exceed 5 km./sec.;

—target flight range not to exceed 3,500 km.

High Velocity TMD

—interceptor velocity greater than 3 km./sec.

—target velocity and flight range limits same as for low velocity TMD.

According to conventional wisdom, and the U.S. interpretation of both Soviet and Russian compliance with the ABM Treaty, the only "strategic" ABM systems were those deployed at Moscow, Galosh and ABM–3, and the only "TMD" system was the SA–12 deployed in limited numbers in the 1980s. The SA–5 and SA–10 were only "SAMs," i.e. anti-aircraft systems.

The U.S. "intelligence community" and the Clinton administration have simply ignored all evidence from both Russian and U.S. sources that the SA–5 and SA–10 really were dual purpose anti-aircraft and anti-missile systems (SAM/ABMs) deployed nation-wide in violation of Article 1 of the 1972 ABM Treaty. Russian plans to modernize its illegal ABM defenses with the new "S–400" SAM/ABM also are being ignored.

The following discussion focuses on the implications of Dr. Foster's and the 1977 Protocol criteria for "strategic ABM" and TMD systems.

BACKGROUND ON SOVIET ABM TEST PRACTICES AND SYSTEM CHARACTERISTICS

In the mid 1950s the Soviets concluded that they could develop ABM systems using only medium range ballistic missiles (MRBM) as targets. The Galosh and ABM–3 systems, which were deployed only at Moscow, and the dual purpose anti-aircraft/missile (SAM/ABM) SA–5 and SA–10/12 systems, which were deployed nationwide, were all developed at the Sary Shagan range (on the Western shore of Lake Balkhash). Target missiles were SS–3 and (mostly) SS–4 MRBMs launched from Kapustin Yar (across the river from Stalingrad, now Volgograd): maximum target velocity 3–3,5 km./sec.; range ~2,000 km.; and maximum altitude ~1,000 km.

With the exception of one interceptor (Gazelle) deployed at Moscow in 1987, all Soviet ABM systems had maximum velocities that were a fraction of that of ICBMs. Although the maximum velocity of the Galosh missile has not been reported, it most

probably was around 2 km./sec. This also applies to the Gordon, a modernized Galosh, currently deployed with the ABM–3 at Moscow. Moreover, these interceptors had low initial launch acceleration rates.

The interceptor missiles of the first generation SAM/ABM, the SA–5, had maximum velocities around 1.5 km./sec. Both the original SA–10 (Russian S–300P) interceptor and the anti-aircraft interceptor for the SA–12 (Russian S–300V) had maximum velocities of ~1.7 km./sec. Subsequent modernizations of the SA–10 (Russian S–300 PMU–1 & PMU–2) raised the maximum velocity to over 2 km./sec., approaching the 2.4 km./sec. maximum velocity of the SA–12 TMD interceptor. (The SA–12 was a variant (S–300V) of the SA–10 designed to protect Soviet Ground Forces from both tactical aircraft and missiles).

In order to intercept ICBM RVs with velocities of 6–7 km./sec., all of these interceptors, both for the ABM systems deployed only at Moscow and the SAM/ABM systems nation wide, had to be launched when the target RVs were on the order of 1,200 km., or more, from the intended targets. Consequently, all of these systems depended upon long range target tracking data from large phased array radars located on the Soviet periphery and in the Moscow area.

All of the large phased array radars—Hen House, LPARs, Dog House and Cat house—were designed initially as "battle management" target tracking radars because, given the available interceptor missile technology, there was no other practical ABM architecture, either for defense of Moscow or of the Soviet Union, during the Cold War. When Soviet designers began working on ABM systems in 1954–55, they had no choice but to adopt "battle management" architecture. Early warning of a missile attack was a bonus mission for those radars, not the initial design objective.

It is hardly possible to overemphasize these points, or of the consequences of U.S. failure to grasp them.

Table 4 summarizes these data and various U.S. attempts to define the differences between "strategic" and theatre (TMD) ABM systems.

TABLE 4—SOVIET ABM & TMD SYSTEM AND TARGET PARAMETERS

	R&D targets SS–4 MRBM	Operational targets ICBMs
Range	~2,000 km.	10,000 km.+
Velocity (Max.)	3.5 km./sec.	6–7 km./sec.

INTERCEPTOR VELOCITIES—KM./SEC.

Moscow ABM Systems	
Galosh	[1]~2
Gordon	~2
Gazelle	very high
National SAM/ABMs	
SA–5	1.4–1.6
SA–10	
1980	1.7
1985	~1.7
1992	>2.0

[1] Not available but likely approximation.

DR. JOHN FOSTER'S 1972 TMD PARAMETERS

Target range	~300 km.
Target velocity	2 km./sec.

1997 ABM TREATY PROTOCOLS' TMD PARAMETERS

Low Velocity TMD:	S–400
Target range: 3,500 km.	3,500 km.
Target velocity: 5 km./sec.	4.8 km./sec.
Interceptor velocity: 3 km./sec.	[2]~3 km./sec.
High Velocity TMD:	
Same target range and velocity as low velocity	
Interceptor velocity: >5 km./sec.	

[2] Specifics not available, but probably about 3 km./sec.

The new "S–400" from the same design school that produced the SA–2, SA–5, and SA–10 pushes even the Protocol criteria to the limits, if not beyond. The S–400 is designed to intercept missiles with velocities up to 4.8 km./sec. and a range of 3,500 km. While maximum velocities of either of the two new S–400 interceptors were not available at this writing, expect them to be at or near the Protocol limit of 3 km./sec. for both the long range and short range models.

Trying to delineate between "strategic" and "theater" ABM systems by interceptor velocity and target parameters only results in confusion and contradictions when the U.S. does not comprehend the implications of the Soviet ABM architecture, and persists in the erroneous notion that Soviet/Russian SAM/ABMs are only SAMs, i.e. not even TMD systems much less strategic ABMs as well. Thus systems that are strategic ABMs by one definition are only TMDs by others. Components of the same system are equally contradictory.

By Dr. Foster's target altitude and range criteria—40 and up to 300 km. respectively—all these systems, whether officially recognized "ABMs" deployed at Moscow, or the SAM/ABMs deployed nationwide that the U.S. insists are only "SAMs", are strategic ABMs. The same applies to the new S–400 SAM/ABM.

On the other hand, by Foster's interceptor velocity criteria, the SA–5 and the original SA–10 are only TMDs, but the modernized SA–10 and one of the SA–12 interceptors are strategic ABMs. Galosh and its successor Gordon deployed with ABM–3, which the U.S. considers are the only strategic ABMs the Soviets developed and deployed, are somewhere on the borderline between strategic ABMs and TMDs.

By the 1997 Protocol target and interceptor velocity criteria, only the Gazelle interceptor of the ABM–3 qualifies as a strategic ABM component. All other systems and components are only TMD systems with the S–400 falling on the border line between "Low" and "High" velocity TMD interceptors.

Some qualification of the Soviet practice of using mostly SS–4 MRBMs as targets for all ABM systems is in order. During the extraordinary 1982 Soviet strategic forces exercise, SS–11 and SS–20 missiles were fired into Sary Shagan from an unspecified range. SA–5s and SA–10 SAM/ABMs, of course, were present. However, only the "rapidly deployable" version of the ABM X–3 with the small phased array radar was present at Sary Shagan in 1972. While ABM–3 is a derivative of ABM X–3, its "Pillbox" radar is unique to Moscow.

While the ABM X–3 reportedly was active against the SS–11 and SS–20 targets in 1982, no intercepts—attempt, failure, success—have been reported. Was SA–5/10 activity also detected at the time? One recent Russian source hints that some targets on the Sary Shagan may have been boosted to ICBM velocities, i.e. 6–7 km./sec., but such activity has not been reported publicly by Western sources.

Despite billions of dollars of satellite collection effort the U.S. Intelligence Community cannot certify with much confidence which specific systems were, or were not, tested against which targets during more than three decades of operations on the Sary Shagan range. All technical intelligence can provide is a circumstantial case indicating a high probability of intercept activity in some time periods with many information gaps remaining.

In sum, U.S. attempts to define the difference between strategic ABMs and TMD systems have resulted in hopeless contradictions and confusion. U.S. technical intelligence cannot answer a lot of key questions with any confidence. Nor can U.S. intelligence negate reports from highly credible Russian sources that the SA–5 and SA–10, in conjunction with the Hen House and LPAR battle management radars, were SAM/ABMs. CIA's assessments on these issues are fatally flawed.

OTHER IMPLICATIONS AND CONUNDRUMS

Despite all the evidence to the contrary, the 1997 Protocols declare that all of the large phased array ABM battle management radars deployed on the periphery of the former Soviet Empire are only "early warning" radars that Russia may continue to operate. Russia still controls at least nine, possibly as many as 13, of these radars. Thus this provision of the protocols legalizes Soviet violation of Article 1 of the ABM Treaty by deploying these radars with some 10–12,000 SAM/ABM interceptors, and Russia's continued violation with its inherited portion of Soviet ABM defenses.

Indeed the protocols explicitly permit passing battle management tracking data from these radars, and from space based sensors, provided such data are not used to intercept strategic ballistic missiles! The only way the U.S. could verify that the data were not being used in the ABM mode would be to launch a missile strike on Russia, and accept the consequences.

Despite the fact that Russia is marketing the SA–10 as the world's best TMD, with characteristics equal to or considerably superior to the SA–12, only the latter

is declared to be a TMD prohibited from being tested in the ABM mode. The same applies to modernization of Russia's massive violation of the Treaty with the S–400, which also has an export version.

Inasmuch as all TMD deployments by the U.S. and Russia must be proportionate to the threat, Russia evidently may veto any U.S. global TMD deployment simply by declaring it disproportionate to the local threat.

Each side is to notify the other if it has plans to test a "high velocity" interceptor but deployment is not prohibited, and "Treaty compliance . . . will remain the national responsibility of each Party." Verification of land based ABM programs depends entirely on Russia informing the U.S. of its plans!

ANNEX 3—POST SOVIET UNION RUSSIAN MISSILE & AIR WEAPONS DEVELOPMENT

SS–X–26	SRBM	Operational
SS–27	ICBM	Operational 1997–98
SS–N–X–28	SLBM	?
''Borey'' Class	SSBN	2005–07
New Long Range Bomber		MOD Specs submitted
TU–95 & 175		Maintain, modernize with new ASM
AS–X	Long range ? ASM	
AS–X	Medium range ASM	
S–400 SAM/ABM:		
New missile	400 km. range	Deployment 2000
New missile	160 km. range	
New target tracking radars	Long range	
	Medium range	Deployment 2000–03
	OTH, range 5–600 km.	
Modernized SU–27		Schedule ?
New MIG model		Flight testing
New Fighter		Schedule ?
AS–X	Short range ASM*	Schedule ?

*Derivative of short range S–400 missile.

Senator HAGEL. Well, Mr. Lee, thank you. We are looking at a vote probably around noon. So, I am going to shoot to try to have this wound up by then.

But in the time we have, which is valuable because you have so much to contribute, and I do not want to interfere with that. Why do we not take a couple of minutes at your instruction to take the committee through what you think are the most important points related to the charts in connection to your testimony.

Mr. LEE. Thank you, sir.

If you look at that first chart, the Hen House radars, that is the first generation of the system. What we never were able to determine from technical intelligence collection was whether those radars were designed for this long-range tracking mode so they could look out, see the targets coming far enough in advance so that the missile could fire and the interceptor could fire, intercept, and make up for that difference in the velocity.

We simply did not know whether they were just for early warning or for both purposes. The majority in the intelligence community concluded they were only for early warning. There was never any basis in the technical evidence to prove that. It was simply which way you chose to interpret ambiguous data that could be interpreted either way.

We now have the evidence from the Russian sources that these systems were designed that way from the very beginning, and as I said, indeed the realization that they were good for early warning

seems to have come after they had originally designed them for the target tracking function.

The second chart simply—and I could not find one that is complete with all the radars from both generations. The second chart shows one of the radars at Moscow. There is another one that complements the coverage of that that is not shown—I did not have that available—and some of those in the second generation. At the end they had 17 of these deployed. They negotiated the ABM Treaty to permit 18 of them, and we did not realize that was what we were doing, that we were legalizing the first generation and the second generation deployment. The Krasnoyarsk radar would have been the 18th, but the Politburo, from the record available, made the decision to put that at Krasnoyarsk rather than Aral'sk and so they lost that radar before the Soviet Union collapsed.

Russia controls something like six or eight of these. I can give you the list of them still. The important part is they have what is necessary still for a viable national ABM defense and the upgrade even with what they have lost in Latvia and incomplete radar in the Ukraine.

The other charts. From putting together the declassified national intelligence estimates and the data from the Russian sources, let me emphasize all this new data from the Russian sources does not conflict with any of the facts we had from our national collection systems. They are complementary. I could not a find a single case where there is a factual contradiction. The information from the Russian sources fills in the gaps that we did not and could not have collected from our national collection systems.

The important points on that first one, it is sort of the history of the Moscow ABM system. The critical things are we did not realize that the Russians started out with a non-nuclear ABM system for Moscow. Indeed, they achieved the first non-nuclear hit-to-kill back in March 1961 on a strategic missile, what they used as a target, an intermediate range system, the SS–4, a medium range system.

Not realizing that, we never understood the sequence of the development of that system and the Moscow system. We did not realize that that original system had been canceled and replaced with quite a different version of it in the Moscow system that we call the Galosh. So, there was a 5-year gap there, which I will come back to, in which we were just misinterpreting the evidence we had because we did not understand what the Russians had started out with and what they had changed over to. That was simply a limit of the national intelligence collection. We could not have expected them to do any better as long as they limited it to that.

The other important thing is that I already mentioned but will reiterate that the Russian sources are very clear that all of these systems, all these radars that were on the previous two graphs, all of them were designed to provide the long-range target tracking data so that the low velocity interceptors, including those at Moscow, as well as these dual purpose SAM's could be fired in time to get up there and meet the warhead before it was too late.

The second table shows the points in their national ABM system, dual purpose, anti-aircraft and anti-missile designed from the beginning which we suspected for a long time, but then refused to be-

lieve from fairly standard anti-aircraft components that they could be adapted with the big radars to make them dual purpose. All that really does is confirm that is really what went on, and gave us a key date that the Politburo had approved this national deployment of the first generation no later than mid-1962. That is the basis of my statement that they were in violation of the treaty, article I of the treaty for 10 years before they signed it.

Now, because of various problems of providing the nuclear weapons and the command-control system, that original national ABM dual purpose system probably was not operational until about 1975. It may have been partially operational just in the Moscow area because they had the big Moscow radar there 1969–70. But otherwise, it was probably not.

I think those are the most important points I wish to make.

Table 3 simply shows that sequence of test firing, what went on at Sary Shagan, the development center. And the critical thing that was missed in the national intelligence was that from sometime around mid-1962 and until 1966, all of the test firings we saw going on there that we could not interpret very well as to what was going on—and this is very clear from the estimates—all of that, those 4 to 5 years, was the initial test firing of the dual purpose SA–5 system. And we simply did not recognize that that was what was going on.

That is the essence of it, sir.

Senator HAGEL. Thank you. Mr. Lee, thank you very much.

Let me ask a couple of questions which tie into specifically your timeframe here and some of the testimony. You have claimed that there is new evidence from Russian sources relating to that country's violations of the ABM Treaty. You have also claimed in your book and testimony this morning that this evidence has been known to the U.S. Government for some time.

What happened? Did the CIA not pass it on or DIA failed to act on it. Did our political leaders know it and did not respond? Would you take us through what your interpretation of that failure was about, why and what it has meant to our defense capabilities?

Mr. LEE. To the best of my knowledge, sir, they simply have not been reading it.

Senator HAGEL. They meaning who?

Mr. LEE. The CIA and DIA simply have not been reading this evidence, not been looking at it at all. In fact, a little over a year ago, CIA replied to seven questions from Congressman Weldon clearly stating that they had not read any of this evidence whatsoever, much less reexamined the entire past history and told anybody about it.

I sure would like to see your colleagues in the Intelligence Committee ask some questions on precisely that point. It would be kind of nice to have the Rumsfeld Commission look into this or a new version of the Rumsfeld Commission look into this whole issue.

Senator HAGEL. When was that testimony given to Congressman Weldon?

Mr. LEE. The questions were submitted by Congressman Weldon in late 1997. I have the questions and the replies that were returned to him in early 1998. There was not a specific date on that. Those are appended as annexes to my testimony.

Senator HAGEL. I will, of course, include all your testimony and your accompanying materials, charts, and the questions and answers for the record.

That is rather serious, what you have said about our intelligence community. Is that an ongoing, long-term problem do you believe in our intelligence community, that they have not paid attention to these things?

Mr. LEE. Sir, how much time do you have to listen to past records of not paying attention to what was in the open press? I have often made kind of a harsh remark that the Soviet Union could always hide some of its deepest and darkest secrets very effectively by putting them in books and on the newsstands.

Senator HAGEL. If Russian public sources on this matter complement the evidence from the U.S. collection systems, then what are the key intelligence gaps that are filled in by this information?

Mr. LEE. The key gaps are the radars were designed from the beginning as battle management radars for target tracking data, and at some point—I can only date it 6 years later—they realized they could use them for early warning too and went ahead and used them for both purposes.

Second, the SAM/ABM's were designed from the beginning as dual purpose systems, recognizing they were not terribly effective by U.S. standards, not terribly effective at all perhaps—we do not know and maybe we really do not want to know because the only way you could really test it was to have a little nuclear exchange, which is not exactly desirable. But they went ahead and did the best they could, and they have a long record of doing that in many areas and that was simply overlooked, that they would do the best they could with what they had and they were determined to defend the USSR and now Russia no matter what. And that is the story from the new S–400 also.

The third point is clear. They did put together the command and control system to make it all work, although it probably was not very effective or really satisfactory until about the mid-1970's as best as I can reconstruct it.

Senator HAGEL. As you laid out rather clearly in your testimony and the accompanying charts, in view of the evidence that you have brought to light over the years, including what you have shared with us this morning and what we do know that is available on Soviet violations of the ABM and biological weapons treaties, in your opinion were there ever any cold war arms control agreements that the Soviets adhered to?

Mr. LEE. Well, they adhered to the agreement not to test nuclear weapons in the atmosphere, although there was always some question about bending in some cases. The issue of whether they observed the threshold test ban treaty was always very controversial. It is generally accepted that they did, but there was a significant minority of highly qualified people who repeatedly—and you could get some of those to testify in detail on this—repeatedly that they did violate that one.

The critical thing about the interim agreement on the offensive weapons, the SALT agreements on the offensive weapons, was that they negotiated those so they did not have to violate them in any significant degree except to encode the telemetry, which they pro-

ceeded to do. They simply negotiated those to their level of sufficiency which was defined by their military doctrine and strategy, their nuclear targeting strategy, and therefore they did not have to violate them.

The biological treaty was totally violated. The chemical treaty, we really do not know, but probably also violated.

It is hard to find anything except the hot line and a few things like that that they really strictly adhered to. But the SALT agreements and so forth, they only violated them when they really believed it was in their interest to do so. They did not violate them capriciously.

Senator HAGEL. Mr. Lee, unfortunately, the bewitching hour has arrived and I am going to have to go do my duty here.

I first want to thank you for your contributions. They are very important and we are grateful for what you have shared with us this morning in addition to the information that you have brought with you. I suspect we will want to do a little followup work here. We have really not had adequate time to cover as much as we need to cover. If it is acceptable with you, we may have followup questions that we would like to ask you to respond to, and we would give those to you and we would insert those answers for the record. Again, thank you.

Mr. LEE. Thank you, sir, for the opportunity, and anytime day or night I am at your service.

Senator HAGEL. Thank you.

[Whereupon, at 12:01 p.m., the committee was adjourned, to reconvene at 2:15 p.m., May 25, 1999.]

THE LEGAL STATUS OF THE ABM TREATY

TUESDAY, MAY 25, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 2:31 p.m., in room D–562, Dirksen Senate Office Building, Hon. John Ashcroft presiding.

Present: Senator Ashcroft.

Senator ASHCROFT. This hearing will come to order, please. I am delighted to convene this hearing. You are witnessing what happens to a Senator who tries to run up five flights of stairs. But I am delighted to be here.

Senator Biden, I believe, will be coming later. We have had several votes scheduled, which commenced at 2:15. They will be intermittent, and I thought it best if we could get underway.

This is a hearing on the legal status of the ABM Treaty. First ratified in 1972, the treaty has been, for some, the sacred text of arms control agreements, the underlying basis for nuclear arms reduction with the former Soviet Union. Even though the level of offensive nuclear warheads increased by over 400 percent after the treaty entered into force, proponents of the agreement continue to argue it is the "cornerstone of strategic stability."

It is my view that the treaty has never achieved its objectives and, at present, poses a particularly grave threat to the security of the United States and to the stability of the world. It is in this context that we discuss the legal status of the treaty.

When the Soviet Union disintegrated in 1991, the State Department was in the process of reviewing how it would handle U.S. treaty relationships with the USSR. In an effort to encourage stability during a chaotic time, the Bush administration adopted a model of "presumptive continuity" where treaties with the USSR would be presumed to continue with appropriate successor States.

The Bush administration's policy was not an automatic continuity or continuation of all treaties with the USSR, but provided a framework to review each agreement and determine necessary changes. Such a review was particularly important for arms control agreements. As President Clinton stated in a letter to Congressman Gilman in March 1997, and I quote, "Particularly in the area of arms control, a case-by-case review of each agreement was necessary."

In that case-by-case review, the administration negotiated a memorandum of understanding [MOU] on succession to the ABM Treaty. The MOU, was concluded in September 1997 and identified Ukraine, Belarus, Kazakhstan and Russia as the successor states

to the treaty. This selection of successor states seemed to be consistent with a statement by the President that, and I quote, "neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet States with significant ABM interests) nor a simple recognition of all NIS, Newly Independent States, as full ABM successors would have preserved fully the original purpose and substance of the treaty, as approved by the Senate in 1972." That was the letter from the President to Congressman Gilman.

The administration went on to reiterate in that same letter that the MOU on succession "works to preserve the original object and purpose of the treaty."

To summarize, the administration believed in 1997 that recognition of Russia alone or all of the successor states together would not have preserved the original purpose of the treaty. The administration negotiated the memorandum of understanding to preserve the original purpose of the treaty. The administration's initial formulation for the legal status of the ABM Treaty begs two questions, however. First, if the MOU is essential to preserve the original purpose of the ABM Treaty, what is the status of the treaty since the MOU has not been ratified? Second, if the MOU is rejected by the Senate, what will be the status of the ABM Treaty?

The answer to those two questions must be the same, and it is the answer that this administration does not want to hear. The fact that this treaty cannot be carried out without the MOU is evidence enough that it expired with the collapse of the Soviet Union. The fact that this treaty cannot be carried out without the MOU on succession is evidence enough that this treaty will remain void if the Senate rejects the succession arrangement.

That is a key point my colleagues in the Senate need to understand. This is not just a debate on a succession arrangement to the ABM Treaty. If the administration ever submits the MOU on succession to the Senate, this will be a vote to revive an expired treaty, a vote on the ABM Treaty of 1999.

When faced with this uncomfortable fact and the awareness that the Senate would almost certainly reject MOU, the administration modified its legal argument on ABM Treaty succession. When pressed on the status of the ABM Treaty if the MOU on succession is rejected by the Senate, President Clinton wrote to Congressman Gilman and Senator Helms in a subsequent letter.

"Belarus, Kazakhstan and Ukraine each has ABM Treaty-related assets on its territory. Each has participated in the work of the SCC, [the Standing Consultative Commission of the treaty], and each has affirmed its desire to succeed to the obligations of the former Soviet Union under the treaty.

"Thus," and I continue to quote, "a strong case can be made that even without the MOU, these three states are parties to the treaty . . . Finally, the United States and Russia clearly are parties to the treaty. Each has reaffirmed its intention to be bound by the treaty, and each has actively participated in every phase of the implementation of the treaty, including the work of the SCC; and each has on its own territory extensive ABM Treaty-related facilities. Thus there is no question that the ABM Treaty has continued in force

and will continue in force, even if the MOU is not ratified." That letter from Clinton to Gilman and Helms, May 21, 1998.

Only 6 months after stating that neither Russia alone nor all the successor states could fulfill the original purpose of the treaty, the President argues that clearly Russia is a party to the treaty, and a few other successor states may also be parties. Such inconsistency from the administration on a matter this important to U.S. national security is troubling. Indeed, administration lawyers briefing Congress in January 1998 could not say whether any country which emerged from the Soviet Union was bound by the ABM Treaty.

Such ambiguity within the administration makes it all the more clear that the ABM Treaty will expire and will remain void unless the Senate approves the MOU on succession. The MOU is necessary because the treaty cannot be fulfilled without amending. The territory covered by the treaty is changed. Additional parties are added to the treaty. Treaty mechanisms, such as the Standing Consultative Commission, are altered, and the strategic landscape upon which the ABM Treaty was based is dramatically different. These are substantial amendments to the treaty. And in our constitutional form of government, the Senate has a responsibility to advise and consent on such amendments.

As is well established in U.S. law, and I quote, "A significant amendment to a treaty must follow the mandate of the treaty clause and therefore must be proposed by the President and be ratified following the advice and consent of the Senate," *New York Chinese T.V. Programs, Inc.,* vs. *U.E. Enterprise,* 954 Fed 2d.

I find it hard to understand why my Democratic colleagues, many of whom waged an extensive fight in the eighties over the interpretation of several words in the ABM Treaty, are not defending the Senate's prerogative to approve these dramatic changes in the treaty today. Congress has made its will clear with regard to succession arrangements for the ABM Treaty.

The Senate gave its advice and consent to the CFE Flank Document in May 1997 and attached a condition that any successor arrangement to the ABM Treaty be submitted for the Senate's advice and consent. In accepting this condition, the administration is bound not to recognize any party to the ABM Treaty until the Senate approves a successor arrangement.

We will discuss the compelling constitutional and international law arguments surrounding the treaty status today, but the condition in the CFE Flank Document for me removes all doubt that this treaty is not in force until the Senate approves a succession arrangement. It is noteworthy that the State Department's senior arms control lawyer takes a different view than the White House on the legal status of the ABM Treaty.

While the President argues that the treaty certainly is in force, at least with Russia, Mary Elizabeth Hoinkes recently stated, "Absent a succession agreement, we do not have a firm treaty relationship." She made that statement in the Forum on the ABM Treaty sponsored by the Center for National Security Law of the University of Virginia School of Law in February of this year. She may be swimming against the tide within the administration, but her intellectual honesty is appreciated.

The President is bound by the Constitution to submit these treaty amendments to the Senate for advice and consent. And the condition of the CFE Flank Document will help him fulfill his constitutional responsibilities. I do not believe that he can de facto recognize Russia, or any other former Soviet Republic, as a party to the treaty before the Senate consents.

Some of the legal arguments that will be discussed today are complex, but the central point of this hearing is that the ABM Treaty is expired and will remain expired unless the Senate approves a succession arrangement.

I thank you all for your additional patience.

It is now my pleasure to call the first panel to testify, and I am pleased that each of you has come today. Mr. Douglas Feith, former Deputy Assistant Secretary of Defense for Negotiation Policy and a partner at Feith and Zell. Mr. Feith is accompanied by Mr. George Miron, a partner at Feith and Zell; Mr. David Rivkin, partner at Hunton and Williams, accompanied by Mr. Lee Casey, associate at Hunton and Williams; and finally Professor Michael Glennon, professor of law at the University of California, Davis.

Welcome to the committee. Mr. Feith, if you would please, begin.

STATEMENT OF DOUGLAS J. FEITH, FORMER DEPUTY ASSISTANT SECRETARY OF DEFENSE FOR NEGOTIATION POLICY; PARTNER, FEITH & ZELL, WASHINGTON, DC

Mr. FEITH. Thank you, Mr. Chairman. My colleague, George Miron, and I are honored to have the opportunity to testify before this committee this afternoon. First of all, I would like to extend condolences to the committee on the passing of Admiral Bud Nance. Admiral Nance and I worked together at the National Security Council at the beginning of the Reagan administration.

Senator ASHCROFT. We are very pleased to receive those. The entirety of the Foreign Relations Committee mourns his passing and misses him profoundly.

Mr. FEITH. Mr. Chairman, the full testimony that we wish to present is contained in our legal memorandum, which we provided to the committee. The memorandum is lengthy, so we respectfully ask the committee to include it in the record of these hearings. And I now propose to make only a summary opening statement.

Senator ASHCROFT. Without objection, the entire memorandum will be part of the record of the hearing.

Mr. FEITH. Thank you.

Mr. Chairman, our legal analysis of the status of the ABM Treaty of 1972 concludes that following the Soviet Union's extinction, the ABM Treaty did not become a treaty between the United States and the Russian Federation. Rather, as a bilateral, non-dispositive treaty, the ABM Treaty lapsed when the USSR ceased to exist. In December 1991, new states that emerged on what had been USSR territory declared independence, announced the formation of the Commonwealth of Independent States, and proclaimed that the USSR, "as a subject of international law and a geo-political reality, no longer exists."

Soon thereafter, the United States acknowledged that the USSR had dissolved and is no more. The United States has officially expressed its view that upon a state's extinction, that state's bilateral

treaties automatically lapse. The U.S. Government has acted in accordance with that view in connection with the extinction of the Kingdom of Hawaii in 1898, the dissolution of the Austro-Hungarian Empire at the end of World War I, and the dissolution of Yugoslavia in 1992.

The U.S. view is consistent with the opinion of international legal scholars who have addressed that issue. With consistency over more than 200 years, scholarly writings state that when a state ceases to exist, or becomes extinct in legal parlance, that state's treaties have no further effect.

Such treaties are said to lapse. The lapsing occurs by operation of law, which is to say automatically, upon the state's extinction. It does not require action by any other treaty party. No judicial decision or applicable treaty contradicts this principle. And U.S. Supreme Court has established that works of international legal scholars can be accepted as evidence of the law.

In 1898, the State Department stated, as a principle of public law, that a treaty expires when one of the parties "loses its existence." In support, the State Department quoted from General Henry Halleck well-regarded treatise, International Law, which was written in 1861.

Halleck said that the principle of public law, which causes treaties, when a party ceases to exist, to be regarded as abrogated, is thus stated, "The obligation of treaties, even where some of their stipulations are in their terms perpetual, expire in case either of the contracting parties loses its existence as an independent state."

In 1897, U.S. Secretary of State John Sherman invoked scholarly works to explain to the Government of Japan why the treaties made by the Kingdom of Hawaii would not survive the U.S. annexation of the Kingdom's territory. He said it is not the treaty by which the U.S. annexed Hawaii that abrogates the Hawaiian Kingdom's treaties, rather "it is the fact of Hawaii's ceasing to exist as an independent contractant that extinguishes those contracts."

Likewise in 1902, Secretary Elihu Root ordered to be published a report by a law officer in the Office of the Secretary of the War Department, which dealt with the treaty obligations of extinct states. That report says, "Where there is a complete change not only of sovereigns but of sovereignty of necessity the agreement ends." Similar observations include the following: "It is clear that political, including personal and dynastic treaties of the extinguished state fall to the ground." That was written by Professor Amos Hershey, the University of Indiana, in 1911.

"The extinction of the personality of a state results traditionally in an abrogation of all political and military treaties concluded between the now extinct entity and other states," Professor Gerhard von Glahn, University of Minnesota, in 1962.

Many other scholars have expressed the same opinion.

Neither U.S. nor Russian officials deny that the Soviet Union ceased to exist in December 1991. Its international legal personality terminated. In other words, it is not in dispute that the Commonwealth of Independent States and the U.S. Government in 1991 were accurate when they declared that the Soviet Union had ceased to exist as a state.

I also would emphasize that the ABM Treaty, as we all know, was a bilateral treaty. As noted, scholars for over 200 years have been nearly unanimous in concluding that upon a state's extinction, its bilateral treaties that are not dispositive lapse. And a treaty is dispositive if it irrecoverably fixes a right to a particular territory; for example, delineates a boundary between states. And the ABM Treaty was not a dispositive treaty. Dispositive treaties are also supposed to be—are treaties that were intended to be perpetual, no matter what happens to the parties. The ABM Treaty, by its own terms, can be abrogated on 6 months' advance notice by the parties, which also makes it clear that it was not a dispositive treaty.

No judicial decision contradicts the scholarly view that a non-dispositive, bilateral treaty of an extinct state does not automatically become a treaty of its successor or successors. The United States has never declare that it considered itself bound by international law to accept as a treaty partner the successor to an extinct state.

Now the President has constitutional authority to grant recognition to foreign states. Were he to rely on that authority as the legal basis for making a treaty, bringing into being a treaty that would not otherwise exist, he would put the United States under a legal obligation to other states without Senate advice and consent. The President's recognition authority cannot be exercises in a manner that would nullify the U.S. Senate's authority to advise and consent to the making of a treaty.

The President cannot, without Senate approval, bring a lapsed treaty back to life by declaring that a given foreign state is the successor or continuation of an extinct state. And it is principles of international law that govern the issue of whether a state has become extinct.

However broad the President's authority may be to recognize states and governments of states under the U.S. Constitution's Receive Ambassadors Clause, it is necessarily limited by the specific constitutional requirement for Senate advice and consent on the making of treaties. In sum, when the USSR became extinct, its bilateral, nondispositive treaties lapsed, hence the ABM Treaty lapsed. By operation of law, that is automatically. It did not become a treaty between the United States and Russia.

The practical conclusion relating to this committee's work of this description of the law is that the multilateralization memorandum of understanding that you, Mr. Chairman, discussed in your opening remarks is not simply an amendment of an existing treaty. It would be a new treaty. If approved, as you noted, it would create the ABM Treaty of 1999. And if not approved, the status quo would continue. That is, there would be no legally binding international obligation prohibiting the United States from deploying ballistic missile defenses.

Thank you, Mr. Chairman.

Senator ASHCROFT. Thank you very much. Mr. Feith.

[The prepared statement of Mr. Feith and Mr. Miron and material provided subsequent to the hearing follows:]

PREPARED STATEMENT OF DOUGLAS J. FEITH AND GEORGE MIRON

DID THE ABM TREATY OF 1972 REMAIN IN FORCE AFTER THE USSR CEASED TO EXIST IN DECEMBER 1991?

AND

DID IT BECOME A TREATY BETWEEN THE UNITED STATES AND THE RUSSIAN FEDERATION?

I. INTRODUCTION

This Memorandum concludes that, following the extinction of the Union of Soviet Socialist Republics ("USSR"), the Anti-Ballistic Missile ("ABM") Treaty of 1972 did not become a treaty between the United States and the Russian Federation. Rather, as a bilateral, non-dispositive treaty, the ABM Treaty of 1972 between the United States and the USSR lapsed when the USSR ceased to exist.

In December 1991, new States that emerged on what had been USSR territory declared independence, announced the formation of the "Commonwealth of Independent States" ("CIS") and proclaimed that the USSR "as a subject of international law and a geopolitical reality no longer exists." By December 21, 1991, the list of States belonging to the CIS and subscribing to the view that, with the CIS's establishment, "the Union of Soviet Socialist Republics ceases to exist," comprised Azerbaijan, Armenia, Belarus, Kazakhstan, Kyrgyzstan, Moldova, the Russian Federation, Tajikstan, Turkenistan, Ukraine and Uzbekistan. Soon thereafter, the United States acknowledged that the USSR "is no more."

In recent centuries, instances in which States have ceased to exist have not been numerous. The United States has officially expressed its view that, upon the extinction of a State, such State's bilateral political treaties automatically lapse, and has acted in accordance with that view in connection with the extinction of the Kingdom of Hawaii in 1898, the dissolution of the Austro-Hungarian Empire at the end of World War I, and the dissolution of Yugoslavia in 1992. The U.S. view is consistent with the opinion of international legal scholars who have addressed that issue. With consistency over more than a hundred years, scholarly writings state that when a State ceases to exist (becomes "extinct") that State's bilateral treaties have no further effect. Such treaties are said to lapse or "fall to the ground." The lapsing occurs by operation of law—that is, automatically upon the State's extinction. It does not require action by any other treaty party. No judicial decision or applicable treaty contradicts this principle, and the U.S. Supreme Court has established that "where there is no treaty and no controlling executive or legislative act or judicial decision," works of international legal scholars are acceptable as evidence of the law.

President William Clinton has taken the view that the ABM Treaty of 1972 remains "in force." Representative Ben Gilman, Chairman of the House Committee on International Affairs, asked President Clinton in a June 1997 letter which State, if any, does the United States believe is now its ABM Treaty partner. President Clinton in November 1997 replied that the "succession" issue is "unsettled," adding:

> Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS [newly independent states] as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972.

Representative Gilman and Senator Jesse Helms, Chairman of the Senate Foreign Relations Committee, wrote President Clinton in March 1998 and stated that, if the Administration cannot now identify any country in addition to the United States that is bound by the treaty, then Congress would have to conclude that the treaty is no longer in force. In May 1998, President Clinton replied that the ABM Treaty is in force between the United States and the Russian Federation. He did not state the principle of law on which he based this conclusion. Nor did he explain how this conclusion could be squared with his November 1997 response to Representative Gilman.

A. Assistant Attorney General Dellinger's Paper

The most extensive publicly available discussion of the ABM Treaty's current legal status produced by a Clinton Administration official is in the June 29, 1996 memorandum from Walter Dellinger, Assistant Attorney General, Office of Legal Counsel, to Presidential Counsel Jack Quinn ("Dellinger Paper"). The Dellinger Paper contends that as a matter of international law the ABM Treaty did not lapse, for these reasons: (i) The Treaty imposed a permanent burden on the parties" respective territories, which would bring the ABM Treaty of 1972 within the inter-

national legal doctrine of "dispositive" treaties (a treaty is dispositive if it irrevocably fixes a right to particular territory, *e.g.* it delineates a border between two States),[1] (ii) U.S. past diplomatic practice assumes that bilateral treaties "generally" survive a State's extinction, and (iii) Article 34 of the 1978 Vienna Convention on Succession of States in Respect of Treaties embodies a general principle of law that bilateral treaties survive a State's extinction. This Memorandum, concluding that the Dellinger Paper is incorrect regarding international law, specifically refutes the three foregoing bases for the contention that the ABM Treaty of 1972 did not lapse.

A.A.G. Dellinger separately argues that irrespective of international law, the President can bring a treaty into existence without Senate consent by exercise of "exclusive" Executive powers. As this Memorandum shows, however, the President has no power to bring a treaty into existence without Senate consent.

B. Methodology and Scope of this Memorandum

After addressing erroneous Constitutional law assertions in the Dellinger Paper, this Memorandum examines the sources of international law bearing on the question of whether, upon the USSR's extinction, the ABM Treaty became a treaty between the United States and the Russian Federation. This analysis does not describe the principles of international law that govern the question of whether a party to a treaty in force has grounds to terminate that treaty.[2] Nor does it describe the rules of international law for allocating the assets, the debt or the archives of a State that has become extinct. Those rules, parts of the law of "State succession," do not resolve the question of how a State's extinction affects what had been that State's bilateral treaties. For example, although the United Nations and the European Community have declared that no State is a continuation of the Social Federal Republic of Yugoslavia ("SFRY"), they nonetheless expect the successor States of the extinct SFRY to bear portions of the SFRY's debt (in proportions to be determined by a continuing conference of the successor States that is called the "Brussels Process").[3]

This Memorandum attempts to describe international law as it would be understood by a disinterested judicial tribunal resolving a dispute between two States as to whether a particular treaty is in force between them. This analysis assumes that the tribunal would (i) decide for itself the relevant questions of fact and law and (ii) give the parties' contentions the weight they deserved but would not be bound by these contentions.

C. Summary of Conclusions

The pertinent sources of international law support the conclusion that, upon the USSR's extinction, the ABM Treaty lapsed, so it no longer has the force of international law. This conclusion is based on the following observations:

1. In December 1991, as accurately characterized by declarations of the CIS States and of the United States, the changes that had recently occurred on what had been the USSR's territory caused the USSR, by operation of law, to cease to exist as a State—that is, such changes brought to an end the international legal personality of the USSR.
2. The ABM Treaty of 1972 was a bilateral treaty.
3. The opinions of recognized scholars constitute evidence of customary international law in a case in which there is (a) no controlling judicial decision, (b) no controlling State practice and (c) no otherwise controlling treaty.

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[1] The concept of dispositive treaties is elaborated *infra* Part IV.K.

[2] Grounds for termination of a treaty include the other party's breach or fraud, and a fundamental change of circumstances that defeats the treaty's object and purpose (the latter is referred to as the doctrine of *rebus sic standibus*).

[3] The Brussels Process is described in Declaration of Christopher R. Hill, Director, Office of South Central European Affairs, United States Department of State, filed in *Federal Republic of Yugoslavia v. Park-71st Corp.*, No. 95 Civ. 3659 (AGS) (S.D.N.Y.) (Sept. 21, 1995), *complaint dismissed*, 913 F.Supp. 191 (S.D.N.Y. 1995) (App. 1). *See also The Ottoman Debt Arbitration* (1925), I.R.I.A.A. 529 (debt of the dissolved Ottoman Empire); *Administration of Finances v. Ornstein*, Ann. Dig. 75 *Roumanian Court of Cassation, Third Chamber (1926)* (debt of a successor of the Austro-Hungarian Empire); Restatement (Third) of the Foreign Relations Law of the United States § 209 (1986); P. K. Menon, The Succession of States in Respect to Treaties, State, Property, Archives and Debt 158–201 (1991); Parry and Grant, Encyclopedic Dictionary of International Law 279 (1986); Thomas Baty, *Division of States: Its Effect on Obligations*, 9 Transactions of the Grotius Society, Problems of War and Peace 119, 121–26 (1923) (published on behalf of the British Institute of International and Comparative Law (1962)); Arthur Berridale Keith, The Theory of State Succession with Special Reference to English and Colonial Law 99–100 (1907).).

4. Scholars are nearly unanimous in concluding that, upon a State's extinction, its bilateral treaties that are not "dispositive" do not by operation of law, *i.e.*, automatically, become treaties between the extinct State's successor and the extinct State's treaty partner—that is, such bilateral treaties lapse.

5. No judicial decision contradicts the scholarly view that a non-dispositive bilateral treaty of an extinct State does not automatically become a treaty of its successor or successors. The U.S. practice is generally consistent with the scholars' view.

6. The United States has never before considered itself bound by international law to accept as its treaty partner the successor to an extinct State.

7. The 1978 Vienna Convention on Succession of States in Respect of Treaties does not bind the United States because the United States is not a party to the Convention.

8. The 1978 Convention in any event would not impose the ABM Treaty on the United States because the imposition would be incompatible with the ABM Treaty's object and purpose.

9. Article 34.1 of the 1978 Vienna Convention on the succession of States in Respect of Treaties has not passed into customary international law.

10. The ABM Treaty did not become a treaty between the United States and the Russian Federation by devolution.

11. The ABM Treaty was not a dispositive treaty.

II. U.S. CONSTITUTION

This Memorandum deals primarily with the international law issues relating to the current legal status of the ABM Treaty of 1972. As the Dellinger Paper, however, puts forward a combination of international law and U.S. Constitutional law arguments, it is necessary to say why Dellinger's Constitutional law contentions are erroneous.

The Dellinger Paper asserts that, regardless of whether under international law the ABM Treaty of 1972 became a treaty with the Russian Federation, an ABM treaty was brought into existence by agreement of the Russian Federation and the President of the United States, notwithstanding the absence of U.S. Senate advice and consent. Dellinger contends that the terms of what he argues is an ABM treaty between the United States and the Russian Federation are not so different from those of the ABM Treaty of 1972 as to constitute a substantive amendment of the latter. Dellinger does not argue that an amendment to the ABM Treaty could have been Constitutionally accomplished by an "Executive Agreement"—that is, by an agreement that would not have required Senate action. Rather, he cites powers—*i.e.*, to interpret treaties, to implement treaties, and to recognize the existence of foreign States—that he asserts rest "exclusively" with the President. Dellinger also seems to argue that the Senate is imputed with knowledge of the breadth (as Dellinger understands it) of Presidential power vis-a-vis treaty-making, and therefore that, when the Senate consents to a treaty, it implicitly authorizes later Presidents to decide without further Senate consent whether the treaty should become a treaty with a successor to the extinct State with which the treaty had been made.[4]

Dellinger's interpretation of the Constitution here is flawed. The principal errors are these:

A. The President Does Not Have Exclusive Authority to Interpret Treaties

Treaties, like statutes, are the supreme law of the land—under the United States Constitution, Art. VI. Cl. 2[5]—and, as a consequence: "[T]he courts have authority to construe treaties. . . ."[6] Therefore, the Constitution vests in U.S. courts the au-

[4] Dellinger does not espouse, and this Memorandum therefore does not address, the thesis stated in Bruce Ackerman and David Golove, *Is NAFTA Constitutional?*, 108 Harv. L. Rev. 799 (1995), that in the 1940s, Congress and the President, without following a process for amendment specified in Article V, expunged from the Constitution the requirement of Article II that treaties require the concurrence of two-thirds of the Senators present. For a skeptical view of the Ackerman/Golove thesis, see Lawrence H. Tribe, *Taking Text Seriously: Reflections on Free-Form Method in Constitutional Interpretation*, 108 Harv. L. Rev. 122 (1995).

[5] U.S. Const. art. VI, cl. 2. *See Foster v. Neilson*, 27 U.S. (2 Pet.) 253 (1829); *United States v. Schooner Peggy*, 5 U.S. (1 Cranch.) 103 (1801); *British Caledonian Airways Ltd. v. Bond*, 665 F.2d 1153, 159–62 (D.C. Cir. 1981); Kenneth C. Randall, *The Treaty Power*, 51 Ohio St. L.J. 1089, 1110–12 (1990).

[6] *Japan Whaling Ass'n v. American Cetacean Society*, 478 U.S. 221, 229 (1986), citing *Baker v. Carr*, 369 U.S. 186, 217 (1969), as holding that "courts have authority to construe treaties

Continued

thority to interpret treaties definitively. In exercising that authority, courts say they give great weight to interpretations suggested by the Executive Branch,[7] but the courts are not bound by those suggestions and have on occasion rejected them.[8]

Perhaps the most celebrated case of judicial rejection of an Executive Branch treaty interpretation is *United States v. Libellants and Claimants of the Schooner Amistad*,[9] the subject of the motion picture "Amistad." In that case, inhabitants of Africa who had been kidnapped by Spaniards in violation of the laws of Spain mutinied on the high seas and were later apprehended in Connecticut by American officials. The Attorney General asked the court to order that the detainees be delivered to persons claiming to be the detainees" owners. The Attorney General argued that the Treaty of 1795 between the United States and Spain should be construed to deny a person held in custody a right to assert that he is not anyone's property. The Court, per Justice Story, rejected the Attorney General's interpretation of the Treaty: "[T]he Treaty with Spain never could have intended to take away the equal rights of all foreigners, who should contest their claims before any of our Courts, to equal justice . . .."[10]

Moreover, it is often impossible to measure the "weight" a court gives to an Executive Branch view, because, at the same time that the court announces that it is giving the Executive Branch view great weight, the court has independently satisfied itself of the correctness of that view. Thus, one court said it concurred in the State Department's view because that view was "coupled" with the court's conclusion that the view was "based on supporting facts."[11] Another court accepted the Executive Branch's interpretation of a treaty after "finding it well-founded and supported by the weight of legal authority."[12] One commentator observed:

> A typical passage from a court opinion interpreting a treaty will begin with the acknowledgment that "the views of the State Department are ordinarily entitled to great weight", but then will go on to say in words or substance that "we find them wholly unpersuasive in the present case. . . ." The judicial adjectives to describe the State Department's various commu-

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and executive agreements." *Doe v. Braden*, 57 U.S. (16 How.) 635, 657 (1853); *Valentine v. United States*, 299 U.S. 5, 11 (1936); *Xerox Corp. v. United States*, 41 F.3d 647, 652 (1995); *Alcan Aluminum Corp. v. United States*, 986 F. Supp. 1436, 1440 (Ct. Int'l Trade 1997), *Snap-On Tools, Inc. v. United States*, 26 Cl. Ct. 1045, 1064 (Cl. Ct. 1997); *United States v. Busby*, 1996 WL 927938 (N.M. Ct. Crim. App.) 3 (1996). For a discussion of the principles courts use in interpreting treaties, see James C. Wolf, *The Jurisprudence of Treaty Interpretation*, 21 U.C. Davis L. Rev. 1023 (1988). Wolfe provides a list of 65 Supreme Court decisions interpreting treaties, from 1795 to 1988. *Id.* at 1025 n.14.

[7] *United States v. Stuart*, 489 U.S. 353, 369 (1989); *Sumitomo Shoji America, Inc. v. Avagliano*, 457 U.S. 176, 180–85 (1982); *Kolovrat v. Oregon*, 366 U.S. 187, 194–95 (1961); *The Amiable Isabella*, 19 U.S. (6 Wheat.) 1, 71 (1821); *Air Canada v. United States Dept. of Transportation*, 843 F.2d 1483, 1487 (D.C. Cir. 1988). *See also Military Payment Orders and Certificates Issued to Prisoners of War—Treaty Interpretation Claims Before and Subsequent to Treaty*, 38 Comp. Gen. 7, 8 (B–136066, July 7, 1958) ("When there is a doubt as to the meaning of a treaty provision, the construction of the treaty by the political department of the government, while not conclusive, is given weight."); *Sullivan v. Kidd*, 254 U.S. 433, 442 (1920) ("While the question of the construction of treaties is judicial in nature, . . . the construction placed upon the treaty . . . by the Executive Department . . . should be given much weight.").

[8] David J. Bederman, *Revivalist Canons and Treaty Interpretation*, 41 U.C.L.A. L. Rev. 953, 962 (1994). *See also Chan v. Korean Air Lines, Ltd.*, 490 U.S. 122, 133–34 (1989) (Court rejects Executive Branch interpretation of Article of the Warsaw Convention for the Unification of Certain Rules Relating to International Transportation By Air); *Perkins v. Elg*, 307 U.S. 325, 334–41 (1939) (Court rejects State Department interpretation of treaty between United States and Sweden relating to citizenship and naturalization); *Haitian Centers Council, Inc. v. McNary*, 969 F.2d 1350, 1361–65 (2nd Cir. 1992), *cert. granted, judgment vacated as moot, Sale v. Haitian Centers Council, Inc.*, 509 U.S. 918 (1993) (Court of Appeals rejects as "untenable" the Executive Branch interpretation of the 1951 Convention Relating to the Status of Refugees, 969 F.2d at 1362); *British Caledonian Airways Ltd. v. Bond*, 665 F.2d 1153, 1160–61 (1981) (court rejects Executive Branch interpretation of Convention on International Civil Aviation); *Galanis v. Pallanck*, 568 F.2d 234, 239 (2d Cir. 1977); *Greci v. Birknes*, 527 F.2d 956, 960 (1st Cir. 1976); *Cannon v. U.S. Dept. of Justice, United States Parole Commission*, 973 F.2d 1190, 1192 (5th Cir. 1992); *Mackin v. United States*, 668 F.2d 122, 132–43 (2d Cir. 1981); *Abu Eain v. Wilkes* 641 F. 2d 504, 517–18 (7th Cir. 1981); *Caltagirone v. Grant*, 629 F.2d 739, 742–45 (2d Cir. 1980). Judicial treaty interpretation that accepted as accurate the views of the Executive Branch include *Kolovrat v. Oregon*, 366 U.S. 187, 192–93 (1961); *Bacardi Corp. of America v. Domenech*, 311 U.S. 150, 157–64 (1940); *Jordan v. Tashiro*, 278 U.S. 123, 127–30 (1928).

[9] 40 U.S. (15 Pet.) 518 (1841).

[10] *Id.* at 596.

[11] *Matter of the Extradition of Demjanjuk*, 612 F. Supp. 544, 562–63 (N.D. Ohio 1985).

[12] *Ivancevic v. Artukovic*, 211 F.2d 565, 573 (9th Cir.), *cert denied*, 348 U.S. 818 (1954).

> nications on the meaning and application of the treaty ranged from "entirely conclusory" to "largely insignificant" to "an aberration." [13]

The most recent Supreme Court opinion interpreting a treaty, *Sale v. Haitian Centers Council, Inc.,*[14] devoted ten pages to an analysis of the meaning of Article 33 of the 1951 Convention relating to the Status of Refugees, including an examination of the history of the drafting of the Convention, and a review of English-French dictionaries to determine how the parenthetical use of "refouler" contributed to understanding the meaning of the phrase "expel or return ("refouler")." That exercise would have represented needless effort if the Court had believed that the Executive Branch's interpretation of Article 33 was necessarily controlling.

One scholar observed:

> Yet it is clear that the President's interpretive power is limited. He cannot make an altogether new treaty and dispense with the requirement of Senate advice and consent by calling that treaty an "interpretation" of an earlier one. . . . The President's semantic denomination of his act cannot by itself control the procedure constitutionally required.[15]

The Judiciary's power to interpret treaties includes the power to determine whether a treaty continues to exist. One court observed that in exercising the power to decide whether a treaty exists, the court gives weight to the Executive Branch's view when the court is satisfied that that view "is based on supporting facts." [16]

The preceding description of judicial paramountcy in treaty interpretation is not intended to imply that every separation-of-power dispute can be resolved by a court. Some cannot be so resolved, because they are "political" questions, and therefore non-justiciable. For example, whether a particular state measure fulfills the Constitution's guaranty of a "republican form of government" is a non-justiciable political question.[17] But the fact that a particular action of the Executive Branch cannot be tested in court does not give that Branch *carte blanche* to encroach on another

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[13] Lori Fisler Damrosch, *Application of Customary International Law by National Tribunals*, 76 Am. Soc'y Int'l. L. Proc. 231, 252 (Apr. 22–24, 1982).

[14] 509 U.S. 155, 177–87 (1993).

[15] Michael J. Glennon, Constitutional Diplomacy 134 (1990). From 1977 to 1980, Professor Glennon was Legal Counsel to the United States Senate Foreign Relations Committee.

[16] *Ivancevic v. Artukovic*, 211 F.2d 565, 573 (9th Cir.), *cert. denied*, 348 U.S. 818 (1954). In articulating the rule that courts should give great weight to the Executive Branch view, courts place varying degrees of emphasis on the weight they say they are giving to the view of the Executive Branch. See, e.g., *Terlinden v. Ames*, 184 U.S. 270, 285 (1902), which, after reviewing the history of the creation of the German Empire in the Nineteenth Century, found that in the creation of the Empire, the Kingdom of Prussia had not lost its identity, and therefore that the Treaty of extradition between the United States and the Kingdom of Prussia remained in effect unless it had later been terminated by one of the parties. On the issue of whether the Treaty had been terminated, the court found no evidence of "governmental action" to terminate. The Court's inquiry into the German Empire's constitution and the international law of treaties and state succession in order to determine whether the treaty with Prussia survived the formulation of the German Empire has been characterized as "an ordinary adjudication in which the Court plays its usual role, albeit with some deference to the evidence adduced by government experts." Thomas M. Franck, Political Questions/Judicial Answers: Does the Rule of Law Apply to Foreign Affairs? 23–25 (1992). Also, see *Then v. Melendez*, 92 F.3d 851, 854 (9th Cir. 1996), which examined the history of extradition treaties between the United States and the United Kingdom to satisfy itself that none of the changes that occurred when the British colony of Singapore emerged as an independent State nullified, as to territory within Singapore, the 1931 U.S.-U.K. extradition treaty. In reaching that conclusion, the court said it had given great weight to the views of the Executive Branch as to the historical facts, because "federal courts are not as well equipped as the Executive Branch to determine when the emergence of a new country brings changes that terminate old treaty obligations." Similarly, in *Arnbjornsdottir-Mendler v. United States*, 721 F.2d 679 (9th Cir. 1983), after giving "deference" to the Executive Branch on extradition matters, and after having made "an independent review" of Iceland's "historical continuity," the court concluded that an extradition treaty existed between the United States and Iceland. One Court of Appeals decision, *Saroop v. Garcia*, 109 F. 3d 165 (3d Cir. 1997), contains language to the effect that whether a treaty exists between the United States and another State is a "political question" that no American court has capacity to decide. That language was not necessary to resolve the case, because the court held that in any event on the question before it, the court would, as a matter of "comity," defer to a decision of the highest court of Trinidad and Tobago. In any event, the discussion of the political question doctrine at notes 17–20, *infra*, shows that the Executive Branch is expected to stay within its zone of Constitutional authority, even when a case challenging its encroachment cannot be presented to a court in a justiciable form.

[17] *Colegrove v. Green,* 328 U.S. 549 (1946). *See also Baker v. Carr*, 369 U.S. 186, 209 (1962).

Branch. The Supreme Court made the point in 1992 in *United States Dept. of Commerce v. Montana*:[18]

> In invoking the political question doctrine, a court acknowledges the possibility that a constitutional provision may not be judicially enforceable. *Such a decision is of course very different from determining that specific congressional action does not violate the Constitution*. (emphasis added)

As A.A.G. Dellinger stated in a May 1996 opinion, the Executive Branch has an "independent constitutional obligation to interpret and apply the Constitution."[19] Dellinger also stated that the Congress as well as the President has a duty to resist unconstitutional encroachment by the other Branch. Dellinger invoked a 1933 opinion of Attorney General Mitchell:

> Since the organization of the Government, Presidents have felt bound to insist upon the maintenance of the Executive functions unimpa[i]red by legislative encroachment, just as the legislative branch has felt bound to resist interferences with its power by the Executive.[20]

In short, absence of an opportunity for judicial review for a particular treaty interpretation would not give the President authority to encroach on the Senate's power of advice and consent, or to arrogate to himself the Congress" power to nullify a treaty by means of a statute that came into law without the President's signature, *i.e.,* by an override of a Presidential veto.

The rule that the Judiciary has the last word on treaty interpretation was not impaired by the announcement in the *Curtiss-Wright Export* case in 1936 that the President is the "sole organ" of the federal government in the field of international relations.[21] After *Curtiss-Wright*, as well as before, the Judiciary, not the President, interpreted treaties definitively. That is not surprising, given the narrowness of the issue resolved in *Curtiss-Wright, i.e.*, whether the Congress, by Joint Resolution, could validly authorize the President to issue regulations prohibiting a violation of a Joint Resolution, when the President issued the proclamation the same day as the Joint Resolution was adopted by both Houses.

In the sixty-two years that followed the decision in *Curtiss-Wright*, the Supreme Court has not invoked the "sole organ" doctrine to deprive the judiciary of ultimate authority to interpret treaties. Indeed, soon after *Curtiss-Wright*, the Court decided *Guaranty Trust Co. v. United States*.[22] The Court construed an executive agreement between the United States and the Soviet Union (an agreement as to which Senate advice and consent had not been obtained). In *United States v. Pink*[23] the Court referred to *Guaranty Trust* as supporting the proposition that "[e]ven Treaties with foreign nations will be carefully construed so as not to derogate from the authority and jurisdiction of the States." To the same purpose, the Court cited *Todok v. Union Bank of Harvard, Nebraska*,[24] construing a treaty between the United States and Norway on testamentary disposition, where "[t]he only question before us is the construction of the treaty."[25]

In short, whatever the sole organ doctrine may mean in other contexts, it does not mean that the Executive Branch has exclusive authority to interpret treaties. Indeed, it does not override the judicial paramountcy in the interpretation of treaties.

Moreover, in light of the rule that a treaty, like a statute, is the supreme law of the land,[26] if the President had the final power to interpret a treaty, he would have

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[18] 503 U.S. 442, 457–58 (1992).

[19] Walter Dellinger, Assistant Attorney General, Memorandum for the General Counsels of the Federal Government, *The Constitutional Separation of Powers Between the President and Congress* (May 7, 1996), 1996 WL 876050.

[20] Opinion of Attorney General William Mitchell, *Constitutionality of Proposed Legislation Affecting Tax Refunds*, 37 Op. Att'y Gen. 56, 64 (Jan. 24, 1933).

[21] *United States v. Curtiss-Wright Export Corp.*, 299 U.S. 304 (1936). For critical analyses of the "sole organ" *dictum*, see David Gray Adler & Larry N. George, The Constitution and the Conduct of American Foreign Policy 37–38 (1996); Raul Berger, Executive Privilege: A Constitutional Myth, 133–35; Arthur Bestor, *Respective Roles of Senate and President in the Making and Abrogation of Treaties—The Original Intent of the Framers of the Constitution Historically Examined*, 55 Wash. L. Rev. 1, 73–106 (1979); Randall, *supra* note 5, at 1106–11.

[22] 304 U.S. 126 (1938).

[23] 315 U.S. 203 (1942).

[24] 281 U.S. 449 (1930).

[25] *Id.* at 452.

[26] *Reid v. Covert*, 354 U.S. 1, 33 n.34 (1957); *Whitney v. Robertson*, 124 U.S. 190, 194 (1888); *Head Money Cases (Edy v. Robertson)*, 112 U.S. 580, 599 (1884); *Committee of the United States Citizens Living in Nicaragua v. Reagan*, 859 F.2d 929, 936 (D.C. Cir. 1988). As a consequence of the rule that a treaty, like a statute, is the supreme law of the land, if a statute and a treaty

the *de facto* power to nullify or "dispense with" or "suspend" a treaty—that is, he would have a power to suspend or dispense with a law. But the President has no power to "dispense with" or to "suspend" a law—a principle announced in *United States v. Smith* in 1806, which held that President James Madison was bound by an Act of Congress that prohibited citizens from carrying on war against a nation with which the United States was at peace.[27] As the Court explained, "because the President does not possess a dispensing power," he cannot authorize anyone to disregard a statute.[28]

In 1972, in *United States v. Monongahela Connecting Railroad Co.*,[29] District Judge Dumbauld stated: "Of course there is no "dispensing power" in an executive or administrative agency unless Congress has specifically granted it." Judge Dumbauld cited his own work, Edward Dumbauld, The Constitution of the United States 7, 12 (1964), which describes the struggle between James II and the Parliament that led to James II's abdication and exile, and the acceptance by William and Mary in 1689 of the Bill of Rights, the first article of which recites, "That the pretended power of suspending laws, of the execution of laws, by regal authority, without consent of parliament is illegal." *Id.* at 12. That event is said to have established that the King had no dispensing or suspending power, and therefore made it unnecessary for the Framers of the Constitution to make express that they were not allocating to the office of the President a power to dispense with law. "[N]ot even the most ardent Antifederalists feared that the Constitution of 1787 had given the President a power to suspend the laws."[30]

The most recent decision on the question of whether the President has dispensing power is *Spence v. Clinton*, a District Court decision in 1996. It explains why the President had no authority to "defy" the Ballistic Missile Act of 1995. The court stated:

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conflict, "the one last in date will control the other." *Whitney v. Robertson*, 124 U.S. 190, 194 (1888) (plurality opinion), *quoted in Breard v. Gilmore*, 523 U.S. 371 (1998). To like effect is *Reid v. Covert*, 354 U.S. 1, 18 (1957).

[27] The question of Presidential authority to terminate a treaty unilaterally was the subject of *Goldwater v. Carter*, 617 F.2d 717 (D.C. Cir.), *vacated on other grounds*, 444 U.S. 996 (1979), discussed *infra*.

[28] *United States v. Smith*, 27 F. Cas. 1192 (C.C.D.N.Y. 1806). To like effect is *Kendall v. United States ex rel Stokes*, 37 U.S. (12 Pet.) 524, 613 (1838) (The Supreme Court, in declaring invalid the refusal of President Andrew Jackson's Postmaster-General to execute a statute requiring payments to postmasters, stated that, allowing the Postmaster-General, on the President's authority, to refuse to execute a statute, "would be vesting in the President a dispensing power, which has no countenance for its support in any part of the constitution; and is asserting a principle, which, if carried out in its results, to all cases falling within it, would be clothing the President with a power entirely to control the legislation of congress, and paralyze the administration of justice.")

[29] 351 F. Supp. 696, 698 (W.D. Pa. 1972).

[30] Christopher N. May, *Presidential Defiance of "Unconstitutional Laws': Reviving the Royal Prerogative*, 21 Hastings Const. L.Q. 865, 885–88 (1994). *See also National Treasury Employees Union v. Nixon*, 492 F.2d 587, 604 (D.C. Cir. 1974), quoting *Kendall v. United States* on the lack of dispensing power, in explanation of why the Court had jurisdiction to declare that the President had not obeyed the Federal Pay Comparability Act. Similarly, in 1975, in *Michigan Head Start Directors Ass'n v. Butz,* 397 F. Supp. 1124 (W.D. Mich. 1975), the court based its decision ordering the Secretary of Agriculture to comply with the National School Lunch Act on the absence of a Presidential power to suspend legislation, "a power not enjoyed by the English Monarch since the Glorious Revolution of 1688." Also, in *Ameron, Inc. v. United States Army Corps of Engineers*, 610 F. Supp. 750 (D.N.J. 1985), *aff'd as modified*, 787 F.2d 875 (3d Cir. 1986), *aff'd on reh'g*, 809 F.2d 979 (3d Cir. 1986), the District Court describes James II's forced exile, and the acceptance of England's Bill of Rights by William and Mary as the foundation for "[t]he rule that no executive official can decide for himself what laws he is bound to obey, but must await the decisions of the Judiciary and until then must obey the laws, [a rule that] has deep roots in our constitutional history." Also, the duty to execute the law faithfully is viewed as a sign of the non-existence of Presidential suspending power. Statement on Behalf of the Office of General Counsel to the Clerk of House of Representatives Regarding The Executive Branch's Declaration That The Competition in Contracting Act Is Unconstitutional, Hearings Before a Subcommittee of the Committee on Government Operations, House of Representatives, on Constitutionality of GAO's Bid Protest Function, 99th Cong., 1st Sess. (Feb. 28; March 7, 1985) ('Scholars have concluded that the "faithful execution" clause of our Constitution is a mirror of the English Bill of Rights" "abolition of the suspending power," that is, the abolition of what the English Bill of Rights has called "the pretended [Royal] power of Suspending … the Execution of Laws.") The same point is made in a Statement of Senator William S. Cohen and Senator Carl Levin in Hearings on the Constitutionality of GAO's Bid Protest Function Before a Subcommittee of the committee on Government Operations, House of Representatives, 99th Cong., 1st Sess. 486, 490 (Feb. 28, March 7, 1985) ("Absent a court ruling, we strongly believe that a unilateral decision by the Executive Branch to refuse to enforce a statute constitutes a usurpation of the proper role of the judiciary and a failure of the President to meet his constitutional responsibility to take Care that the Laws be faithfully executed.").

> Such an outcome would [give] the President the ability to nullify duly authorized congressional actions. The Founding Fathers strongly believed that such a power would be dangerous and unwarranted. Constitutional scholars speak with one voice in concurring with this assessment.[31]

In support of that observation, the court quoted James Madison:

> To give such a prerogative would certainly be obnoxious to the temper of this country.[32]

Nothing in *Goldwater v. Carter*,[33] is to the contrary. That case involves undoing a treaty with one regime claiming to govern China and recognizing a different regime claiming to be the government of China. Neither regime nor the United States claimed that China had ceased to exist. The case arose out of these events: In 1954 the United States entered into a Mutual Defense Treaty that on its face was a treaty between the United States and China. The Treaty was signed by a person who was part of a government situated on Taiwan calling itself the Republic of China, (the "ROC") and claiming authority over the entire territory of China, including the Chinese Mainland. At that time, and ever since, a government situated on the Mainland, and calling itself the "People's Republic of China" ("PRC") claimed authority over the entire territory of China, including Taiwan. In 1978, President Jimmy Carter announced that the United States would terminate the Mutual Defense Treaty that had been made with the Taiwan-based government.

Senator Barry Goldwater brought suit in a District Court, asking the Court to declare that without the consent of the Senate, President Carter lacked authority to terminate the Treaty. Senator Goldwater asserted that termination without Senate deliberation would deprive him of an opportunity to vote on the question of whether the Treaty should be terminated. A majority of Justices of the Supreme Court concluded that Senator Goldwater's case should be sent to the District Court to be dismissed, but no majority could agree on the reasons for that result. Four Justices (Rehnquist, Burger, Stewart and Stevens) said that to decide whether the Senate had authority to participate in a treaty-termination decision would be to decide a non-justiciable "political question," *i.e*, not the kind of controversy that the Constitution vested authority in the Judiciary to decide. Justice Marshall gave no reason for his decision in favor of dismissal. Justice Powell said that he considered the question to be justiciable, but supported dismissal on the ground that it was not ripe for decision, because the Congress had not yet challenged the President's authority by "appropriate formal action." 444 U.S. at 536. Two of the Justices who voted to hear the case (Blackmun and White) said the case was ripe, and therefore should be heard on the merits. Justice Brennan expressed the view that the case was justiciable, and that the lower court had correctly decided the case to the extent that it rested on the principle that the President had exclusive authority "to recognize, and withdraw recognition from, foreign governments."

Given the absence of a majority explanation of the reason for the result, *Goldwater v. Carter* has little value for predictive jurisprudence with respect to treaties with a State that has not lost its existence but only changed its government, let alone with respect to treaties of a State that has ceased to exist.

In any event, even the Judiciary's power to interpret treaties definitively must be exercised so as to avoid making a significant amendment, because that too would trench upon the Senate's power to give advice and consent to the making of the treaty. One court explained:

> A significant amendment to a treaty must follow the mandate of the Treaty Clause and therefore must be proposed by the President and be ratified following the advice and consent of the Senate.[34]

Similarly,

> Courts are not authorized to annul or disregard provisions of a treaty . . . since an annulment or disregard would constitute a modification of the treaty, and treaty modifications are solely within the province of the Senate.[35]

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[31] *Spence v. Clinton*, 942 F. Supp. 32, 38 (D.D.C. 1996) (footnotes omitted).

[32] I.M. Farrand, *The Records of the Federal Constitution of 1787* 100 (1966).

[33] *Goldwater v. Carter*, 444 U.S. 996 (1979).

[34] *New York Chinese TV Programs, Inc. v. U.E. Enters., Inc.*, 954 F.2d 847, 853 (2d Cir. 1991), *cert. denied*, 506 U.S. 827 (1992).

[35] *In re Air Crash Disaster at Warsaw Poland on March 14, 1980*, 535 F. Supp. 833, 843 (E.D.N.Y. 1982), *aff'd*, 705 F. 2d. 85 (2d. Cir.), *cert. denied*, 464 U.S. 845 (1983). *See also* Testimony of Columbia Law School Professor Louis Henkin, in Joint Hearings before the Committee

B. The President Does Not Have Exclusive Authority to Implement Treaties

While Dellinger argues that the President has exclusive authority to implement treaties, the Constitution vests in the Congress the authority to make all laws "necessary and proper" to implement, *i.e.,* to "carry into execution," not only all the lawmaking powers enumerated in Article I, section 8, but also "all other powers vested by this Constitution in the Government of the United States or in any Department or Officer thereof."[36] The recognized powers of Congress to implement (or fail to implement) a treaty "by an apportionment or other law essential to its effectuation, . . . are legislative powers, not treaty-making or treaty-termination powers."[37]

Hence, the Congress has the authority to make laws implementing treaties. It follows that the President can no more create a treaty by calling its creation an implementation than he can create a statute by calling its creation an implementation of another statute.

C. Presidential Authority to Grant Formal Recognition to Foreign States Does Not Imply Authority to Make Treaties with Those States Without Senate Concurrence

As a matter of international law, when a U.S. President grants recognition to a foreign State, the President imposes no duty or obligation on the United States that the United States would not in any event be obliged to discharge. In contrast, when a U.S. President brings a treaty into force, its terms must be fulfilled (unless there is a valid ground under international law, such as coercion or fraud, for not fulfilling them.).[38]

The Constitution, Art. II. sec. 3, requires the President to "receive Ambassadors and other public Ministers," a provision that implies authority to determine whether a particular person is a bona fide representative of a particular foreign State. In turn, that implies that the President has authority to determine whether or not such a foreign State exists. An entity exists as a State if it meets the test of Statehood, *i.e.*, has a defined territory and a permanent population, controls its own governance, and has the capacity to conduct formal relations with States.[39] International law requires that each other State treat that entity as a State, irrespective of whether such other State has "formally" recognized that entity as a State.[40]

> Recognition, *as a public act of state*, is an optional and political act and there is no legal duty in this regard. However, in a deeper sense, if an entity bears the marks of statehood other states put themselves at risk legally if they ignore the basic obligations of state relations. . . . In this context of state *conduct*, there is a legal duty to accept and apply certain fundamental rules of international law: there is a legal duty to "recognize" for certain purposes at least, but no duty to make an express, public, and political determination of the question or to declare readiness to enter into dip-

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on Foreign Relations and the Committee on the Judiciary, United States, Senate, 100th Cong. 1st Sess., on the ABM Treaty and the Constitution 881 (March 11, 1987).

[36] *Neely v. Henkel*, 180 U.S. 109, 121 (1901) (The necessary and proper clause of U.S. Constitution Article 1, section 8 "includes the power to enact such legislation as is appropriate to give efficacy to any stipulations which it is competent for the President by and with the advice and consent of the Senate to insert in a treaty with a foreign power.") To like effect are *Missouri v. Holland*, 252 U.S. 416, 432–33 (1920); *United States v. Lue*, 134 F.3d 79, 82 (2d Cir. 1998); *Goldwater v. Carter*, 617 F.2d 697, 717 (D.C. Cir.), *vacated on other grounds*, 444 U.S. 996 (1979).

[37] Peter M. Shane & Harold H. Bruff, Separation of Powers Law: Cases and Materials 621 (1996).

[38] *Factor v. Laubenheimer*, 290 U.S. 276, 298 (1933) ("Until a treaty has been denounced, it is the duty of both the government and the courts to sanction the performance of the obligations reciprocal to the rights which the treaty declares and the government asserts even though the other party to it holds a different view of its meaning."); *United States v. Kirby*, 106 F.3d 855, 859 (9th Cir. 1997); *United States v. A.L. Burbank & Co., Ltd.*, 575 F.2d 9, 22 (2d Cir. 1975). J.H.H. Weiler & Ulrich R. Haltern, *The Autonomy of the Community of Legal Order—Through the Looking Glass*, 37 Harv. Int'l L.J. 411, 441 (1996).

[39] Restatement (Third) of the Foreign Relations Law of the United States § 201 (1986). The law pertaining to the recognition of a State's existence is distinct from international law pertinent to the recognition of the government of a State. Under international law, a change in the government of a recognized State, without more, does not impair the State's existence as a State. Edwin L. Fountain, *Out from the Precarious Orbit of Politics: Reconsidering Recognition and the Standing of Foreign Governments to Sue in American Courts*, 29 Va. J. Int'l L. 473, 474–76 (1989); D.P. O'Connell, I International Law 127–28 (2d ed. 1970); Restatement (Third) of The Foreign Relations Law of the United States § 202, 203 (1986).

[40] *Id.* at § 202, cmt. c.

lomatic relations by means of recognition. This latter type of recognition remains political and discretionary.[41]

Were the President to use the recognition function to make a treaty that would not otherwise exist, he would put the United States under a legal obligation to other States without Senate advice and consent. In short, there is no merit to Dellinger's suggestion that the exclusive power to recognize States allows the President to make treaties without Senate advice and consent. The President's recognition authority cannot be exercised in a manner that would nullify the U.S. Senate's authority to advise and consent on the making of a treaty.

Hence, if a foreign State ceases to exist under international law and, consequently, a bilateral treaty between the extinct State and the United States lapses, the President cannot use the "receive Ambassadors" clause to bring a new treaty into force between the United States and a successor to the extinct State without Senate advice and consent. In other words, the President cannot, without Senate approval, bring a lapsed treaty back to life by declaring that a given foreign State is the successor or continuation of an extinct State. Principles of international law govern the issue of the extinction of States. However broad the President's authority may be to recognize States and governments of States under the "receive Ambassadors" clause, it is necessarily limited by the specific Constitutional requirement for Senate advice and consent on the making of treaties.

D. The Senate's Concurrence in the Making of a Treaty With One State Does Not Constitute Consent to the Making of a Treaty With a Successor-State

When the Senate consents to a treaty with a given foreign State, does it impliedly authorize future Presidents to make a treaty on the same subject with a new State that is a successor to that given foreign State? An affirmative answer would violate the rule against the President's creating law unilaterally. A treaty cannot be interpreted "[t]o alter, amend, or add to the Treaty, by asserting any clause, whether small or great, important or trivial . . ."[42] In 1989, in *Chan v. Korean Air Lines, Ltd.*,[43] the Supreme Court invoked its 1821 decision in *The Amiable Isabella*[44] to explain that an interpretation that makes a change in a treaty "whether small or great, important or trivial" would constitute a "usurpation of power, and not an exercise of judicial functions," adding: "It would be to make, and not to construe, a treaty." Though the caution in that case was aimed at judges, it applies equally to interpretations by the Executive Branch because it states that any change would be "to make, not construe, a treaty," a clear reference to the treaty-making process, of which Senate advice and consent is an essential part. In light of that rule, there is no room for an inference that Senate advice and consent implicitly authorizes later changes by a President.

In that regard, Dellinger appears to argue otherwise, conjecturing that in 1972 the Senate must have known of what Dellinger argues was past U.S. diplomatic practice with regard to State succession, *i.e.*, when a State dissolves, its treaties with the United States bind the United States *vis-a-vis* the extinct State's successor or successors. Dellinger's assertion disregards the U.S. policy and practice of regarding as lapsed an extinct State's bilateral treaties, a practice that began at least as early as the annexation of the Kingdom of Hawaii in 1898,[45] and was recently manifested in dealing with all five States that succeeded the extinct Yugoslavia.[46] Thus, if any conjecture about the Senate's 1972 understanding is warranted, the reasonable conjecture is that it knew of the practice of regarding extinct States" treaties as lapsed. In any event, Dellinger does not claim that, after the USSR's dissolution, the Senate consented to the making of an ABM Treaty with the Russian Federation. Presumably, Dellinger understands that "Ordinarily, Congress" silence is just that—

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[41] Ian Brownlie, Principles of Public International Law 94–95 (2d ed. 1973) (emphasis added) (footnote omitted). "Recognition of State is the affirmation, usually by the government of another state, that a new nation has come into existence which, at least as far as the recognizer is concerned, is subject to all the rights and duties of a state in international law." Thomas M. Franck & Michael J. Glennon, Foreign Relations and National Security Law: Cases, Materials and Simulations 1021 (1993).

[42] *The Amiable Isabella*, 19 U.S. 1 (6 Wheat.) 1, 71 (1821); *Chan v. Korean Air Lines, Ltd.*, 490 U.S. 122, 135–36 (1984); *Kass v. Reno*, 83 F.3d 1186, 1189 (10th Cir. 1996). *See also The Society for the Propagation of the Gospel in Foreign Parts v. New-Haven*, 21 U.S. (8 Wheat.) 464, 490 (1823).

[43] 490 U.S. 122, 134–135 (1989).

[44] 19 U.S. (6 Wheat.) 1, 71 (1821).

[45] *See* Statement of Secretary Sherman to Japanese Minister, described *supra* Part IV.D..

[46] See discussion at IV.F.4, *infra*.

silence,"[47] and does not constitute the exercise of its power to make or to repeal laws,[48] including treaties.[49]

Finally, there is no evidence that after the USSR's dissolution, the Senate, by voting on various ABM Treaty matters, consented to bringing an ABM Treaty into force between the United States and the Russian Federation. None of the laws passed since the USSR's extinction that relate to the ABM Treaty contains words that can be fairly construed as giving consent to the bringing into force of an ABM Treaty that is not already in force. In construing a statute, its words are to be given their plain meanings.[50] Moreover, legislative history, an aid to the construction of ambiguous words,[51] contains no evidence that either House of Congress, in voting on bills relating to ABM Treaty matters, was voting to bring into force an ABM Treaty that was not otherwise in force.

Hence, if an ABM treaty now exists between the United States and the Russian Federation, it exists only if, under international law, the Treaty did not lapse upon the USSR's extinction.

None of the Dellinger Paper's arguments is supported by international law. International law points to an opposite conclusion: Upon the USSR's extinction, the ABM Treaty did not become a treaty between the United States and the Russian Federation.

This Memorandum does not contend that the United States and the Russian Federation cannot make a treaty between themselves or with other States to limit ABM systems. But such a treaty would require the concurrence of "two thirds of the Senators present," as provided by Article II, section 2 of the U.S. Constitution.

III. FACTUAL BACKGROUND

As a predicate to the legal analysis below, it is useful to review facts pertaining to the USSR's extinction and the U.S. State Department's position thereon, President Clinton's position on the ABM Treaty of 1972, and the purpose of the ABM Treaty of 1972 as seen by the U.S. government at the time of Senate approval of ratification.[52]

A. Extinction of the USSR

On December 8, 1991, at Minsk, the Republic of Belarus, the Russian Federation ('RSFSR") and Ukraine, as the USSR's founders and as signatories to the Union Treaty of 1922 that created the USSR, declared that the USSR, "as a subject of international law and a geopolitical reality no longer exists."[53] Also, they signed the Agreement Establishing the Commonwealth of Independent States. The Agreement invited other States to join. On December 21, 1991, at Alma Ata, eight other States joined.[54] The Agreement included a provision supporting the Russian Federation's assumption of the USSR's permanent seat in the U.N. Security Council.

President George Bush, in his December 25, 1991 address to the nation on the CIS, said that "The Soviet Union itself is no more."[55] On January 22, 1992 President Bush, in addressing the International Conference on Humanitarian Assistance to the former USSR, referred to "the dramatic revolution that swept away Soviet communism and left in its place 12 new nations. . . ."[56] President Bush also referred

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[47] *Alaska Airlines, Inc. v. Brock*, 480 U.S. 678, 686 (1987).

[48] *Patterson v. McLean Credit Union*, 491 U.S. 164, 175 (1989); *United States v. Wells*, 519 U.S. 482, 495 (1997); *NLRB v. Plasterers" Local Union No. 79*, 404 U.S. 116, 129–30 (1971).

[49] *TransWorld Airlines, Inc. v. Franklin Mint Corp.*, 466 U.S. 243, 252 (1984).

[50] *United States v. Gonzales*, 520 U.S. 1 (1997).

[51] *Barnhill v. Johnson*, 503 U.S. 393, 401 (1992).

[52] Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems (the "ABM Treaty"), May 26, 1972, U.S.-U.S.S.R. (App. 2). The Treaty was amended in 1974 to reduce the allowed number of ABM deployment areas of each party from two to one. The United States chose its ICBM emplacements near Grand Forks, North Dakota. The USSR chose Moscow. Each party was given a single option to shift its defense area upon advance notice at the time of scheduled 5-year Treaty review. Protocol to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems (App. 2) (including 1974 Protocol).

[53] Agreement Establishing the Commonwealth of Independent States, Dec. 8, 1991, Belarus-RSFSR-Ukraine, 31 I.L.M. 143 (App. 3).

[54] Agreement Establishing the Commonwealth of Independent States, Art. 12, Dec. 21, 1991, 31 I.L.M. 147–54 (App. 4).

[55] President George Bush, *Address to the Nation on the Commonwealth of Independent States*, 27 Weekly Comp. Pres. Doc. 1883 (Dec. 25, 1991) (App. 5).

[56] President George Bush, *Address to the International Conference on Humanitarian Affairs* (Jan. 22, 1992), in I Public Papers of the President of the United States, George Bush 127 (GPO 1993) [hereinafter Public Papers] (App. 6).

to the "dissolution of the Soviet Union . . .".[57] On April 1, 1992, President Bush referred to "Russia, Ukraine and the other new States that have replaced the Soviet Union."[58] President Bush stated that he was "seeking to conclude trade, bilateral investment and tax treaties with each of the new Commonwealth States."[59]

B. State Department Study of the Effect of the USSR's Extinction

In early 1992, State Department Legal Adviser Edwin D. Williamson announced that the State Department was conducting a study of the effect of the USSR's extinction on its treaties with the United States, including the ABM Treaty.[60] In 1997, President Clinton described the process as follows:

> When the USSR dissolved at the end of 1991, it became necessary to reach agreement as to which former Soviet States would collectively assume its rights and obligations under the [ABM] Treaty (which clearly continued in force by its own terms). The United States took the view that, as a general principle, agreements between the United States and the USSR that were in force at the time of the dissolution of the Soviet Union would be presumed to continue in force as to the former Republics. It became clear, however, particularly in the area of arms control, that a case-by-case review of each agreement was necessary.[61]

During that study, according to the State Department's official annual list of U.S. Treaties in Force, "The United States is reviewing the continued applicability of [listed] agreements [including the ABM Treaty] . . .".[62]

The State Department's practice of studying the status of treaties between the United States and extinct States was described in 1965 by Assistant Legal Adviser Charles I. Bevans: The practice is to negotiate with a new State "as soon as possible." If a new State has a "devolution" agreement with or otherwise announces it would be bound by its predecessor's treaties, the fact is "noted" in Treaties in Force, but the United States does not consider itself bound by the devolution agreement to accept such a treaty as being in force between the United States and the successor State.[63]

State Department practice regarding devolution agreements and proclamations is consistent with the view expressed in scholarly writings. For example, in 1969 a Committee of the United Nations' International Law Commission stated:

> Conversely, on the date of the succession, the territory passes into the treaty regime of the newly emerged State; and, since the devolution agreement is incapable by itself of effecting an assignment of the predecessor's treaty obligations to the successor State, the agreement does not *of itself* establish any treaty nexus between the successor State and third States parties to the treaties of the predecessor State. Thus, even if a newly emerged State has concluded a devolution agreement, the only treaty obligations of the predecessor State which can immediately become obligations also of the successor State vis-a-vis the other contracting parties are such obligations, if any, as would in any event pass to the successor State by operation of the general rules of the international law independently of the devolution agreement.[64]

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[57] *Id.*

[58] President George Bush, Statement at *News Conference on Aid to the States of the Former Soviet Union*, in Public Papers, *supra* note 36, at 522 (App. 6).

[59] President George Bush, *Remarks to the American Society of Newspaper Editors*, in Public Papers, *supra* note 36, at 566 (App. 6).

[60] Edwin D. Williamson, Remarks on *State Succession and Relations with Federal States*, 86 Am. Soc. of Int'l L. Ann. Meeting Procs. 10, 12 (Apr. 1–4, 1992).

[61] Letter from President William J. Clinton to Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives (Nov. 21, 1997) (App. 7).

[62] United States Department of State, *Treaties in Force, A List of Treaties and Other International Agreements of the United States in Force on January 1, 1997* 282 (1997) (App. 8). *Compare with* United States Department of State, *Treaties in Force, A List of Treaties and Other International Agreements of the United States in Force on January 1, 1992* 247, 248 (1992) (App. 9).

[63] Letter from Charles I. Bevans, Assistant Legal Adviser, United States Department of State, to Professor William W. Bishop, Jr., Editor-in-Chief, The American Journal of International Law (July 27, 1964), *reprinted in* Committee on State Succession to Treaties and Other Governmental Obligations, International Law Association, The Effect of Independence on Treaties 382, 385–86 (1965). *See also* Sari T. Korman, *The 1978 Vienna Convention on Succession of States in Respect of Treaties: An Inadequate Response to the Issue of State Succession*, 16 Suffolk Transnat'l L. Rev. 174, 180 (1992).

[64] Sir Humphrey Waldock, Special Rapporteur, *Second Report on Succession in Respect of Treaties*, 1969 II Y.B. Int'l L. Comm'n 45, 57, UN Doc. A/CN.4/SER.A/1969/Add.1.

State Department Legal Adviser Edwin D. Williamson stated that while the study of the ABM treaty was pending, the State Department would use a "presumptive continuity" model in its dealings with the USSR's successor States.[65] "Continuity," as applied to treaties, is a term used by scholars to describe the fact that a treaty between two particular States (the "treaty partners") has become a treaty between one of the partners and another State. For example, when a State dissolves and a successor State (or States) emerges on what had been the territory of the dissolved State, a successor State may agree with the dissolved State's treaty partner that the dissolved State's treaties should "continue" in effect as between the successor State and the dissolved State's treaty partner. In that event, the treaty in question is said to have come into effect with the successor State by a process of "continuity." Thus, when Norway and the Russian Federation agreed that they would consider as treaties between them certain designated treaties that had been in effect between Norway and the USSR, those treaties are said to have come into effect between Norway and the Russian Federation by the process of continuity.[66]

Since the respective dissolutions of the USSR, of Yugoslavia (the "SFRY") and of Czechoslovakia, the United States, various European States, and the successor States have not all dealt in the same manner in all cases with the treaties of the dissolved States. A few examples: Armenia and Azerbaijan chose not to enter continuation agreements with any State as to any USSR treaty.[67] Austria, as regards the treaties with the dissolved SFRY, described its practice as a "principle of pragmatic application" of the continuation process—that is, Austria denied that the FRY was a continuity of the SFRY, and yet, in practice, treated the FRY as though it were the continuity of the SFRY.[68]

The U.S. State Department, though expressing a general desire that the USSR's successor States (a term that does not include Estonia, Latvia and Lithuania) be bound by the same treaty obligations vis-a-vis the United States as was the USSR, "abandoned any assertions of automatic continuation of treaty obligations and relied entirely on assurances provided by the successor States."[69] Also, in seeking assurances of treaty continuation from the successor States, the State Department accepted non-specific (what one commentator has called "feigned") assurances,[70] and unilateral commitments that the successor States may rescind, and that gave the United States the effective right to discontinue the treaties at its option.[71] Similarly, the State Department, by accepting assurances of treaty continuity that were linked by context to non-justiciable political commitments—such as promises to develop market economies—rendered the treaties unenforceable as a practical matter and thereby made "continuity" illusory.[72] Moreover, "Treaties in Force," the authoritative annual State Department publication of the U.S. treaties that are in force, shows as "in force" only those treaties concluded between the United States and the Russian Federation after the USSR's dissolution.[73] A similar treatment is provided by listings of treaties in force involving other successors of the USSR and other successors of the SFRY.[74]

Likewise, the Russian Federation has advised the United States that it does not deem itself bound by any USSR treaty obligation to the United States that conflicts with Russian law.[75]

As regards Ukraine, in May, 1996, the Executive Branch and a representative of Ukraine agreed that the United States and Ukraine would regard as in effect as between the two States thirty-five designated agreements that had been in effect between the United States and the USSR.[76] Of the thirty-five US/USSR agreements in question, thirty-two never received Senate consent, perhaps because they were among the kinds of binding agreements with foreign nations that the President

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[65] Williamson, *supra* note 60, at 10, 12.

[66] Marti Koskenniemi, *The Present State of Research Carried Out By the English-Speaking Section of the Centre for Studies and Research*, in State Succession: Codification Tested Against the Facts 98–118 (Hague Academy of International Law 1996); Paul R. Williams, *The Treaty Obligations of the Successor States of the Former Soviet Union, Yugoslavia, and Czeckoslovakia: Do They Continue in Force?*, 23 Denv. J. Int'l L. & Pol'y 1, 31–35 (1994).

[67] Koskenniemi, *supra* note 66, at 112.

[68] Koskenniemi, *supra* note 66, at 88, 110–11 n. 70; Williams, *supra* note 66, at 31–35 (1994).

[69] Williams, *supra* note 66, at 32.

[70] *Id.*

[71] *Id.*

[72] *Id.*

[73] *Id.* at 33–34.

[74] *Id.*

[75] *Id.* at 35–36. *See also* Gennady M. Danilenko, *Book Review and Note: The Russian Law of Treaties by William E. Butler*, 92 Am.J. Int'l L. 356, 357 (1998).

[76] The 1996 US-Ukraine agreement is described at 143 Cong. Rec. S4462-S4463 (May 14, 1997).

"may enter into without complying with the formalities required by the Treaty Clause of the Constitution . . .".[77] The three US/USSR treaties that had received Senate consent were a consular convention of 1968, a tax convention of 1976, and a convention of 1854 relating to the rights of neutrals at sea.

The wide variety of recent State practice has been summed up as follows:[78]

> [P]arties have normally negotiated and negotiations have led to the adoption and publication of lists of treaties that are to be continued or allowed to lapse. The more weight is given to such lists, and the agreements they embody, the less practical significance the "presumption of continuity" enjoys—until the presumption must altogether yield to the *a contrario* argument that a treaty absent from a list must be deemed to have lapsed.[79]

"Continuity" (or "continuation") is also used to identify a State that, notwithstanding a loss of territory, continues to exist because it has not lost its international legal personality.[80] In that usage "continuity" (or "continuation") is the antonym of "dismemberment" or *"disembratio"* or "dissolution" or "extinction," which terms are used interchangeably to identify States that have ceased to exist.[81] For example, the United States stated that it is the position of the "international community generally" that, as a result of the SFRY's "dissolution" in 1992, "[t]he SFRY has ceased to exist and no . . . State represents the continuation of the SFRY. . . ."[82]

In June 1996 U.S. Assistant Attorney General Walter Dellinger advised Counsel to the President John Quinn that the presumption of "continuity" employed in the State Department during the Bush Administration remained in effect in the Clinton Administration. Dellinger stated that the notion of continuity was "rooted" in U.S. "past diplomatic practice" and in the U.S. Executive Branch's understanding of international law.[83] Dellinger's disregard for U.S. practice as regards treaties of extinct states is described at IV.F., *infra*.

C. President Clinton's Statement of Position

On June 16, 1997, Benjamin A. Gilman, Chairman, House Committee on International Relations, asked President Clinton: If the Senate were to reject the President's proposal regarding ABM Treaty succession, "what countries in addition to the United States will, in the view of the Administration, be parties to the ABM Trea-

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[77] *Weinberger v. Rossi*, 456 U.S. 25, 30 n.6 (1982). According to the Supreme Court, agreements that do not require Senate concurrence under Article II include agreements to protect U.S. nationals employed at U.S. military bases abroad, *id.*, and monetary-claims settlements. *Dames & Moore v. Regan*, 453 U.S. 654, 679–80 nn.8, 9, 10 (1981); *United States v. Pink*, 315 U.S. 203 (1942); *United States v. Belmont*, 301 U.S. 324 (1937). Such an agreement is called an "Executive Agreement" or a "Sole-Executive Agreement" if it is made between the United States and another State without the concurrence of two-thirds of the Senate, and without the consent of a majority of both Houses of the Congress. If the Agreement has received the consent of a majority of both Houses of Congress, it is called a "Congressional-Executive Agreement." The Court has explained that an agreement of that nature, though sometimes called a "treaty," is not a treaty "possessing the dignity of one requiring ratification by the Senate of the United States . . ." *B. Altman & Co. v. United States*, 224 U.S. 583, 601 (1912). *See also Weinberger v. Rossi*, 456 U.S. 25, 29 (1982) ('The word "treaty" has more than one meaning"); *Dames & Moore v. Regan*, 453 U.S. 654, 679–84 (1981); *United States v. Pink*, 315 U.S. 203, 225 (1942); *United States v. Belmont*, 301 U.S. 324 (1937). No case has been presented to a court, however, to decide whether an arms-control treaty can constitutionally be made by the President acting alone or with the consent only of a majority of both Houses.

[78] Koskenniemi, *supra* note 66, at 88, 116 (footnote omitted). *See generally* Brownlie, *supra* note 41, at 82–85; James Crawford, the Creation of States in International Law 400–411 (1979); Krystyna Marek, Identity and Continuity in Public International Law (1968).

[79] Koskenniemi, *supra* note 66, at 116.

[80] *Republic of Croatia v. Girocredit Bank A.G. der Sparkassen*, Supreme Court of Austria (4 Ob. 2304 96V, Dec. 17, 1996), reprinted at 36 I.L.M. 1523 (1997); Konrad G. Buhler, *Casenote: Two Recent Austrian Supreme Court Decisions on State Succession from an International Law Perspective*, 2 Aus. Rev. Int'l & Eur. L., 213, 224–26 (1997).

[81] *Id.*

[82] Declaration of Christopher R. Hill, Director, Office of South Central European Affairs, United States Department of State, filed in *Federal Republic of Yugoslavia v. Park-71st Corp.*, No. 95 Civ. 3659 (AGS) (S.D.N.Y.) ¶¶ 5, 6 (Sept. 21, 1995), *complaint dismissed*, 913 F.Supp. 191 (S.D.N.Y. 1995). (App. 1).

[83] Memorandum from Walter Dellinger, Assistant Attorney General, to John M. Quinn, Counsel to the President, Re: Section 233(a) of S. 1745 (June 26, 1996) (App. 10). *See also* Letter from William C. Danvers, Special Assistant to the President and Senior Director for Legislative Affairs, to Newt Gingrich, Speaker of the House of Representatives (Nov, 29, 1996), transmitting Report on the Livingston ABM Amendment (Nov. 25, 1996) (App. 12), and Letter of Dec. 11, 1996 from Representatives Bob Livingston, Benjamin A. Gilman and Floyd Spence to President Clinton (Dec. 11, 1996) (App. 13).

ty?"[84] The President did not reply until November 21, 1997,[85] by which time the Secretary of State had signed (in September, 1997) a Memorandum of Understanding (the "MOU") with Russia, Ukraine, Belarus and Kazakstan to "multilateralize" the ABM Treaty. The MOU would create an arrangement embodying features that had been in effect between the United States and the USSR.[86] President Clinton's November 17, 1997 letter stated that he would ask the Senate to give advice and consent to the MOU.[87] The November 21, 1997 letter also stated

> [N]either a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972).[88]

In addition, the letter stated that, if the Senate did not consent to the MOU as a Treaty, succession arrangements would "simply remain unsettled,"[89] and in any event the ABM Treaty that had been in force between the United States and USSR "would clearly remain in force."[90] On March 3, 1998, Representative Gilman and Senator Jesse Helms[91] observed that if none of the four USSR-successor States that had signed the MOU were bound by the ABM Treaty, it followed that the Treaty was no longer in force.[92]

On May 21, 1998 President Clinton responded that the Executive Branch had concluded that "there is no question that the ABM Treaty has continued in force and will continue in force . . .". Also, President Clinton stated that "[t]he United States and Russia clearly are Parties to the Treaty. . . ."[93] The President explained neither the basis for this conclusion nor how the conclusion can be reconciled with his November 1997 response to Representative Gilman.

D. The United States" 1972 View of How it Would Benefit from an ABM Treaty

In 1972, Gerard Smith, Director of the Arms Control and Disarmament Agency in the Nixon Administration, told the Congress the following:

> The treaty contains a general commitment not to build a nationwide ABM defense nor to provide a base for such defense. This general undertaking is supplemented by certain specific provisions. By this general undertaking and the specific commitments, both countries in effect agree not to challenge the effectiveness of each other's missile deterrent capabilities by deploying widespread defenses against them. This means that the penetration capability of our surviving deterrent missile forces can be assured. This, to my mind, bears directly on concerns about a first strike against the United States. As long as we maintain sufficient and survivable retaliatory forces, this new assurance of their penetration capability makes "first

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[84] Letter from Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives, to President William J. Clinton, 2–3 (June 16, 1997) (App. 14).

[85] Letter from President William J. Clinton to Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives, 2 (Nov. 21, 1997) (App. 7). Letter from President William J. Clinton to Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives, (May 21, 1998) (App. 11).

[86] United States of America, Republic of Belarus, Ukraine & Kazakstan, *Memorandum of Understanding Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972* (Sept. 26, 1997) (App. 15).

[87] Letter from President William J. Clinton to Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives 1 (Nov. 21, 1997) (App. 7).

[88] *Id.* at 2.

[89] *Id.* at 3.

[90] *Id.*

[91] Letter from Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives, and Jesse Helms, Chairman, Committee on Foreign Relations, Senate (March 3, 1998) (App. 16).

[92] *Id.* at 3.

[93] Letter from President William J. Clinton to Benjamin Gilman, Chairman, Committee on International Relations, House of Representatives 2 (May 21, 1998) (App. 11). Also, on October 5, 1998, Senators Trent Lott, Don Nickles, Larry E. Craig, Jon Kyl, Jesse Helms, Connie Mack, Paul Coverdell and Bob Smith wrote President Clinton a letter stating their view that "the ABM Treaty has lapsed and is of no force and effect unless the Senate approves the MOU, or some similar agreement, to revive the Treaty." Letter from Senators Trent Lott, Don Nickles, Larry E. Craig, Jon Kyl, Jesse Helms, Connie Mack, Paul Coverdell and Bob Smith to President William J. Clinton (Oct. 5, 1998) (App. 17.) On December 17, 1998, President Clinton replied, stating that he would provide the MOU to the Senate for its advice and consent (App. 18).

strike" as a rational act inconceivable, in my judgment. I believe this is a development of prime significance for U.S. security.[94]

Hence, according to that view, a party without ABM defenses would be less likely to launch first strikes, and therefore would be less likely to start a nuclear war.[95]

IV. PRINCIPLES OF INTERNATIONAL LAW THAT BEAR ON THE QUESTION OF WHETHER THE ABM TREATY BETWEEN THE UNITED STATES AND THE USSR BECAME, UPON THE USSR'S EXTINCTION, A TREATY BETWEEN THE UNITED STATES AND THE RUSSIAN FEDERATION

A. The December 1991 Declaration That the USSR Had Ceased to Exist Correctly Characterized Under International Law the Changes That Occurred on What Had Been the USSR's Territory

It is not necessary to resolve any dispute as to whether the USSR became extinct in December 1991, for there has been no dispute between the United States and the USSR's successor States on this point. It bears noting, however, that, had the parties put the question to a disinterested tribunal, that tribunal would have had ample grounds for concluding that the USSR did become extinct at that time, for after December 1991 the USSR lacked the attributes of "statehood" that are essential elements of a State's existence, *i.e.* sovereignty over defined territory inhabited by a permanent population, and the power to conduct foreign relations.[96] At the close of the day on December 8, 1991, each of fifteen States had sovereignty over a part of what had been the USSR's territory. No State claimed that even one *pyt* of territory remained as USSR territory.[97]

Moreover, the USSR's dissolution was marked by other consequential changes: (1) It occurred abruptly, out of strong secessionist pressures that created the risk of widespread civil strife, rather than by a deliberate and peaceful evolution. (2) The USSR government was not a party to any of the declarations of dissolution or independence or to the organizational agreements of the CIS or to any other agreements among the newly independent States. (3) Within the several years immediately before dissolution was declared formally, the USSR government had yielded its political and military control over the other Warsaw Pact States. (4) In that period before formal dissolution, the USSR government abolished the Communist Party's monopoly on domestic political power, thereby facilitating the acquisition by the people of the USSR's constituent "republics" of control of their territories and economies, and removing an obstacle to the emergence of the new States.[98] (5) The demography of the new states was markedly different from that of the USSR, the former being far more ethnically homogeneous than the latter was. (6) None of the newly independent States separately has military/strategic resources (including agricultural and mining assets and geographical assets such as access to various ports and con-

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[94] Statement by United States Arms Control and Disarmament Agency Director Gerard C. Smith, *Strategic Arms Limitations Agreements* (June 28, 1972), *reprinted in* U.S.C.A.C.D.A. Documents on Disarmament 1972, at 423.

[95] Report by the United States Senate Foreign Relations Committee, *Treaty on Limitation of Antiballistic Missile Systems*, S. Exec. Rep. 92–28 (July 21, 1972) (App. 19), quoting former Assistant Secretary of Defense for International Security Affairs Paul Warnke, that "[a]ccordingly, both sides have accepted the principle that safety resides not in physical defense but in the certainty that the attacker would be destroyed by the retaliatory strike that the other side would be able to mount."

[96] A State must have (a) a permanent population; (b) a defined territory; (c) a government; and (d) capacity to enter into relations with other States. Restatement (Third) of the Foreign Relations Law of the United States § 201 (1986). A State has territorial sovereignty if it "has a monopoly on the exercise of governmental power within its borders . . . ." *Societe Nationale Industrielle Aerospatiale v. United States District Court for the Southern District of Iowa*, 482 U.S. 522, 557 (1987) (Blackman, J., concurring in part and dissenting in part); *Hoyt v. Sprague*, 103 U.S. 613, 630 (1880). Justice Story, as quoted in *Cherokee Nation v. Southern Kan. R. Co.*, 33 Fed. 900, 906 (W.D. Ark. 1888), described sovereignty as the "supreme, absolute, uncontrollable power; the *jus summi imperii*; the absolute right to govern." The fifteen states included the Baltics, *i.e.* Latvia, Lithuania, and Estonia, which the United States and Western European States did not regard as having been absorbed into the USSR. *See generally* Lawrence S. Eastwood, Jr., *Secession, State Practice and International Law after the Dissolution of the Soviet Union and Yugoslavia*, 3 Duke J. Comp. Int'l L. 299, 316–22 (1983); Ruta M. Kalvaitis, *Citizenship and National Identity in the Baltic States* 16 B.U. Int'l L.J. 231, 234–39 (1998).

[97] A *pyt* in the Russian language is the smallest measure of area, as in, "not a single inch." Russian-English Dictionary 517 (E.P. Dutton & Co. 1973).

[98] See generally accounts collected in The Decline and Fall of the Soviet Empire (B. Gwertzman and M. Kaufman, eds. 1992) For a description of Russia's place in the USSR, see Richard Pipes, Russia Under the Bolshevik Regime (1993).

tiguity with certain regions on land) that are on par with those possessed by the USSR.

International law does not consider a State extinct solely because it has lost some territory or population. But no USSR successor State embodies the USSR's international legal personality; indeed, none even claims to do so. Given the abruptness of the loss of territory and population, the loss of empire, and the loss of central control over the inhabitants of the fifteen sub-states that led to their independence, the changes in ethnic concentrations and in military/strategic resources, it is not hard to understand why the United States agreed with the newly-emerged States that the USSR's identity had disappeared. Hence, the successor States and the United States aptly concluded that the USSR had "ceased to exist," *i.e.*, "was no more."[99]

B. The ABM Treaty Was a Bilateral Treaty

A bilateral treaty is a treaty between two "sides," which usually are two States.[100] Only the United States and the USSR were parties to the ABM Treaty. The Treaty specified no means for adding parties.[101]

C. If Neither Judicial Decision, Diplomatic Practice Nor Treaty Provides Trustworthy Evidence on a Disputed Point of Customary International Law, a Court Will Consult the Works of Scholars for Evidence of What the Law Is

International law, like common law in Anglo-American jurisprudence, can grow out of long-practiced custom that becomes accepted as law.[102] In ascertaining custom, courts often consult the works of scholars, as the Supreme Court explained in *The Paquete Habana*, a landmark case in 1898:

> [W]here there is no treaty and no controlling executive or legislative act or judicial decision, resort must be had to the customs and usages of civilized nations, and, as evidence of these, to the works of jurists and commentators who by years of labor, research and experience, have made themselves peculiarly well acquainted with the subject of which they treat. Such works are resorted to by judicial tribunals, not for the speculations of their author concerning what the law ought to be, but for trustworthy evidence of what the law really is.[103]

Courts continue to look to distinguished commentators for aid in ascertaining customary international law.[104]

D. The Works of Scholars Support the Conclusion That a Bilateral Treaty Other than a Dispositive Treaty Does Not Survive the Extinction of One of the Treaty Partners

In very general terms, a dispositive treaty is one that creates a disposition—as of a political boundary, for example—that is intended to be perpetually respected. That the ABM Treaty is not a dispositive treaty is shown at Part IV.K below. A treaty that is not dispositive is called a "personal" or a "real" or "political" treaty.

A widely-quoted author on the law of State succession is D.P. O'Connell. According to Professor O'Connell:

> There has been, at least since the late nineteenth century, almost unanimous agreement that personal treaties of a totally extinguished State expire with it because they are contracted with a view to some immediate advantage, and their operation is conditional on the nice adjustment of the

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[99] "[S]tates fully extinguished lose all international personality . . .." Amos S. Hershey, The Essentials of International Public Law and Organization 215 (rev. ed. 1935).

[100] Arnold Duncan McNair, The Law of Treaties, British Practice and Opinions 5 (1938).

[101] Confining discussion in this Memorandum to bilateral treaties does not imply that a State's extinction has no effect on multilateral treaties of which it was a party. State succession as regards multilateral treaties is discussed in Hubert Beemelmans, *State Succession in International Law: Remarks on Recent Theory and State Praxis*, 15 B.U. Int'l L.J. 71, 85 (1997); Yehuda Z. Blum, *U.N. Membership of the "New" Yugoslavia: Continuity or Break?*, 86 Am. J. Int'l L. 830 (1992).

[102] On the role of custom in the development of the common law, see William Blackstone, I Commentaries on the Laws of England 69–80 (James DeWitt Andrews, ed., 4th ed., 1899); Arthur Reed Hogue, Origins of the Common Law 190–200 (1966); David J. Bederman, *The Curious Resurrection of Custom: Beach Access and Judicial Takings*, 96 Colum. L. Rev. 1375, 1451 (1996). On the role of custom in the development of international law, see O'Connell, I International Law, *supra* note 39, at 15–20, 35–36.

[103] *The Paquete Habana*, 175 U.S. 677, 700 (1900) (citation omitted).

[104] *Banco Nacional de Cuba v. Sabbatino*, 376 U.S. 398, 423 (1964); *See also Hilton v. Guyot*, 159 U.S. 113, 163 (1895); *United States v. Nippon Paper Indus. Co.*, 109 F.3d 1, 10–11 (1st Cir. 1997).

> political and economic relations which they presuppose. When this adjustment is upset the rationale of the treaty is destroyed.[105]

The principle that bilateral treaties of a State lapse on the State's extinction became a part of the scholarly tradition of international law even before the United States was founded, and European scholarly works on international law were well known in the United States in the early Nineteenth Century. The most prominent work was by Emmerich de Vattel, a Swiss scholar who wrote in the second half of the Eighteenth Century. Vattel wrote:

> In the same manner as a personal treaty expires at the death of the king who has contracted it, a real treaty is dissolved, if one of the allied nations is destroyed,—that is to say, not only if the men who compose it happen all to perish, but, also if, from any cause whatsoever, it loses its national quality, or that of a political and independent society.[106]

Another of the prominent early works was Frederic de Martens' *The Law of Nations*, published in 1788. Martens' career included professorships of law at the Imperial School in St. Petersburg and at the University of Gottingen; as representative of Russia at many official conferences; and as an arbiter in international disputes, for which he became known as "Chief Justice of Christendom."[107] An English translation of Martens" work was published in Philadelphia in 1795, dedicated to President George Washington. Martens wrote:

> TREATIES, properly so called, cease to be obligatory when the foreign power with whom they were concluded ceases to exist, and when the state passes under the dominion of another power.[108]

Henry Wheaton made the same point in his *Elements of International Law* in 1836, perhaps the first treatise exclusively on international law written in the United States. Wheaton was Justice of the Marine Court of New York. Later, as the official reporter of the U.S. Supreme Court, he edited twelve volumes of the Supreme Court's reports. He then became, in succession, Charge d'affaires of the United States to Denmark, U.S. Minister to Prussia, and Lecturer on International Law at Harvard University.[109] Professor Wheaton wrote:

> *Treaties*, properly so called, or *fodera*, are those of friendship and alliance, commerce and navigation, which even if perpetual in terms, expire of course . . . in . . . case either of the contracting parties loses its existence as an independent State.[110]

In 1889, the State Department stated as a "principle of public law" that a treaty expires when one of the parties "loses its existence."[111] In support, the State Department quoted from General Henry W. Halleck's *International Law*,[112] written in 1861:

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[105] D. P. O'Connell, The Law of State Succession 16 (1956) (footnotes omitted). The rationale for treaty lapse has also been characterized as a case of "impossibility of performance," *i.e.*, it is impossible for an extinct State to do anything; *ergo*, it is impossible for an extinct State to perform its predecessor's treaty obligations. The principles of impossibility-of-performance are elaborated in a Memorandum from the law firm of Hunton and Williams to the Heritage Foundation, *The Collapse of the Soviet Union and the End of the 1972 Anti-Ballistic Missile Treaty* 4–10 (June 15, 1998) (David B. Rivkin, Jr., Lee A. Casey, Darin R. Bartram, authors).

[106] Emmerich de Vattel, The Law of Nations, Book II, Chap. XIII, sec. 203, 215 (in English translation 1833). Vattel's work was first published in French, *Le droit de gens, ou, Principes de la loi naturelle, applique a la conduite, aux affaires des nations, et des souverains* (1758). Vattel was published in English (in New York), at least as early as 1787 (for Berry and Rogers). Vattel has been cited in 148 cases in the Supreme Court, from *Miller v. The Resolution*, 2 U.S. (Dall) 1, 15 (1781) to *New Jersey v. New York*, 523 U.S. 767 (1998).

[107] George A. Finch, The Sources of Modern International Law 40–41 (1937); Terry Nardin, Law, Morality and the Relations of States 64 (1983).

[108] Georg Frederick von Martens, The Law of Nations, Book II, Sec. 8, 56 (trans. from the French by William Cobbett, 1795).

[109] Finch, *supra* note 107, at 35–36.

[110] Henry Wheaton, Elements of International Law 191 (1836) (unabridged republication by Da Capo Press 1972). "Fodera" are treaties. A "fodus" is a treaty, a league or a compact. Black's Law Dictionary 770 (rev. 4th ed. 1968).

[111] United States Department of State, *Treaties and Conventions Concluded Between the United States of America and Other Powers Since July 4, 1776*, 1236 n.2 (1899), quoting Halleck's International Law 899, which is materially the same as Henry W. Halleck I International Law 316 (G.S. Baker ed., 4th ed. 1908).

[112] Halleck, the adopted son of Baron Frederic von Steuben, was a career soldier and lawyer. He was General-in-Chief of the United States Army in the Civil War until replaced by General Ulysses S. Grant. In 1861 he wrote his first book on international law. It was updated in 1866

> The principle of public law which causes Treaties under such circumstance [*i.e.*, the cessation of a State's existence as an independent State] to be regarded as abrogated is thus stated: "The obligations of Treaties, even where some of their stipulations are in their terms perpetual, expire in case either of the contracting parties loses its existence as an independent State . . .". [113]

In 1897, U.S. Secretary of State John Sherman invoked scholarly works to explain to the Government of Japan why the treaties made by the Kingdom of Hawaii would not survive the U.S. treaty of annexation of the Kingdom's territory, *i.e.*, "[t]he treaty of annexation does not abrogate [the Kingdom's treaties], it is the fact of Hawaii's ceasing to exist as an independent contractant that extinguishes those contracts." [114]

Likewise, in 1902 Charles E. Magoon, Law Officer in the Office of the Secretary of the War Department, submitted a Report to Secretary of War Elihu Root, which Secretary Root ordered to be published. On the subject of the treaty obligations of extinct States, the Report states:

> But where there is a complete change, not only of sovereigns but of sovereignty, of necessity the agreement ends, for each sovereignty must exercise its grace in accordance with its own constitution, laws, and customs.[115]

In addition, in 1895 Captain Edwin F. Glenn, Acting Judge Advocate General of the United States Army, in his *Hand-Book of International Law*, wrote:

> When some of the stipulations of a treaty imply perpetuity, even though the act mentioned to be performed has been accomplished according to the letter of the agreement—as, for instance, in the recognition of a new state,—the act of recognition is complete when accorded; but the state of things contemplated implies permanency, and a state is not authorized to disregard the obligation imposed. If, however, one of the contracting parties loses its existence, or its interior constitution undergoes a change of such a nature as to render the treaty inapplicable to the new state of things, the contract expires.[116]

Also, William Edward Hall (1895) and Max Huber (1899) published treatises expressing the view that upon a State's extinction, its personal treaties lapse.[117]

British scholar Arthur Berriedale Keith assessed the evidence of State practice in 1907. Soon after the dissolution of the Dual Monarchy of Norway and Sweden, he stated: "The evidence, from the practice of nations, is all in favour of the lack of continuity in treaty obligations." [118]

Similar observations include the following:

> [T]here is no legal resurrection in international law. Once a State has become extinct, it cannot resume a continued existence. Professor Krystyna Marek, Graduate Institute of International Studies, Geneva, 1968.[119]
>
> When a State is dismembered into new independent States, its *treaties* as a rule become null and void without descending to the new States. Treaties are generally personal in so far as they presuppose, in addition to the territory, also the existence of a certain sovereign over the territory. To the

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and has appeared in many subsequent editions. Halleck's career as soldier and lawyer is sketched in Scott R. Morris, *The Laws of War: Rules by Warriors for Warriors*, 1997 Army Law. 4, 10 (1997).

[113] United States Department of State, *Treaties and Conventions Concluded Between the United States of America and Other Powers Since July 4, 1776* 1236 (1899).

[114] United States Secretary of State John Sherman, *Note to the Minister of Japan* (June 25, 1897), *quoted in* John Basset Moore, V Digest of International Law 349, 350 (1906). The treatises invoked in the Note were Halleck's I International Law or Rules Regulating the Intercourse of States in Peace and War 316 (4th ed. 1908) and William Edward Hall, A Treatise on International Law 96–97 (4th ed. 1895). Secretary Sherman was a lawyer who had been a Senator and a Representative. He is remembered as the author of the Sherman Antitrust Act, 15 U.S.C. § 1 *et seq.*, and the Sherman Silver Purchase Act, 26 Stat. 289 (1890). *See also Territory of Hawaii v. Osaki Mankichi*, 190 U.S. 197, 198–211 (1903) (describing the termination of the Kingdom of Hawaii's treaties with other States after it was annexed by the United States).

[115] Charles E. Magoon, Law Officer, Division of Insular Affairs, Office of the Secretary, War Department, Report to Secretary of War, Elihu Root, *The Law of Civil Government in Territory Subject to Military Occupation by the Military Forces of the United States* 304 (1902).

[116] Edwin F. Glenn, *Hand-Book of International Law,* 151–52 (1895).

[117] Hall, *supra* note 114, at 97; Max Huber, The Succession of the States, International and National Practice in the Nineteenth Century 191–92 (1899).

[118] Keith, *supra* note 3, at 19.

[119] Marek, *supra* note 78, at 6.

> succeeding States the treaties concluded by the former State are *res inter alios acta*. Professor Erik Castren, University of Helsinki. 1951.[120]
>
> It is clear that political (including personal and dynastic) treaties of the extinguished state fall to the ground. Professor Amos H. Hershey, University of Indiana, 1911.[121]
>
> The extinction of the personality of a state results traditionally in an abrogation of all political and military treaties concluded between the now extinct entity and other states. Professor Gerhard von Glahn, University of Minnesota—Duluth, 1962.[122]

Many other scholars have expressed the same opinion.[123]

E. No Controlling Decision of an International Judicial Tribunal or Quasi-judicial Tribunal or a Court of the United States Holds That an Extinct State's Treaty Automatically Becomes a Treaty Between the Extinct State's Successor and the Extinct State's Treaty Partner

1. Courts of the United States

In *Terlinden* v. *Ames*,[124] the Supreme Court had to decide whether the extradition treaty of 1853 between the United States and the Kingdom of Prussia remained in force after 1871, when a number of Germanic States, including Prussia, formed the German Empire. The Court held that the treaty remained in force because the German Empire's Constitution had not extinguished Prussia's sovereignty. The Court described the adoption of the Empire's Constitution, as follows:

> Then came the adoption of the Constitution of the German Empire. It found the King of Prussia, the chief executive of the North German Union, endowed with power to carry into effect its international obligations, and those of the Kingdom, and it perpetuated and confirmed that situation.[125]

The Court was careful to distinguish cases in which a State loses its international identity upon joining a union of States:

> Undoubtedly treaties may be terminated by the absorption of powers into other nationalities and the loss of separate existence, as in the case of Hanover and Nassau, which became by conquest incorporated into the Kingdom

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[120] Erik Castren, *Obligations of States Arising from the Dismemberment of Another State*, XIII Zeitschrift Fur Auslandisches Offentliches Recht Und Volkerrecht 753, 754 (1951). "*Res inter alios acta*' literally, "a thing done between others," Black's Law Dictionary 1470 (4th ed. 1951), is used figuratively, as "it's no concern of ours," Eugene Ehrlich, Amo, Amas, Amat and More 249 (1987).

[121] Amos S. Hershey, *The Succession of States*, 5 Am. J. Int'l L. 285, 287 (1911). *See also id.* at 291–92.

[122] Gerhard von Glahn, Law Among Nations 117 (6th ed. 1992).

[123] *See, e.g.*, UN GAOR, 1st Comm., 2d Sess., Annex 14g at 582–83, U.N. Doc. A/C.1/212 (1947) (Letter of October 11, 1947 from the Chairman of Sixth Committee to the Chairman of the First Committee); Restatement (Third) of the Foreign Relations Law of the United States § 210(3) (1986); J. L. Brierly, The Law of Nations 153 (6th ed. 1963); Crawford, *supra* note 78, at 408; Green Haywood Hackworth, I Digest of International Law 297 (1943); Hans Kelsen, Principles of International Law 382–87 (2d. ed. 1966); Noyes E. Leech, et al, The International Legal System: cases and Materials 980 (1973); Werner Levi, Contemporary International Law, A Concise Introduction (2d ed. 1991); John Bassett Moore, I Digest of International Law 248 (1906); O'Connell, I International Law, *supra* note 39, at 368; L. O. Oppenheim, I International Law 553 (1905); Paul Reuter, Introduction to the Law of Treaties 186 (2d. ed. 1995); Georg Schwarzenberger, A Manual of International Law 169 (5th ed. 1967); Malcolm N. Shaw, International Law 694 (4th ed. 1997); Max Sorenson, Manual of Public International Law 295–98 (1968); Oscar Svarlien, An Introduction to the Law of Nations 111–112 (1955); Okon Udokang, Succession of New States to International Treaties 404 (1972); Blum, *supra* note 101, at 833; Albert J. Esgain, *Military Servitudes and the New Nations*, in III Yearbook of World Polity, The New Nations in International Law and Diplomacy (William V. O'Brien, ed. 1965), *quoting* H. D. Reid, International Servitudes in Law and Practice 25 (1932); Charles Cheney Hyde, *The Termination of the Treaties of a State in Consequence of Its Absorption by Another—The Position of the United States*, 26 Am. J. Int'l L. 133 (1932); J. Mervyn Jones, *State Succession in the Matter of Treaties*, 1947 Brit. Y.B. Int'l L. 360, 373; Josef L. Kunz, *Identity of States Under International Law*, 49 Am. J. Int'l L. 66 (1955); Dieter PapenfuB, *The Fate of the International Treaties of the GDR within the Framework of German Unification*, 92 Am. J. Int'l L. 469, 470–71 n.16 (1998); Edwin D. Williamson & John E. Osborn, *A U.S. Perspective on Treaty Succession and Related Issues in the Wake of the Breakup of the USSR and Yugoslavia*, 33 Va. J. Int'l L. 261, 270–71 (1993); Richard Young, *The State of Syria: Old or New*, 56 Am J. Int'l L. 482, 487 (1962).

[124] *Terlinden v. Ames*, 184 U.S. 270 (1902).

[125] *Id.* at 284.

> of Prussia in 1866. Cessation of independent existence rendered the execution of treaties impossible.[126]

The Court cited as a source an 1889 State Department study of treaty succession, *i.e.*, "Where a state has lost its separate existence, as in the case of Hanover and Nassau, no questions [of treaty succession] can arise."[127] The Court also invoked a State Department analysis of the effect on treaties of a State's loss of existence.[128]

The question of whether a State has become extinct was addressed by a Court of Appeals in 1954 in *Ivancevic* v. *Artukovic*.[129] The court held that the Kingdom of Serbia had not become extinct when the inhabitants of adjacent and smaller south Slavic States joined with Serbia to form what was successively called the Kingdom of the Serbs, Croats and Slovenes; the Kingdom of Yugoslavia; and the Socialist Federal People's Republic of Yugoslavia. *Ivancevic* therefore does not address the consequences of extinction.

Therefore, to the extent that U.S. courts have addressed the question of State extinction, the Supreme Court's *dictum* in *Terlinden v. Ames* is consistent with the scholarly works that a State's treaties lapse upon the State's extinction.

2. International judicial tribunals

Neither the International Court of Justice nor its predecessor, the Permanent Court of International Justice, has handed down a decision that turned on the status of personal bilateral treaties of an extinct State, but in 1996, in the case *Concerning application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina v. Yugoslavia)*, the ICJ Separate Opinion of Judge Weeramantry observed that the Genocide Convention survived the dismemberment of Yugoslavia because the Convention in embodying universal principles of civilized behavior, transcended the concept of state sovereignty. Judge Weeramantry distinguished the Genocide Convention from treaties that are "confined within the ambit of a State's sovereignty."[130] As to such treaties, "[a]n important conceptual basis denying continuity . . . is that the recognition of the predecessor state's treaties would be an intrusion upon the sovereignty of the successor state."[131] Hence, Judge Weeramantry appears to have concluded that treaties, other than those of universal humanitarian concern, do not as a matter of law remain in existence upon a State's dissolution.

3. International arbitration panel

A Tripartite Claims Commission (United States, Austria and Hungary) was created in 1927 to fix the amounts of financial obligations to Americans assumed by Austria in its World War I Peace Treaty (Vienna, 1921) with the United States, and the amount assumed by Hungary in its World War I Peace Treaty (Budapest, 1921) with the United States. The Panel found it unnecessary to resolve any question of obligations imposed by customary international law. In passing, however, the Panel compared the U.S.-Austria and U.S.-Hungary Peace Treaties to the U.S.-Germany Peace Treaty (Berlin, 1921) as follows:

> Unlike the Treaty of Berlin "*restoring* friendly relations" between the United States and Germany, these Treaties in terms "establish" for the first time such relations between Austria and the United States and between Hungary and the United States.[132]

Thus, the Tripartite Claims Commission believed that the treaties of the Austro-Hungarian Empire did not, upon its extinction at or near the end of World War I, automatically pass to Austria and Hungary, which were two of the States that succeeded to parts of the Empire's territory.

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[126] *Id.* at 283.

[127] *Id.* at 287.

[128] John Davis Bancroft, in *Treaties and Conventions Concluded Between the United States of America and Other Powers Since July 4, 1776*, 1234–36 (1889).

[129] *Ivancevic v. Artukovic*, 211 F.2d. 565, 568–74 (9th Cir. 1954).

[130] *Case concerning Application of the Convention on the Prevention and Punishment of the Crime of Genocide (Bosnia and Herzegovina),* 1996 I.C.J. 803, at "640, 646–47 1996 WL 943410 [I.C.J.]. *See also* Thomas D. Grant, *Territorial Status, Recognition, and Statehood: Some Aspects of the Genocide Case* (*Bosnia and Herzegovina v. Yugoslavia*), 33 Stan. J. Int'l L. 305 (1997).

[131] *Id.*

[132] Tripartite Claims Commission (United States, Austria and Hungary), Administrative Decision No. 1, 11 (May 25, 1927) (App. 20).

F. The United States Conduct Described by Assistant Attorney General Dellinger Does Not Constitute State Practice for Purposes of Establishing Customary International Law

1. Background

A State's loss of sovereignty over all its territory was relatively common in the Nineteenth Century and in the early Twentieth Century. France annexed Madagascar and Algiers; Great Britain annexed the Southern African Republic; Japan annexed Korea; Italy annexed various Italian States; Prussia annexed Hanover, Frankfurt and Nassau; the United States annexed the Republic of Texas and the Kingdom of Hawaii. In all of those annexations the United States expressed a view that the treaties of the annexed States ended automatically with respect to the territory annexed.[133]

A State's loss of sovereignty over all its territory from a cause other than annexation was less common. A vast number of States combined to form "composite" States or "confederations" or "unions," but the combining States in many cases retained substantial powers to conduct their own foreign relations, including the power to make treaties. An example was the Dual Monarchy of Norway and Sweden, which ultimately dissolved in 1905. When such a hybrid State dissolved and its members resumed full sovereignty, each was expected to continue in effect the treaties it had made when it was part of a union.[134] The USSR was different. Before dissolution, its sub-States did not make bilateral treaties with nation-States.

AAG Dellinger cites four examples of State dissolution to support his contention that the ABM Treaty of 1972 survived the USSR's extinction: (a) The breakup of the Greater Columbian Union in 1829–1831 into what became Columbia, Venezuela and Ecuador; (b) the dissolution of the Dual Monarchy of Norway and Sweden in 1905; (c) the dissolution of the Austro-Hungarian Empire at or near the end of World War I and (d) the dissolution of the United Arab Republic in 1961. According to Dellinger, those events support the proposition that "[w]here a state divides into its constituent parts, the [diplomatic] practice supports the continuity of existing treaty rights and obligations."[135] The quotation that Dellinger used is from a law review article by Edwin D. Williamson (former State Department Legal Adviser) and John E. Osborn.[136]

Dellinger did not mention Yugoslavia's 1992 dissolution, a curious omission inasmuch as it is a recent example of a State that has been dissolved, leaving no sovereignty in the extinct predecessor States. It is therefore more closely analogous to the USSR case than the foregoing four examples of State dissolution. Regarding Yugoslavia's dissolution, the United States has taken the position in U.S. Courts and in the U.S. State Department's publication *Treaties in Force* that none of the Yugoslav successor States is a continuation of Yugoslavia,[137] and in dealing with the successors of extinct Yugoslavia has "abandoned any assertions of automatic treaty obligations and relied entirely on . . . assurances provided by the successor states."[138]

Also, Dellinger does not mention the U.S. practice of regarding as lapsed the treaties of States made extinct by the annexation of their entire territories. Dellinger gives no reason why those extinctions should be treated differently from extinctions caused by dismemberment. Indeed, with respect to the question of treaty survival, the scholarly literature treats all extinctions in the same way. For example, Pro-

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[133] Jones, *supra* note 123, at 362.

[134] Herbert A. Wilkinson, The American Doctrine of State Succession 108–109 (1934); Samuel B. Crandall, Treaties, Their Making and Enforcement 438 (2d ed. 1916); Robert Willem Gaston de Muralt, The Problem of State Succession with Regard to Treaties 87–88 (1954).

[135] Memorandum from Walter Dellinger, Assistant Attorney General, to John M. Quinn, Counsel to the President, Re: Section 233(a) of S. 1745 (June 26, 1996), at 3 n.5 (App. 10).

[136] *Id.* (quoting Edwin D. Williamson & John E. Osborn, *A U.S. Perspective on Treaty Succession and Related Issues in the Wake of the Breakup of the USSR and Breakup of USSR and Yugoslavia*, 33 Va. J. Int'l L. 261, 263 (1993)).

[137] Declaration of Christopher R. Hill, Director, Office of South Central European Affairs, United States Department of State, filed in *Federal Republic of Yugoslavia v. Park-71st Corp.*, No. 95 Civ. 3659 (AGS) (S.D.N.Y.) ¶¶ 3, 5 (Sept. 21, 1995), *complaint dismissed*, 913 F.Supp. 191 (S.D.N.Y. 1995) (App. 1). The United Nations also concluded that no State is the continuation of the SFRY. U.N. Resolution 777 (Sept. 19, 1992): "[T]he State formerly known as the Socialist Federal Republic of Yugoslavia has ceased to exist," and as a consequence the FRY "cannot continue automatically [the SFRY's UN] membership." The Security Council thereupon asked the General Assembly to rule that the FRY "apply for membership in the United Nations and . . . not participate in the work of the General Assembly." The event is described in Blum, *supra* note 101, at 833. *See also* James B. Foley, Deputy State Department Spokesman, Statement on Yugoslav State (Sept. 30, 1997), 1997 WL 14464578 (App. 21).

[138] Williams, *supra* note 66, at 32.

fessor Amos S. Hershey, after explaining that "States are extinguished through voluntary incorporation, forcible annexation, *division into several States*, or union with other States,"[139] says: "It is clear that political (including personal and dynastic) treaties and alliances of the extinguished State fall to the ground."[140]

2. A State practice does not contribute to the development of customary international law unless the practice is conducted out of a sense of necessity to comply with international law

International law, like the common law in Anglo-American jurisprudence, can grow out of long-practiced conduct.[141] In international law, it is the conduct of States that is relevant. But not all conduct of States contributes to the growth of international law because States, like other persons, sometimes engage in lawful conduct for reasons that have nothing to do with their international legal obligations. For example, States admit aliens for residence, borrow money from other States, make treaties with other States, assert claims to property located in other States, grant diplomatic asylum, settle disputes they have with other States, and do other things "merely for reasons of political expediency."[142] Indeed, in dealing with questions of treaty survival, States appear to act in the way they act when dealing with questions as to whether they should enter new treaties, *i.e.*, they identify their political, economic, security and other interests and seek the greatest benefits they might achieve, using any arguments they can muster, while giving up as little as they have to.[143] Therefore, to separate State conduct that can contribute to the growth of international law from State conduct that does not contribute, courts have established a rule that is called *opinio juris sive necessitatis*, which loosely translates as "a conviction that a rule is obligatory."[144] For short, it is *opinio juris*. According to this rule, the only State conduct that can contribute to the growth of international law is an act done out of a sense that the act is required by international law.[145]

According to Sir Hersch Lauterpacht, to cite State practice as evidence of "binding customary international law," one must establish "the [State's] conviction that the conduct in question is followed as a matter of legal obligation . . .".[146]

The American Law Institute states the rule of *opinio juris* as follows:

> For a practice of States to become a rule of customary international law it must appear that the States follow the practice from a sense of legal obligation (*opinio juris sive necessitatis*); a practice that is generally followed but which States feel legally free to disregard does not contribute to customary law.[147]

In three leading cases, the *North Sea Continental Shelf Cases* (1969),[148] the *Anglo-Norwegian Fisheries Case* (1951),[149] and the *Columbian-Peruvian Asylum*

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[139] Hershey, *supra* note 99, at 215 (emphasis added).

[140] *Id.* at 218.

[141] Bederman, *supra* note 102, at 1451; Blackstone, *supra* note 102, at 72; O'Connell, I International Law, *supra* note 39, at 3–37; Mark E. Villiger, Customary International Law and Treaties 3–60 (rev. 2d ed. 1997).

[142] *Columbian-Peruvian Asylum Case*, 1950 ICJ 4, 277 (Nov. 20). *See generally* Jo Lynn Slama, *Opinio Juris in Customary International Law*, 15 Okla. City U. L. Rev. 603 (1990).

[143] Villiger, *supra* note 141, at 48 (*opinio juris* seems to exclude State conduct engaged in solely for convenience); *Columbian-Peruvian Asylum Case*, 1950 I.C.J. at 276–78.

[144] Slama, *supra* note 142, at 605 n.13, *citing* H. Steiner & D. Vagts, Transnational Legal Problems 290 (3d ed. 1986).

[145] In addition to the authorities cited in the text, the following describe the rule of *opinio juris* as an established rule of international law: *The Paquete Habana*, 175 U.S. 677, 700 (1900); *The Scotia*, 14 U.S. (Wall.) 170 (1871); Helen Silving, *'Customary Law': Continuity in Municipal and International Law*, 31 Iowa L. Rev. 615, 622 (1946); Herbert W. Briggs, *The Columbian-Peruvian Asylum Case and Proof of Customary International Law*, 45 Am. J. Int'l L. 728, 730 (1951); J. L. Brierly, The Law of Nations, An Introduction to the International Law of Peace 60–61 (5th ed. 1955); Kunz, *supra* note 123, at 71–76; D. P. O'Connell, I International Law 16, 18 (1965); Bin Cheng, *United Nations Resolutions on Outer Space: "Instant" International Customary Law,* 5 Indian J. Int'l L. 23, 36 (1965); Clive Parry, The Sources of Evidence of International Law 61–63 (1965); John A. Perkins, *The Changing Foundations of International Law: From State Consent to State Responsibility*, 15 B.U. Int'l L.J. 433, 440 (1997); Villiger, *supra* note 143, at 52; Glennon, *supra* note 15, at 69 n.197.

[146] Sir Hersch Lauterpacht, The Development of International Law by the International Court 368 (1958).

[147] Restatement (Third) of the Foreign Relations Law of the United States §102(1)(c)(3) cmt. c (1987).

[148] *North Sea Continental Shelf Cases*, 1969 I.C.J. 4, 44–45 (Feb. 20).

[149] *Anglo-Norwegian Fisheries Case*, 1951 I.C.J. 4, 131 (Dec. 18). *See also Fisheries Jurisdiction Case, Gr. Brit and N. Ir. v. Ice*, 1974 I.C.J. 3.

Case (1950),[150] all involving claims based on State practice, the International Court of Justice ruled that a failure to establish that the State practice at issue met the *opinio juris* test required a conclusion that the practice had not passed into customary international law. Also, in the 1927 *Lotus* case,[151] the Permanent Court of International Justice likewise rejected a claim because of a failure to meet the *opinio juris* test.

The *Anglo-Norwegian Fisheries* case typifies the application of the *opinio juris* rule. The ICJ held that the evidence did not establish the existence of a purported customary rule of international law limiting the base-line of territorial waters to ten miles in the case of a bay. The evidence was to the effect that some States had adopted the ten-mile limit by statute or by treaty, and some arbitral proceedings had adhered to the ten-mile limit. Nonetheless, the ICJ ruled that, however broadly the limit was respected, the State practice failed as evidence of the existence of customary international law because it was not practice that responded to a command of law.[152]

Hence, if the acts of diplomacy cited by AAG Dellinger are to serve as evidence of customary international law, they must pass the *opinio juris* test.

3. The record does not show that, in any of the four episodes cited by Dellinger, the United States accepted a treaty as binding on it out of a sense that international law so required

a. The Dissolution of the Greater Columbian Union, 1829–1831

In 1819, the Spanish Kingdom of New Granada, the Captain-Generalship of Venezuela and Quito (also called Ecuador) formed the Greater Columbian Union. The Union Dissolved in 1829–1831. The extent to which the three States had submerged their separate identities in the Union is a matter of dispute. According to one scholar, the Union consisted of three States. Hence, the dissolution did not manifest a unitary State's loss of sovereignty over territory.[153] Later, Columbia and the United States signed a new treaty, which contained language that can be read to imply that each party had considered the pre-dissolution treaties to have continued in effect in the period between the Union's dissolution and the making of the new treaty.[154]

The episode was described by the U.S. Secretary of State in 1832, and more recently in books, articles and reports on State succession, including a report by a Committee of the UN's International Law Commission.[155] If the United States had manifested an understanding that it acted out of a compulsion of international law, that would have been a noteworthy event to students of the law of State succession as well as to AAG Dellinger, *i.e.*, a bona fide manifestation of action *opinio juris* in a field of few if any such manifestations. Yet, neither Dellinger nor any other scholar, identifies any such manifestation.

There is, in short, nothing to suggest that the United States was acting out of *opinio juris* in conducting treaty relations with the successors of the Greater Columbian Union.

b. The Dissolution of the Dual Monarchy of Norway and Sweden, 1905

In 1814, the Kingdom of Norway and the Kingdom of Sweden formed a "Dual Monarchy" by which one person became King of both States.[156] In a 1910 letter to the Minister of Japan in Washington, the U.S. Secretary of State described the treaty operations of the Dual Monarchy from the time it was formed until it dissolved in 1905:

> In point of fact the Government of Norway and the Government of Sweden have hitherto acted independently in execution of their treaty engagements, each within its sovereign jurisdiction. In the matter of extradition

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[150] *Columbian-Peruvian Asylum Case,* 1950 I.C.J. 4, 276 (Nov. 20).

[151] *The Lotus*, (1927) P.C.I.J. Rep. Ser. A. No. 10, at 28; *Anglo-Norwegian Fisheries Case*, 1951 I.C.J. 4, 131 (Dec. 18).

[152] *Anglo-Norwegian Fisheries Case,* 1951 I.C.J. 4, 131 (Dec. 18).

[153] McNair, *supra* note 100, at 412–18.

[154] De Muralt, *supra* note 134, at 86–87.

[155] President Andrew Jackson, Message to the House of Representatives, transmitting Report of Secretary of State Edward Livingston, on Government of Columbia, H.Doc. No. 173, 22d Cong. 1st Sess. (March 16, 1832) (App. 22). *Draft Articles on Succession of States in Respect of Treaties with Commentaries Adopted by the International Law Commission at Its Twenty-Sixth Session*, U.N. GAOR, 1977 Sess. & res. Sess. 1978, Vol. III, at 89, U.N. Doc. A/Conf. 80/16/Add. 2 (1979); Jones, *supra* note 123, at 367–68; O'Connell, V The Law of State Succession, *supra* note 101, at 43–44; D. P. O'Connell, *State Succession in the New Nations*, in International Law and Diplomacy, III Yearbook of World Polity 13 (1965); De Muralt, *supra* note 130, at 86–87.

[156] Fridtjof Nansen, Norway and the Union with Sweden 26 (1905).

the United States has concluded separate treaties with the Governments of Norway and Sweden.[157]

The U.S. practice of concluding separate extradition treaties with Norway and Sweden has been interpreted by the UN's International Law Commission as recognition that the two States had "separate international personalities." [158]

In 1905, when Sweden and Norway separated from their Union, each notified the United States and other States of its position on treaties made during the period of the Union, *i.e.*, a treaty that had been made specifically with reference to one member of the Union would continue in effect between that member and its treaty partner, and would not continue in effect otherwise; a treaty made for the Union as a whole would continue in effect to the extent that it related to one of the members of the Union, and would not otherwise continue in effect. The United States and France acquiesced. Great Britain did not acquiesce as to the continuance of any treaty with Norway, and as to Sweden, reserved the right to examine the treaties one-by-one.[159]

Like the episode of the Greater Columbia Union, no public account of that episode states or implies that the U.S. acquiescence was driven by a sense of necessity to comply with international law. In one respect, however, the episodes differ, in that in the period between the dissolution of the Greater Columbian Union (1829–31) and the dissolution of the Dual Monarchy of Norway and Sweden (1905), additional government officials and scholarly writers had expressed opinions on the status of treaties of extinct States. None of them suggests that the dissolution of Greater Columbia was a precedent relevant to the dissolution of the Norway/Sweden Dual Monarchy.

Thus, to the extent that views of law had been expressed after the Greater Columbian Union's dissolution, those views suggested that the United States was not bound by law to acquiesce in Norway's and Sweden's proposal that any of their treaties with the United States remained in effect after their Dual Monarchy's dissolution. Indeed, to the scholars, the law appeared to be to the contrary. Hence, there is no evidence to support Dellinger's implied claim that the U.S. practice *vis-a-vis* the dissolved Dual Monarchy of Norway and Sweden was arrived at by *opinio juris*. That episode therefore does not support the existence of a rule of customary international law.

c. The Dissolution of the Austro-Hungarian Empire, 1918

The Austro-Hungarian Empire dissolved at or about the end of World War I. The Empire had fought as an ally of the German and Ottoman Empires, against a group of States (the "Allies"), the principals of which were Britain, France, Italy, Japan, Russia, (until its withdrawal in 1917), and the United States (which entered in 1917 as against the German and Austro-Hungarian Empires).

After the War, the Allies jointly negotiated with Germany the Peace Treaty of Versailles (1919),[160] to which the U.S. Senate denied consent. Therefore, the Treaty was not ratified by the United States.[161]

The Allies jointly negotiated other Peace Treaties which the United States did not ratify, including treaties with Hungary (Trianon, 1920),[162] and with Austria (St. Germain-en-Laye, 1919).[163] The United States made peace by separate treaties, *i.e.*, with Germany (Berlin, 1921),[164] with Austria (Vienna, 1921)[165] and with Hungary (Budapest, 1921).[166]

In the recitals at the beginning of the U.S. Treaty with Germany, the parties state that "Being desirous of *restoring* the friendly relations existing between the two nations prior to the outbreak of war . . . [h]ave for that purpose appointed their plenipotentiaries . . ." (emphasis added). The recitals introducing the Treaty with Austria

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[157] Letter from Secretary of State Elihu Root to Minister of Japan Takahira (Nov. 10, 1905), reprinted in Hackworth, *supra* note 123, at 362.

[158] *Draft Articles on Succession of States in Respect of Treaties with Commentaries Adopted by the International Law Commission at Its Twenty-Sixth Session*, U.N. GAOR, 1977 Sess. & res. Sess. 1978, Vol. III, U.N. Doc. A/CONF.80/16/Add.2 (1979).

[159] Baty, *supra* note 3, at 123–24 (1923). *See also* Keith, *supra* note 3, at 101.

[160] Treaty of Versailles, June 28, 1919, reprinted in II Major Peace Treaties of Modern History 1265 (F. L. Israel, ed., 1967).

[161] Edwin Borchard, *Shall the Executive Agreement Replace the Treaty?*, 53 Yale L.J. 664, 665–66 (1943–1944).

[162] Treaty of Trianon (June 4, 1920).

[163] Treaty of St. Germain-en-Laye (Sept. 10, 1919).

[164] Treaty of Peace with Germany, Aug. 25, 1921, U.S.-F.R.G., T.S. No. 658 (Excerpts, App. 23).

[165] Treaty of Peace with Austria, Aug. 24, 1921, U.S.-Aus., T.S. No. 659 (Excerpts, App. 24).

[166] Treaty of Peace with Hungary, Aug. 29, 1921, U.S.-Hung., T.S. No. 660 (Excerpts, App. 23).

are different, *i.e.*, "Considering that the former Austro-Hungarian Monarchy ceased to exist and was replaced by a republican Government . . .," and "Being desirous of *establishing securely* friendly relations between the two nations . . . [h]ave for that purpose appointed their plenipotentiaries . . ." (emphasis added). The recitals in the Treaty with Hungary are substantially the same as in the Treaty with Austria, *i.e.*, "Considering that the former Austro-Hungarian Monarchy ceased to exist and was replaced in Hungary by a National Hungarian Government . . .," and "Being desirous of *establishing securely* friendly relations between the two nations . . . [h]ave for that purpose appointed their plenipotentiaries . . ." (emphasis added) Austria insisted that it was not the continuation of the Empire.[167] Austria's position was supported by its national courts and by a Tripartite Commission that included the United States.[168] The Commission cited the above-described differences in the wording of the U.S. treaties with Germany, Austria and Hungary as evidence that neither Austria nor Hungary was a continuation of the Empire.

Moreover, in Article II(1) of the 1921 U.S.-Austria Peace Treaty, Austria confers on the United States "the rights, benefits and advantages" conferred by Austria on the other Allied and Associated Powers by designated Parts of the Treaty of St. Germain-en-Laye (1919) (to which the United States did not become a party),[169] including Part X. Part X of the Treaty of St. Germain-en-Laye, Section II, Articles 234–247, provides a regimen for dealing with the treaties of the dissolved Austro-Hungarian Empire. Article 234 designates particular treaties of the dissolved Austro-Hungarian Empire, and provides that these treaties alone "shall . . . be applied as treaties between Austria and those of the Allied and Associated powers party thereto . . .".[170] Some examples are the Convention of October 11, 1909, regarding the international circulation of motor-cars, and the Convention of June 12, 1902, regarding the guardianship of minors. Article 241 provides that each of the Allied or Associate Powers "shall notify to Austria the bilateral agreements of all kinds which were in force between her and the former Austro-Hungarian Monarchy, and which she wishes should be in force as between her and Austria."[171] Article 241 further provides that "[t]he date of the coming into force shall be that of the notification."[172] Also, "[o]nly those bilateral agreements which have been the subject of such a notification shall be put into force between the Allied and Associated Powers and Austria."[173] The U.S. Peace Treaty with Hungary, *i.e.* Budapest (1921), by reference to the Treaty of Trianon (1920), Article II(1), adopts by reference Article X of the Treaty of Trianon (1920), which is in material respects identical to Article X of the Treaty of St. Germain-en-Laye.[174] Both treaties were submitted to and approved by a two-thirds vote in the U.S. Senate.

In 1923 the State Department Solicitor explained that Article II (i) of the 1921 Treaty with Austria, by incorporating section 241 of the Treaty of St. Germain-en-Laye, had the effect of terminating the U.S.-Austria Naturalization Treaty of 1870.[175] In 1927 the State Department Solicitor explained that Article 241 gave the United States a "right . . . to revive, by giving notice to Austria within a specified period, any treaty or convention which it may be desired to continue in effect." The Solicitor explained further that the United States did not within the period specified in Article 241, give notice of "its intention to revive the Consular Convention concluded between this country and Austria-Hungary on July 11, 1870," adding that the Department "therefore does not consider that this Consular Convention is now in force."[176]

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[167] *See* Kelsen, *supra* note 123, at 384 n.85; Marek, *supra* note 78, at 230–32; Thomas Baty, *The Obligations of Extinct States*, 35 Yale L.J. 434, 435–37 (1925–1926); Oskar Lehner, *The Identity of Austria 1918 as a Problem of State Succession*, 44 Aus. J. Pub. Int'l L.63 (1992). For a history of the dissolution of the Austro-Hungarian Empire, see Robert A. Kann, A History of the Habsburg Empire 468–520 (1974); Rene Albright-Carrie, A Diplomatic History of Europe Since the Congress of Vienna 360–371 (1958).

[168] Tripartite Claims Commission (United States, Austria and Hungary) Administrative Decision No. 1, 4–6, 11–14 (May 25, 1927) (App. 20).

[169] Treaty of Peace between the United States and Austria (Vienna, 1921) (Excerpts, App. 24).

[170] Treaty of Peace between Austria on the one hand and the Allied and Associated Powers on the Other (St. Germain-en-Laye, 1921).

[171] *Supra* note 169, at Article 234 (Excerpts, App. 24).

[172] *Id.* at Article 241.

[173] *Id.*

[174] Treaty of Peace Between the United States and Hungary (Budapest, 1921) (Excerpts, App. 25).

[175] Letter from United States State Department Solicitor to Mr. Vallance, Effect of War on Naturalization Treaty Concluded Between the United States and Austria on September 20, 1870, at 1–2 (Apr. 6, 1923) (App. 26).

[176] Letter from United States State Dept. Solicitor Green H. Hackworth to Mr. Jean Dube 1–2 (May 25, 1927) (App. 27).

Given that the United States and Austria agreed to an elaborate regimen by which the United States would select the U.S.-Austro-Hungarian Empire treaties that it wanted to be in force with Austria, and that this regimen was consented to by the Senate, there is no support for Dellinger's implied claim that the U.S.-Austro-Hungarian treaties continued automatically by operation of law, or Dellinger's implied claim that the Executive Branch revived those treaties without the Senate's consent.

In short, the United States did not regard itself as bound by international law to the treaties of the extinct Austro-Hungarian Empire.

d. The Secession of Syria from the United Arab Republic, 1961

In 1958, Syria and Egypt formed a union called the United Arab Republic (the "UAR"). In 1961, Syria seceded and was once again recognized as a separate State. In the view of the United States, the UAR continued to exist notwithstanding Syria's secession, a view shared by the UAR itself. Under the circumstances, as a matter of international law, treaties would remain in place absent some reason why a particular treaty could no longer fulfill its object and purpose. Moreover, a scholarly work expresses the opinion that Syria's treaties that were in force when it joined the Union never went out of force.[177] Therefore, in 1961 when Syria seceded, its pre-Union treaties were in force in any event. The United States did not object to continuing with Syria the treaties that the United States had made with the UAR, but the United States did not maintain that it continued those treaties out of a sense of legal duty.

4. U.S. practice regarding Yugoslavia's 1992 dissolution shows that the United States does not consider itself bound by international law to maintain in force the non-dispositive treaties of extinct States

In 1992, the Socialist Federal Republic of Yugoslavia ("SFRY") dissolved and five States emerged on its territory, *i.e.*, Slovenia, Croatia; Bosnia and Herzegovina; Macedonia; and the Federal Republic of Yugoslavia (Serbia and Montenegro) ("FRY(S&M)"). When the dissolution occurred, the FRY(S&M) claimed that it was not a new State but merely a reduced-in-size SFRY and therefore was the SFRY's continuation.

The United States rejected the FRY(S&M)'s claim. In a Declaration filed with a Statement of Interest of the United States in U.S. District Court in New York in 1995, Christopher R. Hill, Director of the State Department Office of South European Affairs, stated:

> In the early part of this decade, the SFRY suffered increasing political crisis that ultimately led to dissolution. Since 1992 the United States has taken the position that the SFRY has ceased to exist and that no state represents the continuation of the SFRY.
>
> The United States' position that the SFRY has ceased to exist and that no state represents the continuation of the SFRY is consistent with the position of the international community generally.[178]

5. The U.N. Security Council Decision not to oppose giving the Russian Federation veto power does not evidence customary international law because the decision was not required by international law

Within days after the USSR dissolved in December, 1991, the Russian Federation asked the United Nations Security Council for the USSR's Permanent Seat (with veto power) on the Security Council. The United States could have exercised its veto to preclude a Security Council decision to grant the Russian Federation's request. Instead, the United States, at a non-public meeting with other members of the Security Council, granted the Russian Federation's request.

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[177] L. C. Green, *The Dissolution of States and Membership of the United Nations*, in Law, Justice and Equity 162–166 (R. H. Code Holland & G. Schwarzenberger, eds., 1967); J. H. W. Verzijl, International Law in Historic Perspective 126 (1969); United States Dept. of State, Bureau of Intelligence and Research, *The Outlook for Nasser,* Research Memorandum RNA8 at 1 (Oct. 30, 1961) (Declassified, NARA 1/14/99) (The 1961 separation is called "The Secession of Syria; U.S. Dept. of State, Telegram to American Embassies in Bonn, London, Cairo, etc. The State Department had advised the UAR Ambassador that "[Syria's secession] was a special situation in that it was not repeat not a matter of a new regime having supplanted an old regime, but of a new regime having been created side by side with the previous regime.") (App. 28).

[178] Declaration of Christopher R. Hill, Director, Office of South Central European Affairs, United States Department of State, filed in *Federal Republic of Yugoslavia v. Park-71st Corp.*, No. 95 Civ. 3659 (AGS) (S.D.N.Y.) ¶¶ 3, 5 (Sept. 21, 1995), *complaint dismissed*, 913 F. Supp. 191 (S.D.N.Y. 1995) (App. 1).

The Security Council made no official announcement at the time other than by removing the USSR's nameplate and replacing it with a Russian Federation nameplate in the Security Council chamber.[179] The Russian Federation's request was handled quietly and quickly to avoid precipitating consideration of proposals to restructure the Security Council to abolish the veto power, to merge the veto powers of France and Great Britain, and to give veto powers to Germany or Japan or both. According to one news account, "western diplomats are said to be lobbying hard to avoid a messy debate on the reform of the Security Council."[180] Similarly, former U.S. Ambassador to Italy Richard N. Gardner explained: "The one thing the United States, Britain and France wanted to avoid at all costs is anything that would open up the Pandora's box of a Charter amendment altering the present membership of the Security Council and possibly ending the right of a veto."[181]

Carolyn L. Willson, U.S. Department of State, has called the decision to give the USSR seat to the Russian Federation a "de facto amendment" of the U.N. Charter, a locution that implies that without amendment the U.N. Charter would not have permitted the Russian Federation to take the USSR's seat, a tacit statement that the Russian Federation was not the same State as the USSR.[182]

Professor Michael P. Scharf, who at the time served as the State Department lawyer with responsibility for legal issues concerning succession to membership at the United Nations, goes no farther than to say that "[W]hat is significant is that the members of the United Nations have found it in their interests to act (or at least to depict their actions) concerning membership succession in conformity with legal principles and precedent."[183] The precedent to which Professor Scharf refers is a U.N. decision in 1947: When British Colonial India (a member of the U.N. even before Indian independence) became independent, it automatically acquired U.N. membership, but Pakistan, which emerged as a new State at the same time, had to apply for membership.[184] The USSR episode and the India-Pakistan episode, however, differ in a material respect: treating India as though it were an incumbent U.N. member, rather than as a new applicant could not change the regimen for governing the U.N., whereas allowing the Russian Federation to occupy (as incumbent) the USSR's seat on the Security Council would vastly change the governing regimen, *i.e.*, as an incumbent, the Russian Federation would have a veto power. As just another U.N. member it would not. So, when the Security Council gave the Russian Federation a veto power, it was not bound to do so on the basis of the 1947 decision on India and Pakistan. The Security Council, and the U.N. generally, acted on the basis of expediency, not legal requirement. Indeed, one commentator, concluding that the India/Pakistan episode of 1947 was not analogous to the dissolution of the USSR, stated that, "with the demise of the Soviet Union itself, its membership in the UN should have automatically lapsed and Russia should have been admitted to membership in the same way as the other newly-independent republics.[185]

Therefore, the USSR/Russian Federation decision does not constitute *opinio juris* as to the survival of treaties of the USSR.

In sum, U.S. diplomatic practice has not contributed to the development of a rule of law that a non-dispositive treaty of an extinct State automatically becomes a treaty between a successor State and the extinct State's treaty partner.

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[179] Michael P. Scharf, *Musical Chairs: The Dissolution of States and Membership in the United Nations*, 28 Cornell Int'l L.J. 29, 46–53 (1995); Carolyn L. Willson, *Current Development: Changing the Charter: The United Nations Prepares for the Twenty-First Century*, 90 Am. J. Int'l L. 115, 117–19 (1996); Yehuda Z. Blum, *Russia Takes Over the Soviet Union's Seat at the United Nations*, 3 Eur. J. Int'l L. 354 (1992).

[180] Trevor Rose, *Switch of Soviet Security Council Seat Could Spur Reform Ideas*, Wash. Post., Dec. 26, 1991, at A25; *see also* Paul Lewis, *3 Western Powers for Russian Takeover of Soviet U.N. Seat*, N.Y. Times, Dec. 24, 1991, at A8; Paul Lewis, *West Acts to Defer Issue of New U.N. Council Seats*, N.Y. Times, Jan. 3, 1992, at A6; Sam Jameson, *Japan to Seek Seat on U.N. Security Council*, L.A. Times, Jan. 29, 1992, at A9.

[181] Scharf, *supra* note 179, at 48, n.104, quoting from a statement by former Ambassador Gardner, reported in Paul Lewis, *3 Western Powers Favor Russian Takeover of Soviet U.N. Seat*, N.Y. Times, Dec. 24, 1991, at A8.

[182] Willson, *supra* note 179, at 117.

[183] Scharf, *supra* note 179, at 67–69.

[184] *Id.* at 68–69.

[185] Blum, *supra* note 179, at 359.

G. The 1978 Vienna Convention on Succession of States in Respect of Treaties Does Not Resolve Any ABM Treaty Question Because The United States Is Not a Party to The Vienna Convention and Conventions Do Not Bind Non-Parties

The United States did not sign the 1978 Vienna Convention at the time it was opened for signature in 1978, or since. A State is not bound by a convention or treaty to which it is not a party.[186]

H. Article 34.1 of the 1978 Vienna Convention Does Not Reflect a Rule That Has Passed into Customary International Law

Article 34.1 of the 1978 Vienna Convention provides:

> Succession of the States in cases of separation of parts of a State 1. When a part or parts of the territory of a State separate to form one or more States, *whether or not the predecessor State continues to exist:* (a) any treaty in force at the date of the succession of States in respect of the entire territory of the predecessor State continues in force in respect of each successor State so formed; (b) any treaty in force at the date of the succession of States in respect only of that part of the territory of the predecessor State which has become a successor State continues in force in respect of that successor State alone.[187]

In *Filartiga* v. *Pena-Irala* (1980),[188] a U.S. Court of Appeals held that an act of torture committed by a foreign State official against a person held in detention in that State's territory violated a customary rule of international law. The court inferred the existence of the rule from evidence that the use of torture had been universally condemned by States. According to the court, foreign States had manifested their "universal abhorrence" by way of treaties on human, political and civil rights; by declarations of the United Nations General Assembly; and by domestic laws.[189] The court, however, issued this caution:

> The requirement that a rule command the "general assent of civilized nations" to become binding upon them all is a stringent one. Were this not so, the courts of one nation might feel free to impose idiosyncratic legal rules upon others, in the name of applying international law.[190]

In counseling caution, the court could have cited the *North Sea Continental Shelf* case, decided by the International Court of Justice in 1969.[191] The ICJ rejected the contention of Denmark and the Netherlands (in a dispute with Germany) that, by reason of the adoption of the Convention on the Continental Shelf, a principle for determining continental-shelf boundaries between adjacent coastal States (the principle of "equidistance") had become a rule of customary international law. The Convention was opened for signature for 1958. Between 1958 and 1969, thirty-nine States had become parties.[192] By 1969, approximately 70 States were exploring or exploiting continental shelf areas.[193]

Denmark and the Netherlands argued that the participation of 39 States in the Convention was sufficient to establish the equidistance principle as a rule of customary international law binding on every coastal State, not just the 39 States that were parties to the Convention. The ICJ rejected the argument. The participation of 39 States was not sufficiently "widespread and representative" to show that the equidistance principle had passed into a rule binding on States that were not parties to the Convention. That number of participants "though respectable," was "hardly sufficient" even when compared to the total number of States "whose interests were specially affected," *i.e.* were eligible to join and had continental shelves.[194]

The evidence as to States' acceptance of the Vienna Convention does not approach the level of proportional participation that the ICJ found insufficiently widespread in the *North Sea Continental Shelf* case, *i.e.,* 39 out of 70 interested States in the *Continental Shelf* case; 20 out of at least 185 States in the case of the1978 Vienna Convention (all States have an interest in the making of treaties). Moreover, the

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[186] *Jet Traders Inv. Corp. v. Tekair*, 89 F.R.D. 560, 567 (D. Del. 1981); Restatement (Third) of the Foreign Relations Law of the United States § 324(3); Udokang, *supra* note 123, at 403; Georg Swarzenberger, A Manual of International Law 160–61 (5th ed. 1967).

[187] Vienna Convention on Succession of States in Respect of Treaties, Art. 34.1, U.N. Doc. A/Conf.80/31 (1978) (emphasis added).

[188] *Filartiga v. Pena-Irala*, 630 F.2d 876 (2d Cir. 1980).

[189] *Id.* at 884.

[190] *Id.* at 881.

[191] *North Sea Continental Shelf Cases*, 1969 I.C.J. 3 (Feb. 20).

[192] *Id.* at 25.

[193] *Id.* at 227 (Lachs, J., dissenting).

[194] *North Sea Continental Shelf Cases*, 1969 I.C.J. 3, 43 (Feb. 20).

1978 Vienna Convention's participants do not include any developed state other than the Holy See or any Western European State, or any North American State or any of the five States (United States, the Russian Federation, China, France and Great Britain) that has a Permanent Seat (and veto power) on the UN Security Council. The line is pushed even farther from the regimen of customary international law if weight is given to proportion of population, because the 1978 Vienna Convention's participants collectively represent about 15 percent of the World's population.[195] Moreover, in the *North Sea Continental Shelf* case the ICJ ruled that the passage of eleven years between the Convention's signing and the Court's decision was adequate to judge how well the Convention was becoming accepted by States. One commentator explained:

> However, when time passes and States neglect to become parties to a multilateral instrument, the abstention constitutes a silent rejection of the treaty. Early in the history of the treaty, it is impossible to determine what position States will ultimately take, but 20 years after the treaty was drafted, one can gain a fairly clear idea of how much acceptance the treaty will probably ever secure.[196]

If time available for participation is given weight, there is even less to commend the 1978 Vienna Convention as a maker of customary international law, because nineteen years have elapsed since the 1978 Convention was signed.[197]

So Article 34.1 of the 1978 Vienna Convention does not meet the "stringent" requirement suggested by *Filartiga* or the "widespread and representative" requirement of the *North Sea Continental Shelf* case. The 1978 Vienna Convention has not passed into customary international law and therefore binds no State other than a party to that Convention.

I. The Continuation Principle of the 1978 Vienna Convention Would Not Apply to the ABM Treaty Vis-a-vis the Russian Federation Because the Continuation of the Treaty Would Conflict with the Treaty's Object and Purpose

The clause in the 1978 Vienna Convention that would require the continuation in force *vis-a-vis* successor States of the treaties of their extinct predecessors does not apply if continuation would be incompatible with the treaty's object and purpose or would radically change the conditions for its operation.

Article 34.1 of the 1978 Vienna Convention provides:

> Succession of the States in cases of separation of parts of a State 1. When a part or parts of the territory of a State separate to form one or more States, whether or not the predecessor State continues to exist: (a) Any treaty in force at the date of the succession of States in respect of the entire territory of the predecessor State continues in force in respect of each successor State so formed; (b) any treaty in force at the date of the succession of States in respect only of that part of the territory of the predecessor State which has become a successor State continues in force in respect of that successor State alone.

Article 34.2 of the 1978 Vienna Convention provides:

> Paragraph 1 does not apply if: (a) the States concerned otherwise agree; or (b) it appears from the treaty or is otherwise established that the application of the treaty in respect of the successor State would be incompatible

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[195] Participants in the 1978 Vienna Convention are Angola, Bosnia and Herzegovina, Brazil, Chile, Cote d'Ivoire, Croatia, Czech Republic, Democratic Republic of the Congo, Dominica, Egypt, Estonia, Ethiopia, Holy See, Iraq, Madagascar, Morocco, Niger, Pakistan, Paraguay, Peru, Poland, Senegal, Seychelles, Slovakia, Slovenia, Sudan, the former Yugoslav Republic of Macedonia, Tunisia, Ukraine and Uruguay. (U.N. Sales No. F.79.v.10 (1996)). Each of the parties other than the Holy See is a "developing" State according to the classification used by the International Bank for Reconstruction and Development. See The World Bank Group, *The World Bank's Role*, and *Countries and Regions listings*, <http://www.worldbank.org/html/extdr/backgrd/ibrd/role.htm> (visited Dec. 29, 1998), and <http://www.worldbank.org/html/extdr/country.htm> (visited Dec. 29, 1998). The parties to the 1978 Vienna Convention represent about 15 percent of the world's population of 5.9 billion in 1998. United Nations, Population division, Department of Economic and Social Affairs, 1998 Revision of the World Population Estimates and Projections (1998) (for world population figure); Population Reference Bureau, 1998 World Population Data Sheet (1998) (for population of each of the parties to the 1978 Vienna Convention).

[196] Richard Baxter, *Treaties and Custom,* Recuil des Cours 25, 99–101 (1970); *See also* Briggs, *supra* note 145, at 728.

[197] "It took nineteen years for the 1978 Vienna Convention or the Succession of States in Respect of Treaties to enter into force with the deposit of the fifteenth instrument of ratification by the Former Yugoslav Republic of Macedonia (FYROM) on 7 October, 1996." Koskenniemi, *supra* note 66, at 89, 93–94 (footnotes omitted).

with the object and purpose of the treaty or would radically change the condition for its operation.

In his November, 1997 letter to Representative Gilman, President Clinton stated that the ABM Treaty of 1972 cannot fully achieve its purpose with the Russian Federation as the only partner of the United States because the Treaty refers specifically to territory outside the boundaries of the Russian Federation and within the boundaries of Belarus, Kazakstan and Ukraine:

> Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original purpose and substance of the Treaty as approved by the Senate in 1972.[198]

Therefore, according to President Clinton, to achieve the Treaty's purposes, the area of its application must include the territories of Belarus, Kazakstan and Ukraine in addition to the Russian Federation. To include those territories they would have to be made parties. This would require a substantial amendment to the Treaty's provisions on decision-making. Moreover, the alteration in the ABM Treaty's territorial scope would have a material affect on the ability of parties to defend their national territory by means of the one permitted ABM site.

Were Belarus, Kazakhstan and Ukraine simply added as parties (assuming, for the sake of argument, President Clinton's view that the Treaty remains in force between the United States and the Russian Federation), the veto power that the United States has as regards the ABM Treaty of 1972 in treaty governance would be destroyed. Also, the United States and the Russian Federation together could be outvoted by the other three States. So critical a change in the powers of governance would not be compatible with the ABM Treaty as adopted by the United States and the USSR.

Moreover, the dynamics of amending the Treaty would change drastically. It would no longer be enough for the United States to convince the other major party to agree to an amendment. The other three could block an amendment, requiring the major parties to withdraw and start anew if they desired an amended treaty.

J. The ABM Treaty Did Not Become a Treaty Between the United States and the Russian Federation by Devolution

In anticipation of dissolving, a State may want to impose its treaties on both its treaty partners and its successors. To that end, it may proclaim that a treaty will become a treaty between its successor and its (the dissolving State's) treaty partner. That proclamation is called a "devolution proclamation." Similarly, the dissolving State and its about-to-become successor may agree to such a devolution. In either case, the devolution does not bind a treaty partner.[199]

It follows that neither a devolution proclamation by the USSR nor a devolution agreement between the USSR and any one or more of its to-be-successor States could bind the United States to accept one or more of the successor States as a party to the ABM Treaty.

K. The ABM Treaty Was Not a Dispositive Treaty

1. The ABM Treaty did not create a legally recognizable interest in any State other than the Treaty parties

Some treaties, like some contracts, are thought to create permanent rights in third parties. Thus:

> It is equally clear that transitory or dispositive treaties remain in force. Of such a character are stipulations respecting boundary lines, servitudes

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[198] Letter from President William J. Clinton to Benjamin A. Gilman, Chairman, Committee on International Relations, House of Representatives (Nov. 21, 1997) (App. 7).

[199] *Draft Articles on Succession of States in Respect of Treaties with Commentaries Adopted by the International Law Commission at Its Twenty-Sixth Session*, U.N. GAOR, 197 Sess. & res. Sess. 1978, Vol. III, at 18–25, U.N. Doc. A/CONF.80/16/Add.2 (1979); Restatement (Third) of the Foreign Relations Law of the United States § 210 cmt. f (1986) ('Subsection (3) adopts the "clean slate" theory . . .. Under that theory, a new state starts afresh, with neither rights nor obligations under the agreements . . . of its predecessor state, unless the new state indicates a desire to adopt a particular agreement . . . and the other party or parties agree. Even a devolution agreement between the predecessor state and the successor state, whereby the latter assumes all or some of the agreements . . . of the predecessor state, is binding only as between those states; the other party (or parties) to an agreement must agree to the substitution of the new state. The principle applies both to newly independent states and to a state separated from another by secession or other circumstances.").

> or easements resting on the land relating to the use and repair of roads (including railways) or the navigation of rivers, etc. In these cases the rights of third parties, which it would be illegal to ignore or destroy, are involved.[200]

The ABM Treaty did not purport to transfer any legally enforceable right to any third party, and that alone raises a strong presumption that no third party had such right.[201] In addition, Article XV.2 of the ABM Treaty allows each party to withdraw on specified grounds, without the consent of anyone else, upon six months" advance notice. Finally, a party is allowed to withdraw "if *it* decides that extraordinary events related to the subject matter of this Treaty have jeopardized *its* supreme interests" (emphasis added). Hence, the decision as to whether to withdraw is vested exclusively in each party. Therefore, the ABM Treaty cannot reasonably be read as having transferred a legally recognizable interest to any third party.

2. The ABM Treaty did not evidence an intent to restrict either treaty party's use of particular territory beyond the time that the Treaty was to be in force

Some scholars suggest that a treaty may create a "servitude"—that is, a restriction on a particular use of territory for the benefit of the other party that survives the first party's extinction, even if no third-party right is created. Such obligations "are said to be in the nature of covenants running with the land."[202] Whether, in international law, such a device as a servitude actually exists, is hotly contested. According to F.A. Vali:

> The "servitude" of international law is the traditional scapegoat of international jurisprudence. There is hardly any concept or doctrine of international law which has suffered such contemptuous criticism and blunt rejection, and at the same time enjoyed such unsubstantiated approval and wanton praise. It has been accused of being the absolute vestige of medieval patrimonial, feudal and—last but not least—Roman law. It has been attacked as being the hybrid product of a servile adaptation of private law concepts, it has been indicted as being a superfluous and artificial construction, apt to deform international law and to introduce the utmost confusion therein. It has been dealt even the deadliest blow which can be given to any scientific conception . . . its existence has been denied.[203]

But assuming, for the sake of argument, that some restraints on land use can survive extinction even though they do not vest rights in third parties, there is good reason to assume that the rule would be limited to restraints on particularly-described territory. The servitude is based on the presumption that a State that granted the restriction intended to transfer a permanent property right to another State, just as any landowner might transfer to another person a permanent right in designated property. That view was expressed by Vattel:

> But it is here to be observed, that treaties or alliances which impose a mutual obligation to perform certain acts and whose existence consequently depends on that of the contracting powers, *are not to be confounded with those contracts by which a perfect right is once for all acquired, independent of any mutual performance of subsequent acts.* If, for instance, a nation has *forever ceded* to a neighboring prince the right of fishing in a certain river, or that of keeping a garrison in a particular fortress, that prince does not lose his rights, even though the nation from whom he has received them happens to be subdued, or in any other manner subjected to a foreign dominion. His rights do not depend on the preservation of that nation; she

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[200] Hershey, *supra* note 121, at 287.

[201] "The standard of proof of the existence of rights *in rem* in customary international law is strict, and it is believed, although it cannot be demonstrated here, that there is no general rule accepted *ex opinio juris sive necessitatis* that "real" or "localized" treaties automatically bind successor States." A. P. Lester, *State Succession to Treaties in the Commonwealth*, 12 Int."l & Comp. L.Q. 475, 501 (footnote omitted).

[202] James Wilford Garner, *Questions of State Succession Raised by the German Annexation of Austria*, 32 Am. J. Int'l L. 421, 432–33 (1938). To like effect is De Muralt, *supra* note 130, at 108. *See also* Malcolm N. Shaw, *State Succession Revisited*, 1994 Finnish Y.B. Int'l L. 34 77 ("where an existing State comes to an end as an international person and is replaced by two or more States it is accepted that political treaties will not continue but that territorially grounded treaties will continue . . .".)

[203] F. A. Vali, Servitudes of International Law 42 (2d. ed. 1958). Arguments pro and con, the existence of international servitudes, and the identities of the advocates of each position, are given at Esgain, *supra* note 123, at 43–44.

had alienated them; and the conqueror by whom she has been subjected can only take what belonged to her.[204]

Similarly, Samuel B. Crandall stated:

> Rights in or over the territory, or real rights, which have been created or transferred by treaty, do not expire with the extinguishment of the state conveying such rights, but survive as against the succeeding territorial sovereign. The instruments under which such rights have passed out of the one state into the other remain unchanged as documents of title.[205]

Likewise, "[t]here is an incapacity in the successor State to assert rights of sovereignty greater than those which inhere in respect of the territory."[206]

Also, D. P. O'Connell writes:

> A distinction is drawn in traditional international law between "personal" and "impersonal" or "dispositive" treaties. The former are those which are essentially contractual and presuppose reciprocity between the parties with a view to an agreed end. The latter are those which impress upon a territory with some special legal status, and so limit the incidence of sovereignty upon it.[207]

The ABM Treaty fell within D. P. O'Connell's description of a "personal treaty," *i.e.*, it presupposed "reciprocity between the parties with a view to an agreed end." If the ABM Treaty had ended by a party's withdrawal under Article XV.2, neither party would have been further obliged to forego deploying ABM systems anywhere on its territory. The end of the Treaty as a result of the USSR's extinction could not give the Treaty any greater power to burden particular territory. The ABM Treaty therefore was the antithesis of what O'Connell describes as treaties that "impress" upon a territory a "special legal status" that "limit[s] the incidence of sovereignty" on that territory. Similarly, the ABM Treaty was the opposite of Vattel's example of a right acquired by conquest that is "once for all acquired, independent of any mutual performance of subsequent acts." Finally, it cannot be assumed that the United States has, outside any treaty, granted any third State a legal right to require the United States to forego deployment of a national missile defense.

Accordingly, the ABM Treaty was not a dispositive treaty.

V. CONCLUSION

The ABM Treaty was a bilateral, non-dispositive treaty. In accordance with longstanding principles of international law, expounded with remarkable consistency by numerous officials and scholars from various countries over hundreds of years, when the USSR became extinct, its bilateral, non-dispositive treaties lapsed. Hence, the ABM Treaty lapsed by operation of law—that is, automatically—when the USSR dissolved in 1991. It did not become a treaty between the United States and the Russian Federation.

Senator ASHCROFT. I am going to move now to Mr. Rivkin. It is my understanding that Mr. Miron is here to be available to answer questions. And we will be delighted to have you as a resource in that respect.

I want to try and keep this moving, because the bells will ring a little bit later. Pardon me. I never wanted to be a prophet quite like that. But I probably have about 20 minutes in which to cast my vote. So it might be that I would hear your testimony before going.

STATEMENT OF DAVID B. RIVKIN, JR., PARTNER, HUNTON AND WILLIAMS, WASHINGTON, DC

Mr. RIVKIN. Thank you, Mr. Chairman. On behalf of myself and two of my colleagues, whom I want to recognize, Mr. Casey to my

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[204] Vattel, *supra* note 102, at X113, § 203, *quoted in* Samuel B. Crandall, Treaties, Their Making and Enforcement 430–31 (1916); Jones, *supra* note 123, at 375 (emphasis added).

[205] Crandall, *supra* note 204, at 430.

[206] Committee on State Succession to Treaties and Other Governmental Obligations, International Law Association, The Effect of Independence on Treaties 352 (1965).

[207] O'Connell, I International Law , *supra* note 39, at 368.

left, Mr. Bartram behind me, we are also delighted to be here. The totality of our views is also set forth in the memorandum of June 15, prepared for the Heritage Foundation. If you do not mind, I would appreciate it if you can include it in the record.

[The memorandum referred to, "The Collapse of the Soviet Union and the End of the 1972 Anti-Ballistic Missile Treaty: A Memorandum of Law," is available on The Heritage Foundation web site at: httl://www.heritage.org]

Senator ASHCROFT. Without objection, we are pleased to do so.

Mr. RIVKIN. And I will proceed with a very short introductory statement.

In May 1998, my law firm, as part of our pro bono responsibilities, was asked by the Heritage Foundation to consider the legal status of a 1972 ABM Treaty. Based upon our review of a text of the treaty, its history, the relevant international law authorities and American constitutional law sources, we concluded that the ABM Treaty no longer binds the United States as a matter of international and domestic law.

Our argument is as follows: We believe that the ABM Treaty became extinct when the Soviet Union dissolved in 1991. We believe that treaties are a species of contract that may be rendered impossible to perform and may be discharged as a matter of law by the disappearance of one or both of the treaty partners. Under the applicable rules of international and constitutional law, the ABM Treaty could have survived the Soviet Union's dissolution only if one or more of the surviving post-Soviet States both continued the Soviet Union's sovereignty, which is to say its international legal personality and were capable of fulfilling unimpaired the totality of the terms and conditions of the original treaty. No such state survived the Soviet Union's dissolution.

The President's sometime assertion—and Mr. Chairman recounted how mixed the record is in that regard, so the President's sometime assertion that Russia is an ABM Treaty partner—is, in our opinion, incorrect. It is significant that the Russian Federation is not merely a continuation of the Soviet Union under a different name and a different system of government, as the Soviet Union arguably was a continuation of the Romanov Empire.

The Soviet Union dissolved in 1991. Both the Empire and the Russian State around which it was built collapsed. Boris Yeltsin's Russia may be many things, but it is certainly not a continuation of the Romanov Empire. We believe it is sui generis.

Moreover, even if today's Russia could be considered to be a continuation of the Soviet Union, it could not in itself carry out the totality of the Soviet Union's obligations under the ABM Treaty. That agreement was painstakingly negotiated. It was based upon a number of fundamental assumptions about the parties and their place in the world order during the cold war. All of these assumptions, or at least most of them, are now obsolete.

Moreover, the ABM Treaty had a critical geographical component, which at the bottom guaranteed that the United States' and the Soviet Union long-range offensive ballistic missiles had unrestricted access to the entire territory of the other party. The Russian Federation today controls only a part of the Soviet Union's territory and has lost control over many of the Soviet Union's most important population centers.

Any treaty with Russia alone would not preserve the totality of a bargain that the United States had agreed to with the advice and consent of the Senate in 1972. Significantly, the conclusion that the ABM Treaty automatically was discharged in 1991 is also supported by the application of either of the two prevailing paradigms of legal analysis governing questions of state succession to treaties, the continuity analysis and the clean slate analysis.

Under the continuity analysis, even if one or more of the former Soviet Republics could have been considered to continue the USSR's interntional legal personality, the ABM Treaty could not have survived because it was a bilateral treaty personal to the Soviet Union. Such treaties are generally discharged when one treaty partner disappears.

Moreover, and this is a very important point, even if the continuity analysis were to apply, the end result of the application of that analysis would have been a series of mini ABM Treaties with 15 successor states, or, I should say, post-Soviet States, and not either a multilateral treaty with several of the post-Soviet States envisioned in the September 1997 MOU or a single treaty with Russia, the position the administration seems to be taking at this time.

Under the clean slate analysis, one or more of the former Soviet Republics would have had to agree to undertake to perform the totality of the Soviet Union's ABM Treaty obligations, and the United States would have had to accept this new state or states as a treaty partner. Significantly, that acceptance under the clean slate theory would have constituted the creation of a new treaty that could only be effected with the advice and consent of the U.S. Senate.

To summarize, today the ABM Treaty can be revived only with the full participation of the U.S. Senate, as provided by the U.S. Constitution. Moreover, to ensure that the United States obtain the totality of the benefits of its original 1972 bargain, the ABM Treaty would have to be very significantly and substantially redrafted.

In any case, the substitution of one or more former Soviet Republics of the Soviet Union for the USSR would fundamentally change the original bargain of 1972, to which the Senate consented. In sum, the President cannot, on his own authority, change the ABM Treaty in so fundamental a manner, without obtaining the Senate' advice and consent again.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Rivkin and material provided subsequent to the hearing follows:]

PREPARED STATEMENT OF DAVID B. RIVKIN, JR., AND LEE A. CASEY

I. INTRODUCTION

In May, 1998, my firm was asked by the Heritage Foundation to consider the legal status of the 1972 Treaty on Limitation of Anti-Ballistic Missile Systems ("ABM Treaty") between the United States and the Union of Soviet Socialist Republics ("U.S.S.R." or "Soviet Union"). Based upon our review of the text of the ABM Treaty, its history, and the relevant international law and American constitutional law sources, we concluded that the ABM Treaty no longer binds the United States as a matter of international or domestic law.

This is because the Soviet Union disappeared in 1991, rendering performance of the ABM Treaty as originally agreed impossible. Because there is no state, or group of states—including the Russian Federation—that can both be said to have continued the Soviet Union's international legal personality (its sovereignty) and that also is capable of implementing the totality of the U.S.S.R.'s obligations under the ABM

Treaty in accordance with that agreement's original terms, that treaty was discharged as a matter of law in 1991 and the United States is not now legally bound by it.

As a direct consequence, any new treaty regarding anti-ballistic missile defenses between the United States and the former Soviet Republics can be effected only through renewed negotiations and the agreement of both the United States and one or more of these states. Moreover, any such agreement would require the consent of the United States Senate before it could be ratified by the President.

II. BACKGROUND

The 1972 ABM Treaty limited severely the ability of the United States and the U.S.S.R. to defend their respective territory through deployment of an anti-ballistic missile system.[1] However, the U.S.S.R. collapsed in 1991. Its fifteen constituent "republics" became independent states, and all were recognized as such by the United States.

Nearly a decade later, the formal status of the Soviet Union's bilateral treaties with the United States, including the ABM Treaty, remains uncertain. The "official" stance of the United States is that the matter remains under review.[2]

In this regard, the Executive Branch has yet to announce a consistent position regarding the ABM treaty. President Clinton has both suggested that no single former Soviet Republic, including the Russian Federation, could carry out the U.S.S.R.'s ABM Treaty obligations, and that the ABM Treaty would nevertheless remain in force between the United States and Russia if the Senate were to reject a series of agreements, signed by Secretary of State Albright in September, 1997 ("September Agreements"), identifying four former Soviet Republics (Russia, Belarus, Ukraine and Kazakhstan) as ABM Treaty parties.[3] The President has promised to submit these agreements to the Senate for its advice and consent, but has not yet done so.

III. DISCUSSION

The question whether the ABM Treaty survived the Soviet Union's fall is complex, and there is no single precedent or authority that definitively resolves the issue. However, when the applicable rules of international and American constitutional law are consulted, a compelling argument emerges that the ABM Treaty no longer binds the United States, and that the Senate's approval must be obtained before that treaty, or a similar instrument, can bind the United States in the future.

A. The Impact of the Soviet Union's Demise on the ABM Treaty

The ABM Treaty was a bilateral agreement between the United States and the Soviet Union, and its key terms could be performed only by those two states. Like any contract,[4] a treaty's obligations are discharged, as a matter of law, when a necessary party (whether an individual or a "legal" person such as a corporation) to the contract disappears, or is otherwise rendered incapable of performance.[5] As the Supreme Court has recognized, a bilateral treaty survives the disappearance of a state-party only if there is a successor that continues the state-party's international legal personality, its "sovereignty," and in which "the power to execute [the treaty]

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[1] Treaty on the Limitation of Anti-Ballistic Missile Systems, May 26, 1972, 23 U.S.T. 3435.

[2] See U.S. Department of State, Treaties in Force: A List of Treaties and Other International Agreements of the United States in Force on January 1, 1998, 290 (1998) [hereinafter Treaties in Force] (With respect to bilateral treaties with the "Union of Soviet Socialist Republics," and their possible applicability to the former Soviet Republics, this official listing of United States treaties explains that: "The United States is reviewing the continued applicability of the agreements listed below [including the ABM Treaty].").

[3] See Letter from William J. Clinton to Benjamin A. Gilman 3-4 (Nov. 21, 1997) [hereinafter Clinton/Gilman Letter]. In this letter to the Chairman of the Foreign Affairs Committee of the House of Representatives, the President wrote that "[n]either a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original substance and purpose of the Treaty as approved by the Senate in 1972," and that if the Senate does not consent to ratification of the September Agreements the "ABM Treaty itself would clearly remain in force." In a subsequent letter to Chairman Gilman, the President stated that "the United States and Russia clearly are parties to the [ABM] Treaty." See Letter from William J. Clinton to Benjamin A. Gilman (May 21, 1998).

[4] It has long been recognized that treaties are a species of contract between states. *Head Money Cases,* 112 U.S. 580, 598 (1884) (A treaty is primarily a compact between independent nations, and depends for the enforcement of its provisions on the honor and the interests of the governments which are parties to it.); *Z. & F. Assets Realization Corp.* v. *Hull,* 114 F.2d 464, 470 (D.C. Cir. 1940) ("A treaty is primarily a compact between independent nations").

[5] *See* Restatement (Second) of Contracts § 261, 262 & cmt. a (1981).

remains unimpaired."[6] Thus, the ABM Treaty could have survived the Soviet Union's collapse only if there were one or more successor states that continue the U.S.S.R.'s international legal personality and which could execute the treaty in accordance with its original terms. No such state or group of states exists.

In this regard, the ABM Treaty was based upon a number of fundamental assumptions about its parties and their place in the world order during the Cold War. The ABM Treaty's purpose was to ensure that the whole territory of the United States and the Soviet Union would remain open to attack by long-range offensive ballistic missiles.[7] The premise here was that ensuring a calculated "balance of terror" between the two nuclear superpowers (the only states capable of threatening each other with nuclear annihilation) would deter nuclear war (the aptly named "MAD" or "mutually assured destruction" theory), enabling both states to control the pace of additional offensive nuclear deployments. It was assumed that any attempt to build a national anti-ballistic missile defense system would undermine the delicate "stability" of that balance.

Moreover, the ABM Treaty had a critical geographical component. Under the Treaty, both population centers and ICBM sites were to remain unprotected, and the whole territory of each ABM Treaty partner was to be free of ABM defenses (such as certain early warning radars), except for the limited systems permitted under the ABM Treaty regime itself. In this respect, a number of the key provisions of the ABM Treaty were linked to the territory of both superpowers, and would have to be rewritten if any party other than the Soviet Union were to undertake its ABM obligations, and the United States was to preserve the benefits of its original bargain. These include, among others,

- Article I(b), in which the parties agreed "not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region."
- Article III(a), as amended by the 1974 Protocol, which allowed the Soviet Union to deploy one ABM system, with no more than one hundred launchers and one hundred interceptors, around its national capital, and no more than six ABM radar complexes within its territory as a whole.
- Article VI(b), in which the parties agreed not to deploy early warning radars except at locations "along the periphery of its national territory and oriented outward."[8]
- Article IX (as clarified by Agreed Interpretation G), in which each party agreed not to "transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty."[9]

None of these provisions can be implemented in accordance with their original terms by one or more of the post-Soviet states. Only the Soviet Union could do so. Because the Soviet Union is extinct, the ABM Treaty is no longer in force.

B. The ABM Treaty and the Soviet Union's "Successor States"

The President has suggested that, even if the Senate refuses to consent to the September Agreements, the ABM Treaty would nevertheless survive as an agreement between the United States and the Russian Federation. This cannot be the case. Although the President has very broad authority to conduct the Nation's foreign affairs, including the authority to interpret and implement its treaty obligations, his power must be exercised in accordance within the recognized boundaries of domestic and international law, as that law is understood and applied in the

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[6] *Terlinden* v. *Ames,* 184 U.S. 270, 283 (1902) ("Undoubtedly treaties may be terminated by the absorption of Powers into other Nationalities and the loss of separate existence, as in the case of Hanover and Nassau, which became by conquest incorporated into the Kingdom of Prussia in 1866. Cessation of independent existence rendered the execution of treaties impossible. *But where sovereignty in that respect is not extinguished, and the power to execute remains unimpaired, outstanding treaties cannot be regarded as avoided because of impossibility of performance.*") (emphasis added).

[7] This is true with one exception. Under the ABM Treaty, as amended, each party was entitled to one ABM site. *See* Protocol to the Treaty on the Limitation of Anti-Ballistic Missile Systems, July 3, 1974, 27 U.S.T. 1645. The Soviet Union deployed this site around Moscow, and the United States—for a time—deployed its site around Grand Forks, N.D., to protect a nuclear missile field.

[8] This key provision was designed to prevent the Soviet Union from creating a large-scale radar network that could serve as a base for an ABM Treaty "breakout."

[9] In addition, a number of other provisions also would have to be rewritten, including Article XIII, which establishes a consultative mechanism—the Standing Consultative Commission ("SCC")—tasked with helping the two original treaty parties deal with various treaty related issues, and Article XIV, establishing treaty amendment procedures that become far more burdensome if more than two parties are involved.

United States.[10] When these rules are applied, it becomes clear that the ABM Treaty cannot be said to have survived as an agreement between the United States and Russia.

Two competing rules traditionally have been advanced in resolving questions of state treaty succession—the "continuity" model, under which a new state is presumed automatically to be a party to all of the treaties of its predecessor, and the "clean-slate" model, under which a new state is bound by its predecessor's treaties only if: (1) the new state agrees to be bound; and (2) the relevant treaty partner itself agrees to, or acquiesces in, the new relationship.[11]

1. The ABM Treaty Under a Continuity Rule

The United States is said to favor the continuity analysis.[12] However, the continuity rule, or rule of "universal state succession," has rarely been applied in practice—by the United States or by others—because it would automatically bind a new state, and all of its predecessor's treaty partners, to the old state's treaties without alteration. When the Soviet Union dissolved, the State Department actually claimed to adopt a "presumptive" continuity rule to determine which of the U.S.S.R.'s bilateral treaties with the United States remained in force.[13] Under this rule, the State Department proceeded to make an individual assessment of the Soviet Union's treaties with the United States to determine which could be continued in force as bilateral agreements between the United States and the former Soviet Republics. This "case-by-case" approach was continued by the Clinton Administration,[14] and has still not been completed.[15]

Nevertheless, when a continuity analysis, whether "presumptive" or actual, is applied to the ABM Treaty, it becomes clear that this agreement did not survive the Soviet Union's demise. The ABM Treaty was a bilateral agreement that was based upon a careful calculation by both treaty partners of their competing interests and objectives during the Cold War. It ordered one important facet of the relationship between the United States and the Soviet Union during that period. Under a continuity analysis, such treaties are considered to be political or "personal" (*i.e.*, to a particular monarch or state) treaties, and automatically expire at the sovereign's death or extinction.[16] Thus, "[t]here has been, at least since the late nineteenth cen-

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[10] The President is not a legislator, *Youngstown Sheet & Tube Co.* v. *Sawyer,* 343 U.S. 579, 587 (1952) ("[i]n the framework of our Constitution, the President's power to see that the laws are faithfully executed refutes the idea that he is to be a lawmaker.") and, even in the foreign affairs area, the President must exercise his authority in "subordination to the applicable provisions of the Constitution." *United States* v. *Curtiss-Wright Export Corp.,* 299 U.S. 304, 318–19 (1936). With respect to questions of state succession, his determinations are entitled to deference only so long as they are based upon the supporting law and facts. *Ivancevic* v. *Artukovic,* 211 F.2d 565, 573–74 (9th Cir. 1954) ("There is no exact formula by which it can be determined that a change of a nation's fortunes amounts to a continuance of the old or the beginning of a new nation, there can be no better equipped vehicle for decision than the Chiefs of State of the countries concerned. If their agreed decisions, *when based upon supporting facts,* are not conclusive, they should at least weigh very heavily.") (emphasis added).

[11] *See* Restatement (Third) of the Foreign Relations Law of the United States § 210(3) [hereinafter Restatement (Third)].

[12] *See e.g.,* Edwin D. Williamson & John E. Osborn, *A U.S. Perspective on Treaty Succession and Related Issues in the Wake of the Breakup of the USSR and Yugoslavia,* 33 Va. J. Int'l L. 261, 264–65 (1993); Hubert Beemelmans, *State Succession in International Law: Remarks on Recent Theory and State Practice,* 15 B.U. Int'l L.J. 71, 97 n.97 (1997).

[13] Williamson & Osborn, *supra* note 12, at 264–65.

[14] *See* Clinton/Gilman Letter, *supra* note 3, at 1 ("The United States took the view that, as a general principle, agreements between the United States and the U.S.S.R. that were in force at the time of the dissolution of the Soviet Union would be presumed to continue in force as to the former Republics. It became clear, however, particularly in the area of arms control, *that a case-by-case review of each agreement was necessary.*") (emphasis added).

[15] *See* Treaties in Force, supra note 2, at 290. A similar position has been adopted in practice by the former Soviet Republics. For example, although the Russian Federation and ten other former Soviet republics declared their willingness to be bound by the Soviet Union's treaty commitments in the Alma Ata Declaration, the former Soviet Republics have not been willing to accept application of the universal succession approach. Russia, for example, has stated that it will honor those treaties only to the extent that they do not conflict with Russian law. Paul R. Williams, "The Treaty Obligations of the Successor States of the Former Soviet Union, Yugoslavia, and Czechoslovakia: Do They Continue in Force?, 23 Denv. J. Int'l L. & Pol'y 1, 36 (1994).

[16] *See* E. de Vattel, *The Law of Nations or the Principles of Natural Law* 178 (1758) (Carnegie Institution ed. 1916) ("Just as a personal treaty expires at the death of the King, a real treaty comes to an end if one of the allied Nations is destroyed; that is to say, not only if the men composing it should all happen to perish, but even if, for any cause whatever, the Nation should lose its character as an independent political society."). Only a small category of "real" or "dispositive" treaties, involving the grant of rights or obligations intended to last in perpetuity, could survive a state's disappearance. As Vattel explained:

tury, almost unanimous agreement that personal treaties of a totally extinguished State expire with it because they are contracted with a view to some immediate advantage, and their operation is conditional on the nice adjustment of the political and economic relations which they presuppose. When this adjustment is upset the rationale of the treaty is destroyed." [17]

Moreover, even assuming that the ABM Treaty were the type of treaty that could survive the Soviet Union's dissolution, a continuity analysis would not result in an ABM Treaty between the United States and the Russian Federation. This is because the Russian Federation is not a continuation of the Soviet Union's international legal personality. It is, like the other former Soviet Republics, an entirely new state.

Although "Russia" was at the heart of the Soviet Union, the Russian State that controlled the Soviet Union was not Boris Yeltsin's Russia. Rather, it was the successor of the Romanov empire, around which the Russian colonial empire of the 18th and 19th centuries had been built. In 1991, that empire collapsed, finally following the example of the Spanish, British, and French empires before it. The borderland territories in Europe and Asia, absorbed by the Russian Empire in the 18th, 19th and 20th centuries regained, or established, their independence.

At the same time, the metropolitan Russian state, around which this colonial empire was built, also disintegrated. That state, which had been created by the Muscovite tsars from the fifteenth through the seventeenth centuries, included Great Russia (generally the territory of the old Grand Duchy of Muscovy), White Russia (now Belarus, an area largely absorbed into the Russian State from territory belonging to the medieval Polish-Lithuanian kingdom), and Little Russia or the Ukraine (now Ukraine) a territory joined to Muscovy in the 17th century which itself could properly claim to be the cradle of Russian civilization.[18]

Thus, when the Soviet Union collapsed, its metropolitan center also fragmented. In this regard, to fully appreciate the scope of the catastrophe that overtook the Russian State in 1991, it is necessary to imagine that the British and French colonial empires had not merely dissolved over the past fifty years, but that Britain and France also had dissolved into their ancient kingdoms, principalities and provinces, *i.e.*, England, Scotland, and Wales, or Normandy, Brittany, Anjou, and so forth. The Russian Federation cannot, therefore, be considered to be merely a continuation of the Soviet Union's international legal personality in the same manner that Britain or France are clearly the same states that once also were the metropolitan hubs of great empires.

Finally, under *Terlinden's* teaching, the ABM Treaty could have survived between the United States and Russia only if the Russian Federation was both a continuation of the Soviet Union's international legal personality *and* was able to fulfil the Soviet Union's obligations under the ABM Treaty as originally agreed. The Russian Federation cannot fulfil these obligations.

As explained above, the geographical component was critical to the ABM Treaty, at the very core of the bargain struck between the U.S. and the U.S.S.R. Russia, however, no longer controls vast stretches of former Soviet territory, and can no longer assure the United States that its ICBMs and SCBMs would have access to the full area and all of the population centers of the old Soviet Union. (Were the United States bound, of course, both its territory and population centers would continue to be entirely open to attack by Russian missiles.).

2. The ABM Treaty Under a "Clean Slate" Analysis

When the ABM Treaty is analyzed under a "clean slate" approach, it also is clear that it did not survive the Soviet Union. Under a "clean-slate" rule, "[w]hen a new state emerges it is not bound by the treaties of the predecessor sovereign by virtue of a principle of state succession . . . and in addition other parties to a treaty are not bound to accept a new party as it were, by operation of law." [19] This view has increasingly gained acceptance since the Second World War and the dissolution of the European colonial empires, and was identified as the general rule by the American Law Institute's Restatement (Third) of the Foreign Relations Law of the United

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> [W]e must not confound those treaties or alliances which, *since they impose the obligation of repeated acts on both sides, can not remain in force except through the continued existence of the contracting powers,* with those contracts by which a right is once and for all acquired, independently of any subsequent acts of either party.

Id. (emphasis added).

[17] 2 D.P. O'Connell, *State Succession in Municipal Law and International Law* 26–27 (1967).

[18] *See generally* Janet Martin, *Medieval Russia 980-1584* 1–133 (1995); Nicholas V. Riasanovsky, *A History of Russia* 23–59 (4th ed. 1984).

[19] Ian Brownlie, *Principles of Public International Law* 668 (4th ed. 1990).

States whenever "part of a state becomes a new state."[20] Under this approach, a new state would not be presumed to be bound by its predecessor's treaties. Only if the new state agrees to be bound, and obtains the consent of its predecessor's one-time treaty partners, can such treaty obligations be said to continue. Neither condition has been meet with respect to the ABM Treaty.

Although a number of the former Soviet republics, including the Russian Federation, have suggested that they are willing to be bound by the ABM Treaty, none have agreed to undertake the Soviet Union's obligations without alteration or condition. Moreover, even if one or more former Soviet Republics were to agree to accept these obligations, they could not become ABM Treaty parties without the corresponding consent of the United States. This consent has not been given—as noted above, the Executive Branch's official statement in Treaties in Force indicates that the matter remains under review—and could not, in any case, be given without the consent of the Senate. To substitute one or more of the former Soviet republics for the "Soviet Union" would so fundamentally change the bargain approved by the Senate when it consented to the ABM Treaty's ratification, that its consent would have to be obtained again.

C. The President Must Obtain the Advice and Consent of the Senate Before Reviving the ABM Treaty and Adding New Parties

The President has, of course, recognized that the United States cannot obtain the same strategic benefits from the ABM Treaty, to which it was entitled originally, if only the Russian Federation is an ABM Treaty partner. In the September Agreements, the Administration would add to the ABM Treaty regime at least four new parties: Russia, Belarus, Ukraine, and Kazakhstan. This would transform the ABM Treaty into a multilateral convention, and would itself constitute so significant an alteration of the original treaty's terms and conditions that the Senate's approval would have to be obtained.

As a President can make a treaty only with the Senate's consent, so he can amend a treaty only with that same consent.[21] The substitution of four new parties in place of the original treaty partner is a change so significant that it cannot be achieved through the process of interpreting a treaty. As described above, the United States entered the ABM Treaty on the understanding that it was dealing with a single power, capable of implementing its obligations under the treaty. If the ABM Treaty were multilateralized, the United States would become dependent upon at least four separate states to implement the obligations originally assumed and guaranteed by a single state—the Soviet Union. This would not only require the United States to accept a less advantageous bargain than was originally struck, but also would impose upon it the additional burden of assuring the compliance of four governments, instead of only one.[22]

If the President attempted to transform the ABM Treaty into a multilateral agreement without the Senate's consent, purporting to act on his own authority in recognizing one or more Soviet successor states as being bound by the ABM Treaty, he would be on the very thinnest of constitutional ice. As explained by Justice Robert Jackson in his defining concurrence in *Youngstown Sheet & Tube Co.* v. *Sawyer,* "Presidential powers are not fixed but fluctuate, depending upon their disjunction or conjunction with those of Congress."[23] The President's authority is at its "max-

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[20] Restatement (Third), *supra* note 11, § 210(3); *see also* Brownlie, *Principles of Public International Law, supra* note 19, 668 ("The rule of non-transmissibility (forming part of general international law) applies both to secession of 'newly independent states' (that is, to cases of decolonization) and to other appearances of new states by the union or dissolution of states.").

[21] *Amiable Isabella,* 19 U.S. (6 Wheat.) 1, 75 (1821) ("the obligations of the treaty [may] not be changed or varied but by the same formalities with which they were introduced; or at least by some act of as high an import, and of as unequivocal an authority."); *N.Y Chinese T.V. Programs* v. *U.E. Enterprise,* 954 F.2d 847, 853–54 (2d Cir. 1992) ("A significant amendment to a treaty must follow the mandate of the Treaty Clause, and therefore must be proposed by the President, and ratified following the advice and consent of the Senate . . . [A] treaty is 'amended' only if the obligations imposed by that treaty change."); *see also Treaties and Other International Agreements: The Role of the United States Senate,* S. Rep. No. 98–205 144–51 (1984) ("Amendments to a treaty or international agreement require the same procedure as the original agreement, unless otherwise specified in the original agreement."); Restatement (Third), *supra* note 11, § 339 cmt. a ("The President's power to terminate an international agreement does not imply authority to modify an agreement or to conclude a new one in its place.").

[22] In addition, the multilateralization of the ABM Treaty would significantly change the ability of the United States to obtain amendments and revisions to the Treaty. Under the original agreement, the United States was required to obtain the agreement of only one treaty partner, the Soviet Union, to any modification of the agreement it might wish to make. If the Treaty is transformed into a multilateral agreement, the agreement of more than one, and potentially of all four, treaties partners would have to be obtained before modifications could be effected.

[23] 343 U.S. 579, 635 (1952).

imum" when he acts "pursuant to an express or implied authorization of Congress."[24] By contrast, "[w]hen the President takes measures incompatible with the expressed or implied will of Congress, his power is at its lowest ebb."[25]

It has been the longstanding understanding and practice of both the Executive Branch and the Senate that arms control agreements must have the Senate's consent.[26] Indeed, when Congress established the United States Arms Control and Disarmament Agency it specifically provided that agreements limiting "the Armed Forces or armaments of the United States in a militarily significant manner," had to be subject to the Senate's advice and consent power, or be based upon "affirmative legislation by the Congress of the United States."[27] Moreover, with respect to the ABM Treaty itself, Congress has specifically stated that the President may not enter an agreement that "would substantively modify the ABM Treaty unless the agreement is entered pursuant to the treaty making power of the President under the Constitution."[28]

For his part, the President has agreed to this limitation. The Senate imposed this condition in its Resolution of Ratification to the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe (CFE)—the so-called CFE "Flank Document." Specifically, it required that, before ratifying this treaty, the President "shall certify to the Senate that he will submit for Senate advice and consent to ratification any international agreement (i) that would add one or more countries as state parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or (ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term 'national territory' as used in Article VI and Article IX of the ABM Treaty."[29] The Senate unanimously approved the Flank Amendment, and President Clinton accepted this condition. Recognizing Russia, or any other former Soviet Republic, as an ABM Treaty partner would violate this condition, calling into question the continuing validity of the CFE Flank Document.

Thus, overall, if the President determines to revise the ABM Treaty by accepting the substitution of four former Soviet republics for the Soviet Union as a party to that treaty, he must do so based upon his own authority which, in these circumstances, will be "at its lowest ebb." Given the fact that allowing these states to step into the Soviet Union's place in the ABM Treaty would fundamental alter the bargain struck by the United States, and originally approved by the Senate, it is hard to discern a plausible legal justification for such action.

CONCLUSION

When the Soviet Union dissolved in 1991, the ABM Treaty became impossible to perform in accordance with its original provisions. Because of the unique terms and conditions of the ABM Treaty, and the underlying assumptions of the parties, none of the states that emerged from the Soviet Union, either alone or with others, could carry out the U.S.S.R.'s obligations under the ABM Treaty. Consequently, the obligations of the United States under the Treaty were discharged at the time the Soviet Union disappeared.

Although a number of the former Soviet republics have indicated that they are prepared to undertake the U.S.S.R.'s role in the ABM Treaty regime, this willingness is insufficient to bind the United States. None of these states can claim to continue the Soviet Union's international legal personality, and therefore to be the automatic successor to its treaties in general, and to the ABM Treaty in particular, under a "continuity" analysis. In fact, whether a "continuity" or "clean slate" analysis is applied to the Soviet Union's dissolution, a case-by-case review of its treaties must be made to determine which of those treaties may become binding upon both the former Soviet republics and the Soviet Union's one-time treaty partners. In this process, each of those partners must agree to accept one or more of the former Soviet republics as its treaty partner, and to be bound by the relevant agreements in accordance with that acceptance.

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[24] *Id.*

[25] *Id.*

[26] *See* S.Rep. No. 98–205, *supra* note 21, at 149–51.

[27] 22 U.S.C. § 2573 (as amended). The undisputed purpose of this language was to make clear that "any action obligating the United States to disarm, reduce, or limit our Armed Forces or armaments, shall have congressional approval either in the form of a treaty ratified by the Senate or, in the case of an obligation other than a treaty, by a majority vote of the House and Senate." H. Rep. No. 863, *reprinted in* 1963 U.S.C.C.A.N. 1110, 1115.

[28] *See* Pub. L. No. 337, § 232, 103d Cong., 2nd Sess., 108 Stat. 2700.

[29] *Senate Report to Accompany Treaty Doc. No. 105–5, Flank Document Agreement to the CFE Treaty,* 105th Cong. 20–21 (1997).

In the United States, this renewed agreement to be bound can come only by and with the advice and consent of the Senate. The substitution of one or more former Soviet Republics for the Soviet Union would fundamentally change the ABM Treaty's original bargain, to which the Senate consented. The President cannot, on his own authority, change the ABM Treaty in so fundamental a manner without obtaining the Senate's advice and consent again.

HUNTON & WILLIAMS
1900 K STREET, NW,
Washington, DC, June 2, 1999

Hon. JESSE HELMS,
Chairman, Committee on Foreign Relations,
U.S. Senate,
Dirksen Senate Office Building,
Washington, DC.

DEAR MR. CHAIRMAN: At the conclusion of the Committee's May 25th hearing on the current legal status of the ABM Treaty, Senator Ashcroft indicated that the hearing record would be left open so that additional material may be supplied. We would like to add this letter, and the two attached documents, to the record at this time. The first document is a certification, issued by President Clinton on February 9, 1999, along with its accompanying report, which has been transmitted to the House and Senate Appropriations Committees. The second document is a transcript of a statement made by the then-General Counsel of the Arms Control and Disarmament Agency, Mary Elizabeth Hoinkes, on February 18, 1999, at a forum in Washington on the ABM Treaty sponsored by the Center for National Security Law of the University of Virginia School of Law.

The Senate Foreign Relations Committee may be left with the impression from the May 25th hearing that the ABM Treaty is in force today because the Executive Branch has consistently taken the position that Russia is an ABM Treaty party. Not only is this incorrect as a matter of law—the ABM treaty was automatically extinguished when the Soviet Union dissolved in 1991—but the attached documents reveal that it has, in fact, been the consistent practice of the United States, since the collapse of the Soviet Union in 1991, to avoid recognizing any of the former Soviet republics, including the Russian Federation, as ABM Treaty parties until the formal conclusion of a succession arrangement. The documents also reveal that, in the view of the United States, there is no ABM Treaty relationship with any foreign state at this time.

An assertion that Russia is an ABM Treaty party presupposes that Russia's claim to ABM Treaty succession is qualitatively different from those of other states also claiming succession rights. The attached documents also make it clear that it has been the consistent practice of the United States since 1991 to treat all such claims from the newly independent states on an equal footing. The United States has not viewed Russia's claim to ABM Treaty succession as one of separate or special legal status, nor could it do so.

In fact, as the President himself recognized in his November 21, 1997, letter to Representative Benjamin Gilman, Chairman of the House Foreign Affairs Committee, Russia could never be the sole ABM Treaty successor to the Soviet Union. Not only is Russia not a continuation of the Soviet Union's international legal personality, but, as the President suggested, Russia alone is incapable of fulfilling the Soviet Union's ABM Treaty obligations. However, even if there was a legitimate claim that Russia, by itself, could fulfill the obligations of the Soviet Union under the AMB Treaty, the attached documents make it clear that such a claim would not be consistent with the diplomatic record. The diplomatic record reveals that the United States has never recognized Russia as party to the ABM Treaty, and this is fully consistent with the "official" statements of the Executive Branch contained in the Department of State's authoritative listing of United States treaty obligations, Treaties-in-Force. This document indicates that the status of the Soviet Union's bilateral treaties with the United States, including the ABM Treaty, is under study, and does not list the ABM Treaty as a Treaty between the United States and the Russian Federation.

Finally, we would like briefly to respond to statements by Professor Glennon at the close of the May 25th hearing, suggesting that domestic "contract" law does not control the status of the ABM Treaty. This is, of course, correct. However, as we pointed out in our Memorandum of Law for the Heritage Foundation, treaties have

long been recognized as a form of contract between states, and the international law rules governing the disappearance of a state party to a bilateral treaty are, in all important respects, the same as those governing the disappearance of a party to a contract under domestic law. *Cf Terlinden v. Ames,* 184 U.S. 270 (1902). Under these rules, the ABM Treaty was discharged by operation of law at the time the Soviet Union dissolved. Today, neither the United States, nor any of the former Soviet republics, are parties to, or bound by, the ABM Treaty. Under American constitutional law, this treaty relationship can be restored only through the ratification of a new treaty instrument, which can be accomplished only by and with the advice and consent of the United States Senate.

We thank you for the opportunity to appear before the Committee on May 25th, and hope that you find these further materials appropriate for inclusion in the record of that hearing.

Sincerely,

DAVID B. RIVKIN, JR.
LEE A. CASEY

Enclosures.

THE WHITE HOUSE

Office of the Press Secretary—For Immediate Release—February 10, 1999

TEXT OF A LETTER FROM THE PRESIDENT TO THE CHAIRMEN OF THE SENATE AND HOUSE COMMITTEES ON APPROPRIATIONS

February 9, 1999

DEAR MR. CHAIRMAN:

In accordance with section 625 of the Departments of Commerce, Justice, and State, the Judiciary, and Related Agencies Appropriations Act, 1999 (as contained in the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, Public Law 105–277) (the "Act"), I hereby certify and affirm that the United States Government is not implementing the Memorandum of Understanding Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972 (the "MOU"), entered into in New York on September 26, 1972.

Attached is a report to the Congress on the MOU submitted pursuant to section 625 of the Act.

Sincerely,

WILLIAM J. CLINTON

REPORT TO CONGRESS ON THE MEMORANDUM OF UNDERSTANDING RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

Authority

Section 625 of the Departments of Commerce, Justice, and State the Judiciary, and Related Agencies Appropriations Act, 1999 (as contained in the Omnibus Consolidated and Emergency Supplemental Appropriations Act, 1999, P.L. 105–277) provides that:

Beginning 60 days from the date of enactment of this Act, none of the funds appropriated or otherwise made available by this Act may be made available for the participation by delegates of the United States to the Standing Consultative Commission unless the President certifies and so reports to the Committees on Appropriations that the United States Government is not implementing the Memorandum of Understanding Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, entered into in New York on September 26, 1997, by the United States, Russia, Kazakhstan, Belarus, and Ukraine, or until the Senate provides its advice and consent to the Memorandum of Understanding.

Presidential Certification

The President certifies and affirms that the United States Government is not implementing the Memorandum of Understanding Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the MOU.

The MOU will not be implemented until it enters into force. This requires that all signatory states deposit instruments of ratification or approval with the United States. Only after the Senate gives its advice and consent will the United States deposit its own instrument of ratification.

Background

In 1992, Belarus, Kazakhstan, Russia, and Ukraine (along with a number of other former Soviet states) declared themselves to be successor states to the USSR for purposes of the ABM Treaty and declared their intention to comply with its provisions. Since then, representatives of Belarus, Kazakhstan, Russia, and Ukraine have participated with the United States in the deliberations and negotiations in the Standing Consultative Commission (SCC). (The SCC was established under the ABM Treaty for consultation on matters affecting the object and purpose of the Treaty, and to promote implementation of its objectives and provisions, and to maintain its viability and effectiveness.) The purpose of these multilateral discussions in the framework of the SCC was to ensure a full, common understanding of the rights and obligations of the USSR under the Treaty, and to record agreement as to the terms and conditions under which the USSR Successor States would assume those rights and obligations.

The outcome of these negotiations was the MOU that was signed in New York on September 26, 1997, by the United States Secretary of State and the Foreign Ministers of Belarus, Kazakhstan, Russia, and Ukraine. The MOU provides for the recognition of the four latter states as USSR Successor States for purposes of the ABM Treaty and establishes that upon its entry into force the Parties to the ABM treaty shall be the United States, Belarus, Kazakhstan, Russia, and Ukraine. The MOU provides that its entry into force shall occur on the date when the goverments of all the signatory states have deposited instruments of ratification or approval with the United States. To date, none of the signatory states has deposited such an instrument.

Along with the signing of the MOU on September 26, 1972, representatives of the five states signed: the First and Second Agreed Statements, which help clarify the difference between ABM (i.e., strategic) and theater ballistic missile defenses; an Agreement on confidence-Building Measures (CBMA); and, new regulations that will provide for effective operation of the SCC on a multilateral basis. Entry into force of these agreements is linked to that of the MOU; thus, none of them can enter into force unless and until the MOU enters into force.

Meaning of Implementation

None of the activity to date, in the SCC or elsewhere, constitutes "implementation" of the MOU. Participation in the SCC for the purpose of negotiating succession arrangements does not constitute "implementation" of those succession arrangements. Thus, none of the provisions of the MOU, e.g., those establishing the meaning of "national territory" and prescribing use of the new SCC regulations, has been implemented.

Both before and after the conclusion of the MOU, representatives of Belarus, Kazakhstan, Russia, and Ukraine participated in sessions of the SCC, because each has asserted a claim to succeed to the rights and obligations of the former Soviet Union. That participation, in and of itself, does not settle succession to the Treaty. We have made clear over the years, with respect to such meetings, that a guiding principle in our discussions in the SCC with these states has been that participation does not prejudice the final outcome on succession. Confirmation of succession, by entry into force of the MOU, still is required. However, as a matter of policy, the United States accepted the participation of these states in the SCC negotiations on the MOU and demarcation agreements, as well as the required Treaty reviews, because their participation was necessary to achieve stated policy goals and was consistent with preserving the object and purpose of the Treaty. It also accorded with the general foreign policy interests of the United States.

However, from the outset, the United States made clear that the succession and demarcation agreements could only be concluded and brought into force simultaneously as a package, insisting that no agreement should take effect prior to ratification and entry into force of a succession agreement. The United States successfully negotiated appropriate provisions ensuring that entry into force of the two Agreed Statements, the CBMA, and the new SCC Regulations that would govern a multilateralized body would only occur simultaneously with the entry into force of the MOU. The United States also successfully resisted proposals to provisionally apply the MOU and SCC Regulations before formal approval by the signatory states, as well as any reference to these states as ABM Treaty "Parties" in other SCC documents prior to entry into force.

Presidential Communications with Congress

On May 14, 1997, the United States Senate adopted a resolution of advice and consent to ratification on the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe of November 19, 1990 (the "CFE Flank Document). In accordance with that resolution, on May 14, 1997, the President certified that:

> In connection with Condition (9), Senate Prerogatives on Multilateralization of the ABM Treaty, I will submit to the Senate for advice and consent to ratification any international agreement (i) that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or (ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national territory" as used in Article VI and Article IX of the ABM Treaty.

The President has on several occasions reaffirmed his commitment to submit the MOU to the Senate for its advice and consent to ratification.

Recent Activities in the SCC

Pending entry into force of the MOU, Belarus, Kazakhstan, Russia, and Ukraine continue to have equities in the ABM Treaty. For example, they possess and operate mosy of the ABM Treaty-related facilities of the former Soviet Union. Thus, while awaiting ratification of the MOU, the United States has continued to include them in the ABM Treaty discussions in the SCC. Similarly, the United States met with Belarus, Kazakhstan, and Ukraine, as well as with Russia, on START I issues prior to its ratification. To fulfill its obligations under the ABM Treaty, the United States participated, along with Belarus, Kazakhstan, Russia, and Ukraine, in the required two sections of the SCC in 1998 during which they completed work on details for providing information and notifications in accordance with the CBMA. No data has been provided, and none will be provided until the CBMA enters into force. By their own provisions, neither the CBMA nor the MOU will enter into force until both documents enter into force.

In addition, during the SCC session that ended on October 14, 1998, the sides conducted the fifth periodic review of the ABM Treaty, as required by Article XIV of the Treaty, and issued a "Joint Statement on the Fifth ABM Treaty Review." This communique referred to Belarus, Kazakhstan, Russia, and Ukraine as the "sides participating in the ABM Treaty review" and made no reference to those sides as constituting Parties to the ABM Treaty. Moreover, it emphasized the importance of the New York agreements signed on September 26, 1997, to the ABM Treaty "upon their entry into force."

Conclusion

The United States Government is not implementing the MOU. It remains the policy of this Administration to submit the MOU and the First and Second Agreed Statements—along with the START II Protocol—to the Senate for its advice and consent to ratification, after the Russian Duma approves the START II Treaty.

In response to the question "wouldn't the validy of the CFE Flank Agreement be called into question if Deputy Secretary Talbott negotiated with the Russians alone as a state party to the ABM Treaty?" (referring to the fact that the Senate made submission of any ABM succession agreement to the Senate for its approval a condition of ratification of the CFE Flank agreement, and the President accepted the condition by ratifying the Flank Agreement)

HOINKES responded

I don't think we have to get to that problem. I read with great interest the analyses of that issue in incoming letters from Committees of the Senate. I think it [the status of the CFE Flank Agreement] is a non-problem. We [the Administration] have said we are going to submit any succession agreement (or as you've stated and as the condition requires, any agreement that deals either with a change in the territory covered by, or the parties to, the ABM Treaty) to the Senate, for the advice and consent of the Senate, and we will do so. And we will not have a treaty relationship with which to deal with others as parties, party-to-party, until that issue is finally resolved. So if this [the current] succession agreement does not fly, (and since we have no formal state party relationship with any of the potential state parties at this time) because we have promised to send any succession agreement up [to

the Senate], absent a succession agreement we do not have a firm treaty relationship.

But you know that's not consistent with what the President is saying. The President is saying that Russia is state_____that's Russia

HOINKES. We have, I think it's fair to say, a difference in the interpretation that is possible to draw from the two separate letters that have been sent, I think it's two, it may have been three . . .

Senator ASHCROFT. I appreciate your willingness to push through this, and I hope that you will accommodate me in my effort to run to the Senate floor to cast a vote and then come back, because, if I am not mistaken, we might have contrary views expressed. And a good exchange would be, I think, probably even better than what we have done so far.

So with your indulgence, I will recess this hearing until 10 minutes after 3. That gives me 12 minutes to make it over and back. And I intend to be equally out of breath when I reappear.

[Recess at 2:58 p.m.]

[Reconvened at 3:21 p.m.]

Senator ASHCROFT. I am pleased to be able to reconvene this hearing. There is an old military command, I think, that says, "As you were." We were fortunate enough to get two votes out of the way, and we should be relatively unimpeded for a while. So I thank you for your patience.

As I recall, Mr. Rivkin, you had completed your——

Mr. RIVKIN. Yes, I have.

Senator ASHCROFT. If you unduly truncated them I would welcome you to add——

Mr. RIVKIN. Thank you, Mr. Chairman, but no, I am quite done. In fact, I believe it would be nice to have an opportunity to——

Senator ASHCROFT. Yes, that is good. Good.

It is my understanding that Mr. Casey is also here as a resource for questions afterwards. And so I am pleased now to call upon Professor Glennon and ask him to present his testimony at this time.

Professor Glennon.

STATEMENT OF PROFESSOR MICHAEL J. GLENNON, PROFESSOR AT LAW, THE UNIVERSITY OF CALIFORNIA, DAVIS, CA

Professor GLENNON. Thank you, Mr. Chairman. With your permission, I will give you a quick summary of the testimony and ask that it be entered in the record in its entirety.

Senator ASHCROFT. Well, we would be very pleased to accommodate any written statements you wish to make or that you have already presented and make it a part of the record. And the committee is grateful for your work. It is clear to me that the endeavor of assembling these complex documents is not without effort. And we are the beneficiaries of your efforts. Thank you.

Professor GLENNON. Well, Mr. Chairman, thank you for inviting me to be present today. It is a privilege to appear again before this committee. I have been asked to address two issues, one, whether the ABM Treaty is currently in force, and second, whether the ABM Treaty will continue in force, if the Senate rejects the MOU on succession.

My answer to each of those questions is yes. The debate thus far, Mr. Chairman, has focused on international law, and specifically the issue of state succession, the concrete question being whether, under principles of state succession, Russia is a successor to the rights and duties of the Soviet Union under the ABM Treaty. If it is, of course, the ABM Treaty continues to exist.

With respect, Mr. Chairman, I would suggest that this is the wrong question, at least at the outset. It is the wrong question because the President has purported to answer this question. The President has said that he regards Russia as a successor state to the Soviet Union with respect to the ABM Treaty and that the ABM Treaty is, therefore, in effect. The question, therefore, at the outset is a constitutional question, not an international law question.

The question is: Has the President acted within the scope of his constitutional authority? My answer to that question is that he has. The Constitution, as you know, divides the treaty power between the President and the Senate. There has been much debate over where that line is drawn in issues such as treaty interpretation, treaty termination, and now identification of a successor state to a treaty.

It is basic black letter constitutional law, Mr. Chairman, that in situations such as this constitutional custom—practice between the Congress and the executive branch—provides a gloss on the constitutional text and is an appropriate source of authority in resolving ambiguities in that text.

Turning, therefore, to practice, one finds that since virtually day one, since the earliest days of the Republic, the President—not the Congress, not the Senate—the President has determined whether a given state is a successor state to a treaty to which the United States is a party. I have been unable to find any instance in which either the Congress or the Senate sought to overturn the President's judgment on this issue of state succession.

The principle again is clear, Mr. Chairman. When, over a substantial period of time, the Congress acquiesces to a claim of executive power, the President in the first instance, at least, has the authority to exercise that power. And with respect to state succession, I suggest to you again it has been done probably hundreds of times without challenge from either the Congress or the Senate since the beginning of the Republic.

Now I turn, therefore, to the posture of the Congress. Under the applicable constitutional framework, the President's powers are at his lowest when he acts in the face of congressional objection. The President's powers are at his highest when he acts pursuant to explicit or implicit congressional authorization. And when the President acts in the face of congressional silence, things are pretty much up in the air, and the answer is a function not of abstract rules of law but of, as Justice Jackson said, contemporary political imponderables.

The question that we confront, therefore, is applying this framework to the current facts. Has Congress approved, disapproved or been silent with respect to the determination of the President that Russia is a successor state to the ABM Treaty and that the ABM Treaty is in force? The answer is, Mr. Chairman, that clearly Con-

gress and the Senate have concurred in the President's judgment that Russia is a successor state and that the ABM Treaty is therefore in force.

In 1994, as you know, Congress enacted a statute insisting that any substantive modification of the ABM Treaty be submitted to the Senate for its advice and consent. In 1997, the Senate insisted in a condition to the CFE Flank Document that any multilateralization of the ABM Treaty be submitted to the Senate for its advice and consent.

The question obviously arises: Why would Congress, why would the Senate, insist upon inclusion in the process of modifying the ABM Treaty if either Congress or the Senate believed that the ABM Treaty is not in effect? The reasonable inference to be drawn, Mr. Chairman, both from the 1994 statute and the 1997 condition added to the CFE Flank Document is not that Congress is silent, surely not that Congress or the Senate objects to the President's determination, but rather that Congress and the Senate agree with the President that the ABM Treaty is indeed in effect.

Now, let me turn briefly to questions of international law. The issue arises whether there is a basis in international law for the President's determination that the ABM Treaty is in effect and that Russia is a party to it. And I would suggest to you that there clearly is a basis for the President's determination.

The law of states succession is a complicated and muddled matter. It has been debated heatedly for many years, and there are competing versions of most of the rules in question. The most widely accepted formulation of the applicable principle of state succession, Mr. Chairman, is the formulation given by the American Law Institute in the Restatement Third on Foreign Relations Law. That formulation is set out in section 210, paragraph 3, of the Restatement (Third).

To summarize it briefly, it applies a simple test. It says that the joint intent of the parties controls. The Restatement says, in other words, if Russia and the United States both believe that the treaty is in effect, if Russia and the United States both believe that Russia is a party to the treaty, that joint intent controls, the treaty exists, and Russia is a party.

What has been the posture of the United States? Well, I refer your attention, Mr. Chairman, to the January 29, 1992 joint press conference at which President Boris Yeltsin and Secretary of State James Baker each addressed this issue. Here are the words, Mr. Chairman, of President Boris Yeltsin, spoken again only 1 month after the dissolution of the Soviet Union: "Russia regards itself as the legal successor to the USSR in the field of responsibility for fulfilling international obligations. We confirm all obligations under bilateral and multilateral agreement to the field of arms limitations and disarmament, which were signed by the Soviet Union and are in effect at present."

Secretary of State James Baker, speaking obviously for the Bush administration, said virtually the same thing. He said, "I made the point to President Yeltsin that the United States remains committed to the ABM Treaty. We expect the States of the commonwealth to abide by all the international treaties and obligations

that were entered into by the former Soviet Union, including the ABM Treaty."

So given that the test applied by international law, Mr. Chairman, is the joint intent of the parties; given that the intent of the Bush administration—reiterated many times, as you know, by the Clinton administration—given that the intent of President Yeltsin, reiterated also many times, as you know, by the Russian Government, is that Russia is a party to the ABM Treaty—it is clear that under international law the ABM Treaty is in force, Russia is a party to that treaty.

Now I do not want to get into the remaining international law issues in any detail. It is argued, as you have heard, that the treaty is void because of an impossibility of performance, because of changed circumstances, because continuation of the treaty in force violates domestic law. I would simply point out to you that if you look at each of those doctrines in international law closely, you will find that indeed a treaty is not void if it meets the test of those doctrines, it is voidable.

No entity within the United States, not the President, not the Senate, not the Congress, has taken the affirmative step necessary in international law to void the treaty. I repeat, neither the Congress, nor the Senate, nor the President has acted to make this treaty, if it is voidable, to be in fact void in international law.

So my conclusion, Mr. Chairman, is, with respect to this first issue, that the ABM Treaty is in force and that Russia is a party.

Now the second question that you have asked me to address I can address far more briefly—that is, whether the ABM Treaty would cease to be in effect if the Senate were to take up and reject the MOU on succession. The answer to this question is that of course the treaty would continue in effect, if the MOU on succession is rejected.

To put the constitutional doctrine succinctly, Mr. Chairman, the rule is, you cannot repeal something with nothing. You cannot, in effect, try to make legislative history in connection with a statute that is never enacted or a treaty that is never ratified and argue later that that legislative history has effectively terminated an existing statute or treaty.

And the suggestion that you can do that, with all due respect is voodoo jurisprudence. It is clear under the *Chadha* case that if you want to repeal a statute, you have to involve the President in the process. The President has to be permitted to exercise his veto or to sign the statute. And if he is excluded from the process, what is done cannot have the force and effect of law.

Similar principles apply with respect to treaties. To have effect, a treaty has to be presented to the President, obviously, and the President has got to deposit the instrument of ratification. That is the only time that a treaty can have the force and effect of law.

So in short, Mr. Chairman, there are ways that the Congress and the Senate can end the ABM Treaty, if it wants to do that. But rejecting the MOU on succession is not one of them.

I would be glad to answer your questions.

[The prepared statement of Professor Glennon follows:]

PREPARED STATEMENT OF PROFESSOR MICHAEL J. GLENNON

Thank you for inviting me to be here today. You have asked me to address two questions: whether the ABM Treaty is still in force, and, if it is, whether that Treaty will remain in force if the Senate rejects the ABM Memorandum of Understanding on Succession.

To each question, my answer is yes.

The initial and most important issue concerns the body of law by which the matter is to be resolved. Two bodies of law address different aspects of these questions: international law, and domestic constitutional law. International legal principles address issues of state succession—questions concerning the circumstances under which a state succeeds to the treaty rights and obligations undertaken by another, earlier state. Constitutional principles address the allocation of decision-making power within the government of the United States—questions concerning the power of the President to determine the identity of a successor state and to decide whether treaty relations exist with that state as "law of the land."

Constitutional principles, in turn, fall into two categories plenary and concurrent. If the presidential power in question is plenary, constitutionally it may be exercised exclusively by the President, and neither the Congress nor the Senate may by law or treaty overrule it. If the presidential power is concurrent, on the other hand, it is shared with Congress or the Senate; if the President acts first, his action controls, but often his initial policy can be modified or countermanded. As I will explain, I believe that the constitutional questions raised with respect to the status of the ABM Treaty fall into this latter category, the realm in which power is concurrent rather than plenary.

Most of the debate thus far has involved the application of international law. The issue has been cast as a question of state succession. The question that has been posed is whether one, or some, or none, of the 15 states that occupy territory of the former Soviet Union is a party to the ABM Treaty. If none of those states is a party, obviously the ABM Treaty is no longer in force.

I believe that this is the wrong question, at least the wrong question to be addressed at the outset. The reason is that the Executive has already purported to answer the question whether Russia is a party to the ABM Treaty. The answer given by the Executive is that Russia is a party and that the ABM Treaty is therefore still in effect. (This answer has been given, moreover, in the face of explicit affirmation by both Congress and the Senate that the ARM Treaty is in force, which I will discuss shortly.) Given the implicit claim of the Executive that it has constitutional power to answer the question, therefore, the threshold question before the Congress is not an international law issue concerning state succession. Rather, the issue is whether the President has constitutional power to determine in the first instance whether there exists a successor state to a treaty.

I believe that he does, although I reject the argument that the President has plenary power to act in this matter. Power is shared between the President and Congress, and Congress can, in fact, have the last word if it so desires. Absent a desire of Congress to express its will, however, the President's determination would control, as it would *a fortiori* if the Congress concurred in the President's determination.

To elaborate: Nothing in the constitutional text, case law, custom, Framers' intent or institutional structure suggests that the President is possessed of plenary constitutional power to determine whether a given state is a successor state to a treaty with the United States. There is no reason, in other words, to believe that the Executive Branch has exclusive power to determine for the United States whether there exists a successor state to a treaty. The Executive Branch has contended that the power exercised here is an incident of the President's exclusive recognition power. But that argument stretches the recognition power beyond the traditional practice by which the Executive has simply identified, and acknowledged the existence of, a particular state or government for diplomatic purposes. In the face of timely congressional objection, the President's determination would not control.

In the face of congressional silence, however, the result would be different. The legal status of the President's determination is a function of the posture of the Congress. If Congress approves his determination, the President's power will be at its highest. If Congress disapproves, the President's power will be at its lowest. If Congress says nothing, the matter will remain relegated to a "zone of twilight," a realm in which the answer derives less from abstract rules of law than from the interplay of political forces. Then, if there was a basis in international law for the President's determination that Russia is a successor state to the ABM Treaty, that determination would control, albeit only provisionally: Congress could enact a contrary law,

or, perhaps, the Senate could make a contrary declaration in conditioning its consent to some other treaty.

This is the stage in the analysis at which international law becomes pertinent. The issue is whether international law provides support for the President's conclusion that Russia is a successor state to the ABM Treaty. Clearly it does. The most widely accepted summary of applicable international legal principles concerning state succession is set out by the American Law Institute (ALI) in its *Restatement (Third) on the Foreign Relations Law of the United States.* The ALI drafted the *Restatement* with particular attention to the understanding and practice of the United States in international law. The ALI emphasizes that both treaty partners must agree to or acquiesce in the new agreement. Section 210(3) of the *Restatement* provides as follows:

> When part of a state becomes a new state, the new state does not succeed to the international agreements to which the predecessor state was party, unless expressly or by implication, it accepts such agreements and the other party or parties thereto agree or acquiesce.

The *Restatement* thus provides that a new state can be presumed to be bound to a treaty of a predecessor state if two conditions have been met: (1) the new state—in this case, Russia—must agree to be bound; and (2) the relevant treaty partner—here, the United States—must itself agree to, or acquiesee in, the new relationship.

Both conditions are met. Russia agreed to be bound by the ABM Treaty. On December 8, 1991, Russia signed the initial charter of the Commonwealth of Independent States—the so-called "Minsk Accords"—with Belarus and Ukraine, agreeing therein to "discharge the international obligations incumbent on them under treaties and agreements entered into by the former Union of Soviet Socialist Republics." On December 21, 1991, Russia signed the Alma Ata Declaration, committing itself to "the discharge of the international obligations deriving from treaties and agreements concluded by the former Union of the Soviet Socialist Republics." On January 13, 1992, the Ministry of Foreign Affairs of the Russian Federation transmitted a note to the U.S. State Department indicating that "[t]he Russian Federation continues to perform the rights and fulfill the obligations following from the international agreements signed by the Union of the Soviet Socialist Republics," and adding that "the Ministry kindly requests that the Russian Federation be considered as the Party in all international treaties in force in place of the USSR." Two weeks later, on January 29, 1992, Russian President Boris Yeltsin said the following:

> Russia regards itself as the legal successor to the USSR in the field of responsibility for fulfilling international obligations. We confirm all obligations under bilateral and multilateral agreements to the field of arms limitations and disarmament which were signed by the Soviet Union and are in effect at present.

The Commonwealth States joined in the following declaration on October 9, 1992, again reaffirming the continuity of relations with the United States under the ABM Treaty:

> The member States of the Commonwealth of Independent States as successor states of the USSR will fulfill the terms of the Treaty Between the USSR and the USA on the Limitation of Anti-Ballistic Missile Defense Systems of 26 May, 1972, as it applies to their territories and in consideration of the national interests of each will conclude, as necessary, corresponding agreements among themselves for fulfilling the obligations of the Treaty.

There is, therefore, no question that Russia considers itself a party to the ABM Treaty.

The United States has, similarly, agreed to the relationship. Only a month after the dissolution of the Soviet Union, the Bush Administration explicitly affirmed that the United States regarded Russia as a successor to the Soviet Union's rights and obligations under the ABM Treaty. At a joint press conference on January 29, 1992, following a meeting with President Yeltsin, Secretary of State James Baker stated as follows:

> I made the point to President Yeltsin that the United States remains committed to the ABM Treaty. . . . [W]e expect the states of the Commonwealth to abide by all of the international treaties and obligations that were entered into by the former Soviet Union, including the ABM Treaty.

The Legal Adviser to the State Department during the Bush Administration, Edwin D. Williamson, reaffirmed the U.S. view that Russia became a successor state to the Treaty. "As an operating principle," he has written, "agreements between the United

States and the USSR that were in force at the time of the dissolution of the Soviet Union have been presumed to continue in force with respect to the former republics." The Clinton Administration has similarly viewed the United States as a partner with Russia in the ABM Treaty. President Clinton, in a November 21, 1997 letter to Rep. Benjamin A. Gilman, said that the "ABM Treaty itself would clearly remain in force" even if the Senate did not approve the ABM Memorandum of Understanding on Succession. In a May 21, 1998 letter to Chairman Helms, the President wrote that "the United States and Russia clearly are parties to the Treaty." He continued:

> Each has reaffirmed its intention to be bound by the Treaty; each has actively participated in every phase of the implementation of the Treaty, including the work of the SCC; and each has on its territory extensive ABM Treaty-related assets.

The Executive continues to regard the Treaty as in force. On December 17, 1998 President Clinton wrote Senator Paul Coverdell that "there is no question that the ABM Treaty has continued in force following the dissolution of the Soviet Union." Secretary of State Madeleine Albright testified before the House International Relations Committee on February 25, 1999 that "we have maintained, along with many, many Americans and many members of Congress. that the ABM Treaty is central to our strategic posture. And we have supported the ABM Treaty, and we'll continue to do so." National Security Adviser Samuel Berger said the next day that "We believe very deeply in the ABM Treaty. We believe it is a stabilizing treaty between the United States and now, Russia."

Thus there simply is no question that both Russia and the United States continue to regard the ABM Treaty as fully in force. Under international law, as summarized by the American Law Institute's *Restatement,* their joint intent suffices to establish Russia as a successor state.[1]

It is worth noting that, under international law, official statements such as these have legal consequences beyond and apart from the operation of state succession principles. In holding the government of France bound by certain statements of French officials (concerning atmospheric tests of nuclear weapons), the International Court of Justice said the following:

> [France] was bound to assume that other States might take note of these statements and rely on their being effective. The validity of these statements and their legal consequences must be considered within the general framework of the security of international intercourse, and the confidence and trust which are so essential in the relations among States. It is from the actual substance of these statements, and from the circumstances attending their making, that the legal implications of the unilateral act must be deduced. The objects of these statements are clear and they were addressed to the international community as a whole, and the Court holds that they constitute an undertaking possessing legal effect. *Nuclear Tests Case (Australia v. France),* 1974 I.C.J. 253.

For the same reasons, it would appear that both the Russian and American statements announcing continued adherence to the ABM Treaty constitute binding undertakings in international law.

Several other arguments are made that, under international law, the ABM Treaty is invalid. These arguments contend that, even if Russia was at some point a party to the Treaty, the Treaty is now null and void. It is argued, for example, that the

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[1] This same conclusion obtains under other leading formulations of state succession principles, although no such formulation has commanded the widespread acceptance of the *Restatement.* The much-criticized 1978 Vienna Convention on Succession of States in Respect of Treaties, for example, has not been approved by the Senate. Article 34 of the Convention sets forth a version of the "continuity rule," which is applicable when a part or parts of the territory of a State, such as the USSR, separates to form one or more States, such as Russia. It provides as follows:

> When a part or parts of the territory of a State separate to form one or more States . . . any treaty in force at the date of the succession of States in respect of the entire territory of the predecessor State continues in force in respect of each successor State so formed. . . .

Under the Convention, however, a state is not bound if "it appears from the treaty or is otherwise established that the application of the treaty in respect of the successor State would be incompatible with the object and purpose of the treaty." Art. 34(2)(b). This exception would not apply with respect to the ABM Treaty because Russia, as noted, has rejected this notion. Like the *Restatement,* therefore, the Vienna Convention would also provide a basis in international law for the President's finding that Russia is a successor state to the rights and obligations of the Soviet Union under the ABM Treaty.

President's failure to seek Senate advice and consent for continuation of the ABM Treaty with Russia is grounds for viewing the Treaty as void in international law. Another argument is made that a fundamental change of circumstances has rendered the Treaty void. Finally, it is contended that an impossibility of performance has invalidated the Treaty.

It is not necessary to consider the substantive doctrines on which these arguments rest. Even if their tests were met with respect to the ABM Treaty, the Treaty would remain in force because each such doctrine requires that that the state invoking a treaty's invalidity *take an affirmative step to terminate or withdraw from such a treaty.* Under widely accepted principles of international law, in other words, an international agreement is voidable—not void, but void*able*—if such circumstances arise. No one, of course, has taken any step toward voiding the Treaty. The President has not voided it. The Congress has not voided it. The Senate has not voided it. To the contrary, as I will discuss in a moment, the President, the Congress, and the Senate *all have proclaimed that the Treaty is in force.* Under none of these international law doctrines, therefore, can the Treaty be found to be void.

To the contrary, the doctrine of international law that continues to have overriding relevance with respect to the ABM Treaty is *pacta sunt servanda.* This doctrine has been called the glue that holds the international legal system together. Under this doctrine, every treaty in force is binding upon the parties to it and must be performed in good faith. The ABM Treaty, as a treaty in force, is thus binding upon the United States and must be performed in good faith. That is the unmistakable requirement of international law.

There is, accordingly, clearly a basis in international law for the President's conclusion that the Treaty continues in force and that Russia is a party. This returns us, therefore, to the constitutional issue concerning the allocation of decision-making power. As I indicated earlier, the power exercised by the President to identify a successor treaty partner is properly regarded as concurrent. The conclusion that that power is shared by the political branches derives from the Constitution's text, and also from two centuries of custom that has added a gloss to that text. The constitutional text gives both the President and the Senate a role in the making of treaties. The practice in the United States since the earliest days of the Republic has been that the President acts initially to determine the identity of the successor. In upholding the Iran claims settlement agreement in *Dames & Moore v. Regan,* 453 U.S. 654 (1981). the U.S. Supreme Court quoted Justice Frankfurter's observation in the *Steel Seizure Case* concerning the effect of such practice. "[A] systematic, unbroken, executive practice, long pursued to the knowledge of the Congress and never before questioned . . . may be treated as a gloss on 'Executive Power' vested in the President by sec. 1 of Art. II." 343 U.S. 579 (1952). This practice argues strongly that the President has concurrent power to identify successor treaty partners.

There is, however, no custom here which would suggest that the President necessarily prevails in the face of congressional or Senate opposition. Presidential disputes over such matters with the Congress or the Senate simply have been too rare to justify reliance upon custom as a source of plenary presidential power. The most analogous issue is perhaps treaty termination. When the issue of power to terminate treaties arose in connection with the mutual security treaty with the Republic of China, this Committee asserted—correctly, I believe—that the Senate has the constitutional power to insist that it be included in the termination process. It argued, in other words, that the power to terminate treaties is concurrent, not plenary. By the same token, the Congress, or the Senate, can constitutionally insist upon its inclusion in the process of identifying a successor state or states to a treaty.

This means that, in principle, Congress could constitutionally have enacted a statute overturning the President's determination that Russia has succeeded to the rights and obligations of the Soviet Union under the ABM Treaty. The Senate could have conditioned its consent to the ABM Treaty with a requirement that the Senate approve any presidential identification of successor states to that Treaty. Had it done so, I believe that the President would be bound by that condition.

But neither Congress nor the Senate has objected to the President's determination. In fact, Congress and the Senate have not been silent during this period. Congress and the Senate have *concurred* in the President's judgment that the ABM Treaty remains in force. As you are aware, in 1994 the Congress enacted section 232 of P.L. 103–337, which, *inter alia,* provided in subsection (a) thereof that the United States "shall not be bound by any international agreement entered into by the President that would substantively modify the ABM Treaty unless the agreement is entered pursuant to the treaty making power of the President under the Constitution." Of course, it would have made no sense to prohibit the President from modifying an agreement that did not exist; the Congress must have believed the ABM Treaty to be in effect in 1996, or there would have been no reason to seek

to limit presidential power to amend it. Similarly, in approving the Flank Document Agreement to the CFE Treaty, the Senate again in 1997 concurred that the ABM Treaty was in full force and effect. It added a condition to its resolution of ratification requiring that the President

> certify to the Senate that he will submit for Senate advice and consent to ratification any international agreement:
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> i. that would add one or more countries as state parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or
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> ii. that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national security" as used in Article VI and Article IX of the ABM Treaty.

Again, the question arises: Why would the Senate seek to ensure its inclusion in efforts to amend the ABM Treaty if it believed that the Treaty was not in force? The reasonable inference to be drawn from both such measures is not that Congress and the Senate disagree with the President's judgment that the ABM Treaty remains in effect, or even that they have remained silent on the issue, but rather that both agree that the Treaty is indeed in force. "When the President acts pursuant to an express or implied authorization of Congress," Justice Jackson wrote in his famous concurring opinion in the *Steel Seizure Case,* 343 U.S. 579 (1952), "his authority is at its maximum, for it includes all that he possesses in his own right plus all that Congress can delegate. In these circumstances, and in these only, may he be said (for what it may be worth) to personify the federal sovereignty."

In concluding my discussion of this first question, whether the ABM Treaty is still in force, I call the Committee's attention to the words of then-Justice Rehnquist, speaking for the Supreme Court in *Dames & Moore v. Regan,* 453 U.S. 654 (1981). As you know, the Court in that case unanimously upheld the executive agreement entered into by President Carter to settle conflicting claims with Iran. The Court said the following, using words that seem directly applicable to this issue:

> [We] cannot ignore the general tenor of Congress' legislation in this area in trying to determine whether the President is acting alone or at least with the acceptance of Congress. [Congress] cannot anticipate and legislate with regard to every possible action the President may find it necessary to take or every possible situation in which he might act. Such failure of Congress specifically to delegate authority does not, "especially . . . in the areas of foreign policy and national security," imply "congressional disapproval" of action taken by the Executive. On the contrary, the enactment of legislation closely related to the question of the President's authority in a particular case which evinces legislative intent to accord the President broad discretion may be considered to "invite" "measures on independent presidential responsibility." Youngstown (Jackson, J., concurring). At least this is so where there is no contrary indication of legislative intent and when, as here, there is a history of congressional acquiescence in conduct of the sort engaged in by the President.

The second question that you have asked me to address is an easier one. namely, whether the ABM Treaty will remain in force if the Senate rejects the ABM Memorandum of Understanding on Succession. Clearly it will. The ABM Treaty is now in force. Congress can cause the ABM Treaty not to be in force by directing the President to terminate the Treaty. Whether such presidential action would place the United States in breach of the Treaty is a different and complicated question, which I do not here address.[2] Under *INS v. Chadha,* 462 U.S. 919 (1983), however, Con-

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[2] Three issues would arise. First, is termination consistent with the provisions of Article XV of the Treaty? That Article permits each party to withdraw "if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests." If this condition is met, the Treaty would not be breached by U.S. withdrawal.

Second, if the condition set out in Article XV were not met, would international law otherwise permit withdrawal? Under various international legal doctrines, discussed earlier, a treaty is voidable under specific circumstances. Whether such circumstances have actually arisen is a question that would require careful analysis of the facts as well as the particular doctrine in question.

Third, is transmittal of the notice of termination timely? The Soviet Union dissolved on December 25, 1991—more than seven years ago. During that period, the President, Congress, and the Senate failed to object. Under the laches doctrine, undue delay in asserting a right or claiming a privilege causes the right or privilege to be extinguished. In international law, this principle goes by various names, including extinctive prescription, acquiescence, and estoppel. Whatever the label, analogous substantive principles clearly are part of customary international law,

gress can do so only through the enactment of a measure that is presented to the President for his signature or veto, i.e., a joint resolution or bill. Neither Congress nor the Senate can terminate a law, or (in its domestic effect) a treaty, by expressing "legislative intent" during the consideration of another measure, such as the ABM Memorandum of Understanding on Succession, that is not presented to the President. It is legally irrelevant whether the adoption of the ABM Memorandum of Understanding on Succession is viewed by some members of Congress as necessary for the continuation in force of the ABM Treaty. Obviously, the President does not share that view, or he would not regard the ABM Treaty as currently in force.

The President's view is not, however, dispositive. If the Congress wishes to have the last word, it can—even if the consequence is to place the United States in violation of international law. Nothing in the Constitution prohibits Congress from requiring that the President act in a manner that would make the United States a law violator in the international system. The Constitution requires simply that if Congress wishes to express its will, it do so in the manner prescribed by Article I, section 7 of the Constitution, the "Presentment Clause." This, the Supreme Court has held, means that Congress must accord the President the opportunity to participate in the process—by veto, if he wishes—subject to the possibility of congressional override.

Similar principles apply to ending a treaty as law of the land through use of the treaty power. A treaty in force, such as the ABM Treaty, can of course be superceded domestically through ratification of a second treaty that is inconsistent with the earlier treaty. If the second treaty is not ratified, however, either because the Senate declines to give its advice and consent or because the President declines to deposit the instrument of ratification, nothing exists to supercede the prior treaty. To reiterate, statements made during the consideration of a measure that is never enacted or ratified cannot have the effect of ending an earlier statute or treaty. Even if the Senate were to *adopt* a resolution expressly purporting to govern the interpretation of an existing treaty, the Supreme Court has told us, that resolution would be without effect. *Fourteen Diamond Rings v. United States,* 183 U.S. 176 (1901).

Accordingly, if Congress or the Senate wishes to end the ABM Treaty, the way to do that is to enact a law or to approve a treaty that explicitly or implicitly does so.

I conclude, therefore, that the ABM Treaty is in force and that the Treaty will remain in force even if the Senate rejects the ABM Memorandum of Understanding on Succession.

I would be happy to answer any questions.

Senator ASHCROFT. There are a lot of questions. I just do not know where to start.

Professor Glennon, what happened to the ABM Treaty when the President decided that Russia was a succeeding party to the treaty?

Professor GLENNON. The treaty continued in force, Mr. Chairman.

Senator ASHCROFT. It continued. Did the President announce that at the same time that there was an announcement that the Soviet Union had ceased to exist, that it was extinct as declared by all the parties?

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as the International Court of Justice held in the *Temple of Preah Vihear Case* in 1962. The Court there considered a claim made by the government of Siam (now Thailand) concerning the location of the border with Thailand. In rejecting the claim, the Court said the following:

> [Siam] has, for fifty years, enjoyed such benefits as the Treaty of 1904 conferred on her . . . France. and through her Cambodia, relied on Thailand's [conduct]. . . . It is not now open to Thailand, while continuing to claim and enjoy the benefits of the settlement, to deny that she was ever a consenting party to it. 1962 I.C.J. 6.

These same principles counsel against viewing voidability options as surviving *ad infinitum* in international law. At some point, states' interest in stable and predictable treaty relations come to outweigh their interest in complete procedural regularity in the making of treaties. Seven years may be a reasonable period in which to expect the United States to have objected.

Professor GLENNON. Well, the Soviet Union was dismembered on December 19, 1991. Secretary of State James Baker, the next month, on January 29, 1992, announced that the ABM Treaty——

Senator ASHCROFT. I was interested in that. First of all, it was interesting to me that you say that the President has the authority to do it, and then you rely on a statement by James Baker. You said you are assuming that he was speaking for the President, when he said so. And it may be that we could assume that.

But if the principle exists that the USSR was extinguished and extinct, is it your view that there is a limbo for treaties that intervenes between the time of the extinction of a country and then a time of revival, that it is sort of like the prince coming and knocking the apple out of Snow White's mouth, and the treaty springs back to life? If all the successor states to the USSR declared the USSR extinct, what is the status of the treaty? Is this purgatory, or what is the intermediate standing?

What was it during that month after the USSR collapsed but before Secretary Baker made that comment?

Professor GLENNON. Well, clearly, if President Bush had determined that he wished at that point to terminate American participation in the ABM Treaty regime, he could have done that. And had Secretary Baker announced that the United States no longer considered itself bound by the ABM Treaty at that point, this test of joint intent of the parties would not be met. The ABM Treaty would indeed have terminated at that point.

Senator ASHCROFT. The joint intent test is interesting to me, because the intent to enter a treaty has to be both by the President and the Congress. The intent of the American people to enter into treaties always involves two branches of government.

Why are we to assume that you can have intent expressed only by one branch of government in this setting and not by two branches of government as when you create a treaty?

Professor GLENNON. Well, Mr. Chairman, as I indicated, in 1994 and in 1997 Congress and the Senate both expressed their intent with respect to this issue. And they concurred with the President that the ABM Treaty is in force.

Senator ASHCROFT. Well, I think that is a very interesting argument. And I can understand—I think it is worthy of being made. I think it is also possible for Congress to say, look, if there is a treaty, if you are going to act as if there is, these are the conditions we want to demand. For Congress to make such statements does not necessarily mean that the Congress has acceded to the proposition that a treaty exists.

It looks to me as if there are other folks out here ready to do what we had hoped might happen and have a discussion of this. I do not know which of you wants to go first. I see both of you indicating that you do. So we will go in the inverse order that we went previously.

Mr. Rivkin.

Mr. RIVKIN. Thank you very much, Mr. Chairman. And perhaps we can separate the legal issue of whether or not the joint intent test accurately describes the norms of constitutional and international law from sort of a factual predicate. What I would briefly

like to address is a factual predicate, with all due respect to my colleague, Professor Glennon.

I think the record of both the Russian behavior and American behavior is not at all what it seems to be. No. 1, who speaks for the state and how those expressions are made. Statements by secretaries of state and presidents are important, but their official actions, taken through official channels, are truly dispositive.

The thing that puzzles me is Treaties in Force, the official publication by the State Department, still lists the Soviet Union as the entity. You in your own statement went through numerous permutations of executive branch position. By the way, to set the record straight, what was said by President Bush and Secretary Baker is, "We are going to look carefully on a case-by-case basis, utilizing presumptive continuity model at different arms control treaty."

We had the President saying one thing—and again, in the interest of time, I will—it is all in the record—the President saying one thing in a letter to Congressman Gilman in 1997 and another thing in 1998. The thing that one sort of—the last fact here, which is very interesting to me, as recently as February 10 of this year, the President, in transferring the certification to the House and Senate Appropriations Committee, had a report to the President that says that there are no treaties, no foreign states, that are "parties to the treaty." I mean that to me does not at all amount to this clear certitude that Professor Glennon expressed.

Senator ASHCROFT. Are you conceding that if there had been a clear, unequivocal statement 1 month after the disintegration and extinction of the Soviet Union, is it your view that that would have somehow revived the treaty relationship?

Mr. RIVKIN. No. Very briefly, no. This is a legal issue. But one obvious limitation in the President's ability or ability of both sides to reviving it by invoking the intent is very simple.

If the resulting treaty is dramatically at variance with a bargain that was originally entered into and approved by the Senate exercising its advise and consent function, then clearly the President can do that. And again, I would direct your attention to all the debates that took place back in the eighties.

Battlebroad vs. *Narral,* where a number of your colleagues were expressing the view that a slight alteration in the interpretation of three words in the treaty incites violence to very esteemable, you know, prerogatives of the Senate, that it was not the same bargain. Here we are talking about obvious limitations on the President's ability to revive a treaty. If you agreed originally to A, B and C, the way it is revived, it is only A and B. That cuts you out of a process.

Senator ASHCROFT. Professor Glennon, let me just read a statement. "Neither a simple recognition of Russia as the sole ABM successor, which would have ignored several former Soviet States with significant ABM interests, nor a simple recognition of all CIS States as full ABM successors"—I believe that is CIS. Maybe it is NIS States—"would have preserved fully the original purpose and substance of the treaty as approved by the Senate in 1972."

That is a statement of the President of the United States. Do you agree with him that neither of these simple recognitions could have

served the purposes of the treaty and therefore would each alone have been an insufficient basis upon which to continue the treaty?

Professor GLENNON. Well, Mr. Chairman, I think that the President's statement has to be taken in context. I am aware that he did write that to a Member of Congress. He also, however, on May 21, 1998, wrote to Chairman Helms of this committee as follows, referring to the United States and Russia, "Each has reaffirmed its intention to be bound by the treaty. Each has actively participated in every phase of the implementation of the treaty, including the work of the SCC, and each has on its territory extensive ABM Treaty-related assets."

He went on to write Senator Coverdell on December 17, 1998——

Senator ASHCROFT. Now, in that respect he is just saying what has happened. He did not say what the effect of it was.

Professor GLENNON. Well, he says in the letter to Senator Coverdell what the effect of it was. "There is no question that the ABM Treaty has continued in force following the dissolution of the Soviet Union."

So President Clinton takes precisely the same position that President Bush took. There is no ambiguity in the executive's position.

Senator ASHCROFT. President Bush took a very ambiguous position when he said he is going to look at these on a case-by-case basis.

Professor GLENNON. Well, evidently, Senator, Secretary of State Baker, reviewing the ABM Treaty on a case-by-case basis, came to the conclusion that it was still in force.

Senator ASHCROFT. Well, I think that is so. I mean, he may well have. I guess—how do you know? You are relying on statements by people in the administration, whether that is a Presidential statement that commits the Nation and provides the agreement of the entire Nation, like it or not.

Professor GLENNON. I would like to respond to that, if I may, Senator.

Senator ASHCROFT. Sure. I would like to have you do that.

Professor GLENNON. There is in my testimony a case that I cite on page five from the International Court of Justice that addresses precisely that point. The case is the famous Nuclear Tests Case between Australia and France decided in 1974. The issue was very much the one that we have before us here today.

The French foreign ministry, officials of the foreign ministry, made statements to the effect that France would no longer detonate nuclear devices in the South Pacific. France changed its mind and announced that it, contrary to what was said, intended to recommence nuclear detonations in the South Pacific.

New Zealand and Australia went to the International Court of Justice and said, "Hey, the French foreign minister and his colleagues said they were not going to do this." The International Court of Justice said, "France is bound by those statements. And Australia and New Zealand were right to rely upon them.

I think probably that is the same principle applies——

Senator ASHCROFT. Does that mean the Secretary of State could bind us to treaties by just making pronouncements, and we would be bound later in some international court, contrary to the need of

the Senate to ratify the treaty? It seems to me—I wonder about the appropriateness of saying that since a court in the international arena bound the French because their officials made statements, whether that means that the U.S. Senate no longer would have an appropriate role in fashioning U.S. treaty commitments. That is a somewhat distressing position, if that is your position.

Professor GLENNON. Well, my position is that if there is nothing in the Constitution and nothing in international law that says that the Secretary of State is acting beyond the scope of his authority in making the statement that he does, that statement is binding.

Senator ASHCROFT. Well, there is something in an obscure part of the Constitution which has been disregarded suggests that authority not explicitly given to officials in the Constitution is not theirs. I mean, there are implied powers, I am sure. But even states are reserved all the authority not explicitly given. They were until the 10th amendment was so eroded.

I do not find it very difficult to believe that administrations would like to operate on the basis of the idea that they have the capacity to extend treaties and to adjust things and, frankly, to do so with good intentions and in the national interest. But I find difficulty in the detail.

What happens in these intervals? Who has the authority? How does it have to be expressed? Can it be expressed merely by a Secretary of State, and at what time? When Congress expresses reservations about the existence of a treaty, how can the administration say that the treaty does not exist because Congress talked about it?

What is the status of a treaty when both Congress and the President have different views on its useability and applicability to the United States?

Does the treaty responsibility require agreement on the part of the Senate and the President? We get back to that fundamental question.

So I am going to try and do this. I am going to try and make sure you all have the last word. So I apologize for giving as many myself. But, Mr. Feith, I believe it is, wanted to speak earlier. And now I will call upon him.

Mr. FEITH. Thank you, Mr. Chairman. It is true that the meeting occurred between Boris Yeltsin and Secretary Baker and that the Russian President expressed the willingness of Russia to step into the shoes of the Soviet Union under the ABM Treaty. And I do not disagree that the United States could, on the basis of that statement, have entered into an agreement with Russia that had the same essential terms as the ABM Treaty and made the agreement with Russia, taking Yeltsin up on his statement, "I am happy to assume the rights and duties of the Soviet Union under the ABM Treaty."

There is nothing in international law or domestic law that prevents the United States from making such an agreement with Russia. But, under the U.S. constitutional principles, if we are going to do that, it has to be submitted to the Senate for advice and consent. So it is not that I disagree with the thrust of Professor Glennon's point that we could have made that agreement, but we

have our Constitution that tells us what the process is required for making that agreement.

And on the question of whether there have been hundreds of cases where the President has exercised his recognition authority, of course there have been hundreds of cases where the President has exercised recognition authority. And nobody disputes that the President has recognition authority under the Constitution.

The essential point, though, is there is an international legal doctrine that has existed, as we pointed out, for about 250 years and is essentially unchallenged, which provides that treaties lapse, bilateral treaties lapse, when one of the two parties becomes extinct.

And the fundamental question is: If a treaty has lapsed—and I believe this is what you, Senator, were getting at—if the treaty has lapsed, then it is not in purgatory or limbo or in some state from which it can be revived. If it lapsed, it is dead. Scholars have pointed out there is no resurrection in international law.

If a new agreement is going to come into being——

Senator ASHCROFT. Well, that is the fundamental point. I think Professor Glennon says that it—he uses the terms that are consistent with contractual law, that there is a difference between a voidable agreement and a void agreement.

A voidable agreement is one that is in full force and effect, but one of the parties has a right—and it could be that both parties, perhaps, but I doubt if it is really a contract, if both parties do. At least one of the parties has a right to set the whole thing aside.

Now, is it your view that the doctrine of international law provides that it is not voidable, that it is nonexistent upon extinction?

Mr. FEITH. Yes, that is precisely the point. And the authorities are clear on that point. Professor Glennon was, I believe, correct in citing a number of doctrines of international law that permit governments to treat treaties as voidable at their option. Those exist, and that is correct. It is just not the doctrine of international law that we were talking about.

The doctrine of international law that we have called attention to and that goes back to Vattel and has been cited by U.S. authorities and many other authorities throughout the centuries does not create a voidable contract. It states that the treaties lapse. They become void when one of the two parties becomes extinct.

And it happens, and this is the essential point, it happens by operation of law. In other words, the voiding of the treaty does not await the affirmative decision, action, announcement of the other party. So again, Professor Glennon is correct that the U.S. Government has never announced that the ABM Treaty lapsed.

Our point is that under this well-established doctrine of international law, it does not have to do so, precisely because this doctrine makes it clear that upon the extinction of one of the parties, the treaty becomes void and is not merely voidable.

Senator ASHCROFT. I want to go back to Professor Glennon, who wants to—have you finished?

Mr. FEITH. I would like to, if I may, make one additional point in answer to something that Professor Glennon, which is this issue of congressional acquiescence, because he made a major point of the significance of the several congressional actions that suggest that Members of Congress believe that the ABM Treaty is in effect,

and therefore somehow that supports the conclusion that the ABM Treaty is in effect.

It is established in U.S. constitutional law that there is no principle of estoppel for Congress. And there is no "gotcha principle" that if Members of Congress, even in legislation, make a factual misstatement, that they are somehow bound by even a factual misstatement. And it is not the case, I believe, that anything that was said in any of the legislations cited by Professor Glennon or any other legislation that we are aware of regarding the ABM Treaty, even those statements that suggest that Congress may have believed that the ABM Treaty may be still in effect, none of that could be reasonably construed as authorizing the President to bring such a treaty into effect, if it had lapsed. And so it cannot be taken as consent to bring a new treaty into effect.

Senator ASHCROFT. I do not think Professor Glennon means to say that if Congress for a long enough period of time acts like there is a treaty, that a treaty that was nonexistent is revived. I do not think that is his point. If he would ever agree with you that a treaty did not exist—but he does make this argument that somehow there is a treaty susceptible to resuscitation.

I am going to go back to him now, because he is probably tired of me putting his arguments in my words, which cast it less favorably than he would choose to cast it.

Professor GLENNON. Actually, I agree with a number of your words, Mr. Chairman. Let me make four points, beginning with your earlier question concerning the power of Congress to declare that the treaty is extinct.

Clearly, Congress can, I think, enact a statute directing the President to terminate the ABM Treaty. Clearly, the Senate could have included itself in the termination process by adding a condition to the resolution of ratification to the ABM Treaty in 1972, when it approved the ABM Treaty. That is the debate that we had when I was legal counsel to this committee in 1979 on termination of the treaty with the ROC, the Mutual Security Treaty that was at issue in Goldwater against Carter.

And this committee accurately, I think, took the position that if the Senate wanted to include itself in the termination process, it can do that. But it has to say that. It had not done that with respect to the ROC Treaty.

A very similar principle is at issue with respect to the ABM Treaty. I think that if it had added a condition to the ABM Treaty saying that, in the event an issue of state succession arises at some point down the pike, we, the Senate, would like to be included in the process of determining the identity of the successor state is, the Senate could have done that. But it did not. That is point one.

Second, it is not accurate to state that Boris Yeltsin, on December 29, 1992, simply indicated the willingness of Russia to be a successor to the Soviet's rights and obligations under the ABM Treaty. He said, "Russia regards itself as the legal successor to the Soviet Union with respect to that treaty."

Senator ASHCROFT. How can he regard himself as a successor to the obligations when some of the obligations require the maintenance of conduct and the satisfaction of conditions beyond the limits and boundaries of his territory?

Professor GLENNON. Well, the question is, why should the United States acquiesce in his assertion that Russia continues to be a successor to the treaty? And my answer is, if Secretary Baker and President Bush did not wish the United States to continue as a party to the treaty under those circumstances, as I said, they had every right under international and constitutional law at that point to say the United States is out of this treaty. They did not do that. They said the opposite. And the Senate acquiesced in that.

Senator ASHCROFT. Let me just ask this question, and see if I can refine this just a minute, because I find this to be very interesting. What if they had said nothing? What if we had had silence for the last 8 years?

Professor GLENNON. As a matter of international law or constitutional law, Mr. Chairman?

Senator ASHCROFT. Yes. I mean, I am asking these questions in good faith. You may think I—when I get to reading the questions the staff has prepared, that is when I am trying to pin you down. I am just trying to get educated now.

Professor GLENNON. The issue of silence arises in connection with the question that was just posed concerning the United States' ability to opt out of a treaty that was not sent to the Senate for its advice and consent. And the question that was posed is this: Suppose the Secretary of State goes abroad and makes statements in an exchange of statements with a foreign leader that clearly constitute a treaty, that constitutionally ought to be submitted to the Senate for its advice and consent.

Is that binding constitutionally? Is that binding in international law? That is where the question of silence becomes pertinent. And that is where the question of voidness versus voidability becomes pertinent.

And let me read, Mr. Chairman, if I may——

Senator ASHCROFT. Well, I really want you to have a chance to fairly explain what you are talking about.

Professor GLENNON. I appreciate that, and you have given me that.

Senator ASHCROFT. Please correct me, if I do not give you that chance.

Professor GLENNON. The applicable international law doctrine is set out in article 46 of the Vienna Convention on the Law of Treaties. It deals with precisely this hypothetical that I just discussed. And it says, "In these circumstances, if a law of fundamental importance of a state is violated"—I think the treaty clause is a law of fundamental importance—if that violation is manifest, a "state may not invoke the fact that its consent to be bound was expressed in violation of that principle of fundamental importance, unless the violation is manifest." That is the principle of voidability. That is where your question about silence is answered.

International law——

Senator ASHCROFT. Well, is the United States a party to the Vienna Convention? It is my understanding we are not a party to that.

Professor GLENNON. We are not, Mr. Chairman, but article 46, of course, is widely accepted as codifying preexisting customary international law.

Senator ASHCROFT. Go ahead.

Professor GLENNON. And I would finally indicate, with respect to the question concerning estoppel, of course the Senate is not estopped, of course Congress is not estopped, from saying today that it was wrong in 1994, that it was wrong or it has changed its mind from 1997, and it no longer views the United States as a party to the ABM Treaty.

My point in referring you to this piece of legislation and the condition to the CFE Flank Document was simply to point out that the President is acting consistent with congressional concurrence—and that under Justice Jackson's steel seizure analysis, his power is therefore at its highest. Congress can always change its mind. It has not done that.

Senator ASHCROFT. Mr. Rivkin, I think it is your turn, and then it will be Mr. Feith's turn. And then I get a turn.

Mr. RIVKIN. You are most gracious, Mr. Chairman.

In the interest of time, I will not go through a lengthy recitation of facts. Suffice it to say that just as is the case with our record, the Russian record is much more ambiguous than Professor Glennon describes. And we go for a number of pages in our legal memorandum looking at what the Soviet Union, post-Soviet States stated in Alma Ata, and what they said in Minsk and what they said in Bishkek.

Most importantly, the Russian record is much more ambiguous than a simple recitation of a statement by President Yeltsin would reveal. One thing I just wanted to focus on—and again, there are many disagreements Professor Glennon and I may have about how far a President's recognition power and power to deal with state succession would stretch. But I would just pose a very simple proposition, which we have not discussed yet.

I think it is manifestly clear that in circumstances not involving state succession, just involving treaty interpretation, the President cannot, under the guise of interpretation, come up with a different treaty. And again, I am basically reminding everybody how this issue was dealt with during the debate over broad versus narrow of the ABM Treaty.

It is clear to me that even if the President is operating in the context of recognizing a new successor state, he still cannot come up, utilizing his recognition power, with a very different treaty bargain. I would challenge anybody to look at the totality of the bargain which President Nixon has entered into in 1972 with advice and consent by the Senate, looking—and again, in the interest of time, I would not go into details—looking at articles 26, et cetera, et cetera, dealing with the issue of radars, and explain how is it possible for Russia to deliver, Mr. Chairman, the totality of the bargain that the Senate had endorsed in 1972.

And clearly, the context of a Presidential action is irrelevant, if what you are getting is not the treaty that you agreed to. We bargained for an opportunity to strike at the heart of the Soviet Union.

We bargained for the specific arrangements relating to early warning radars. We bargained for many other things, none of which can be fully delivered by Russia today. It is not the same treaty. It may be a good treaty, but it is not the same treaty.

And again, I would challenge anybody to explain to me how the treaty with Russia is going to give the United States the strategic benefits and the specific legal benefits the Senate sought and agreed to acquiesce in 1972. Thank you.

Senator ASHCROFT. Mr. Feith, I indicated that I would call on you. And if you choose to yield to Mr. Miron——

Mr. FEITH. Mr. Miron.

Senator ASHCROFT. Miron. And pardon me for mispronouncing your name earlier.

Mr. MIRON. No problem. Mr. Chairman, I want to focus on one point, perhaps because I am more of a common lawyer and less of an international lawyer than the rest of my colleagues here. And that is on the question of void versus voidable. And I want to start with a treaty, that is the Vienna Convention on Treaties. I think it is a misdescription of it to say that the only way you get out of a treaty is by asserting that you have the right to have it voided. That is the voidable category.

There are some clearly distinct and listed grounds for asserting that a treaty should be avoided: fraud, undue influence, just as though they were in any—they were in the common law of Texas or Missouri or anywhere else. But nothing in that treaty says that a treaty which does not exist has to be denounced in accordance with that notice procedure for voidability. It is not a treaty anymore.

To that extent, a void treaty is like a void contract, a contract for the sale of a child. I mean, there are a lot of examples in common law that nobody has to go into court to get a declaration of voidness about, because it is void on its face. And therefore, I think repairing to that treaty, which, as you rightly point out, we are not a party in any event, does not give us any aid in analyzing what happened to the ABM Treaty in 1991.

And with respect to the point about whether the Vienna Convention itself, even though the United States is not a party, it is a treaty for principles which are widely accepted, there is nothing in that treaty which in any way adopts a rule that an extinct state can be resurrected in no way, shape or form. There is nothing in the treaty that deals with that subject at all.

And the only thing that deals with that subject in any elaborate way are the several hundred years of scholarly works and the positions of major United States executives in the latter part of the 19th century. And all of them say that when a treaty is extinct—I am sorry—when a State is extinct, its treaties fall to the ground.

It is as simple as that. Nothing that anybody else can do can revive it.

Thank you.

Senator ASHCROFT. I think Professor Glennon wants to make some more remarks.

Professsor GLENNON. Thanks, Mr. Chairman. I will be brief.

First, I agree that if a treaty does not exist, action cannot and need not be taken to void it. The ABM Treaty, however, exists.

Second, with respect to the suggestion that the Vienna Convention on the Law of Treaties is irrelevant to this discussion, one, it is by its terms irrelevant to principles of state succession. Two,

however, a number of issues have been raised which do not relate to principles of state succession.

The question of supervening impossibility of performance, which was raised a moment ago, is, for example, dealt with in article 61 to the treaty. The question of fundamental change of circumstances, which is raised in the Heritage Foundation's memorandum, is dealt with in article 62 to the treaty.

The question of invoking invalidity by virtue of a violation of a rule of fundamental importance is dealt with in article 46 of the treaty. And I would suggest that each of those articles, as I indicated in response to your question, codifies preexisting customary international law norms.

Senator ASHCROFT. I have a series of questions I do want to ask you, but I—when you keep saying it exists, I am fascinated by that, because that is a very pragmatic sort of thing that says we do not have to decide where it came from or whether it existed at any particular time in the past, we will just say that it exists now.

Is it your view that it has always existed since it was ratified by the U.S. Senate in 1972 and that it persisted in existence after the declared extinction of the Soviet Union and prior to its subsequent attempted affirmation of the treaty?

Professor GLENNON. Yes, sir.

Senator ASHCROFT. So you just—when a state no longer exists, there is some interval, you are saying, during which the treaty persists absent the state, and that it is sort of naked in its existence. There is no state which is a party. And then later on, those who were in some ways associated with the nonexistent state can at some time later come and reconstruct the apparatus to which the treaty is appended.

Professor GLENNON. Well, as an abstract question, Mr. Chairman, that is——

Senator ASHCROFT. Well, I do not want this to be abstract. I tried to get this—we got this down to dates earlier. It was about a month before the United States made its statement. I do not know how long it was before the Russians made their statement. I just think you have to answer that question somehow. What happens? Is there a treaty that is sort of floating without a party?

Professor GLENNON. Well, as I was about to suggest, Mr. Chairman, your question presupposes that there was no party. In fact, there was a party. As soon as the Soviet Union ceased to exist, Russia commenced. The Federation of Russian States traces its existence to the instant that the Soviet Union ceased to exist. So there was no floating season or treaty that had to be held in abeyance during any period.

Senator ASHCROFT. But it seems to me that the Russian Federation preexisted the Soviet Union. So I think there are all kinds of ways to talk about continuities there. But it is pretty clear to me that the different parties to this agreement have been negotiating what they wanted as a successorship, not participating in the prior definition of the parties.

And when you have the idea in the MOU that the United States of America, the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation and the Ukraine, upon entry into force of this memorandum, shall constitute the parties to the treaty, you

redefine the membership of the treaty in a way that previously was not defined.

I wonder why the United States and Russia are included as members here, particularly Russia, if they were already members. If this is not a new treaty, why—if these are just accessions of Kazakhstan, Ukraine, Belarus, what already exists, why would the U.S. and Russia be named in the MOU?

Professor GLENNON. Mr. Chairman, I cannot answer that. But I would simply suggest that it does not go to the question whether the ABM Treaty exists, for all the reasons that I have described.

Senator ASHCROFT. Well, the MOU appears to be an international agreement, signed by the Secretary of State. And it states that the triggering event for Russian membership in the ABM Treaty is the entry into force of the MOU. The agreement provides no other mechanism to allow for Russian accession to the treaty.

Do you think that the MOU has come into force? Is it your view that the MOU is in force?

Professor GLENNON. Well, my understanding is that it cannot, as a matter of domestic law, come into force under section 232 or condition 9 to the CFE Flank Document until it receives the advice and consent of the Senate. So my answer would be that it is not in force.

Senator ASHCROFT. They negotiated the MOU expressing that Russian membership was contingent on it. At least that is my understanding. And now you say that it is not in force. Those two points together indicate that if membership is contingent upon something that is not in force, Russia is not a member.

Professor GLENNON. Well, Mr. Chairman, I may need to be educated on this, but my understanding is that the MOU has yet to be submitted to the Senate for its advice and consent, and that until it does receive the Senate's advice and consent and is then ratified by the President, it by definition will not be in force.

Senator ASHCROFT. Well, that is exactly it. And it appears that the administration, in making contingent upon the ratification of MOU the membership of Russia in the ABM Treaty, is taking an inconsistent position. And I want to know if you embrace that inconsistent position or whether you disagree with them.

Professor GLENNON. I am sorry, Mr. Chairman. I think I did not understand your question initially.

Senator ASHCROFT. That is understandable.

Professor GLENNON. No, and I apologize.

By including the term "Russian Federation" in article I of the MOU on succession, I gather that the administration is simply repeating the existing state of affairs and reiterating the status quo in an effort to make as clear as possible in article I of the MOU what the parties to this agreement are. It would look a little strange if Russia, being a party to the ABM Treaty, were not listed in article I to the MOU.

So I surely would not infer from this that the administration does not regard Russia as a party to the ABM Treaty until the MOU is ratified by the Senate. To the contrary, I think this is intended probably simply to reflect the status quo with respect to Russia.

Senator ASHCROFT. The testimony mentions condition 9 of the CFE Flank Agreement. Russia obviously does not comprise the same territory as the Soviet Union. If today Russia were the other party to the ABM Treaty, would this, in your view, necessarily mean that there had been a change in the geographic scope or coverage of the ABM Treaty?

Professor GLENNON. Well, that is a difficult question, because implicitly, Mr. Chairman, your question is whether there are additional successor states, Belarus, Kazakhstan, Ukraine, states that also have ABM assets, to the Soviet Union under the ABM Treaty. And I must tell you I do not know the answer to that. And I think that the administration also would respond that it has taken no position with respect to that issue.

Senator ASHCROFT. Does it trouble you at all to think that we might have a treaty and people cannot name who the parties are?

Professor GLENNON. Yes.

Senator ASHCROFT. It is so troublesome to me that I might think that it would be a good rule of law that any treaty to which you cannot name the parties is not really a treaty.

Professor GLENNON. Well——

Senator ASHCROFT. The identity of the parties being so fundamental to a treaty relationship, I am 32 years out of law school, and am going back to simple contracts. It seems to me that the parties to a contract are important, and for treaties it would seem to be equally important. I had earlier tried to focus in on this when I mentioned Russia alleging its capacity to control extra territorial things.

Now that is not uncommon these days. NATO has converted itself to something that is dealing with extra territorial matters. It had once been a defense organization, and now it is outside the limits of what it had been designed to defend.

I appreciate your candor in saying you do not know who the members of this treaty are, and you do not know whether or not Russia really has a responsibility under the treaty to fulfill the terms of the treaty as it relates to territory outside of its borders.

Professor GLENNON. Well, Russia surely would not have such a responsibility. The question is whether these other states would. And I think that is the issue that is up in the air.

Senator ASHCROFT. I would like to follow that up with you. This is very interesting to me. Could it be possible that these countries have such a responsibility without knowing it. Not all these countries have embraced this responsibility. Could it be possible that they are living with a responsibility under a treaty which they do not understand or know that they are a party, and that they have these responsibilities of which they are unaware?

Professor GLENNON. Well, Senator, the fact that I am not aware whether they are parties to the treaty or, more specifically, aware what their intent is with respect to this issue does not imply that they themselves are unaware of their own intent. They may believe that their intent has been unequivocally expressed. And they may indeed be comporting themselves in a manner fully consistent with the obligations imposed by the ABM Treaty.

If I might just say, Mr. Chairman, on the broader question that you raise, if I may say so, I think you are right to be discomforted

by this ambiguity. And it would be, it seems to me, entirely understandable if the Senate, in view of this ambiguity, said: Look, we do not want any longer to be a party to a treaty the other parties to which cannot be identified and which, on top of it, we view as a bad bargain.

If the Senate were to come to that conclusion, however, it has to do something. It has to join with the House and enact a statute and direct the President to terminate the treaty or act through the operation of the treaty process to get out of the ABM Treaty. And it has not done that.

Senator ASHCROFT. Well, I find rather interesting your concession that this would be a discomforting thing, and it is hard to imagine a Senate that would want to be a party to a treaty that you could not determine who the members were, and you could not determine what the territory to be covered was, and who had responsibility.

And yet what you are basically arguing, I think, is that when we ratified this treaty in 1972, we implicitly provided any administration that succeeded the ability to, with some sort of constructive presumption, move us into that position. Arguing that the United States is bound by a treaty to which parties cannot be identified is a position that is very disconcerting. No reasonable person would want to be party to a treaty whose membership was not defined or defineable. But you are willing to say that is the power that the Congress granted to the President and to the administration in 1972 when it entered into the ABM Treaty.

I find some real tension in that, because I think treaties ought to be construed in a constitutional fashion. I cannot look at the ABM Treaty and reasonably conclude that the Congress in 1972 intended, either by the language or interpretation therefrom, to authorize the President of the United States, and any President thereafter, to change the territorial definition of the treaty, to change the membership of the treaty, and to do so without obtaining the advice and consent of the Senate. I think it carries us right back to ground zero in this debate.

We have gotten to the place where we all admit that we do not know who the parties to the ABM Trteaty are. We all admit that we do not know what territory the treaty covers. But some of us are saying, well, that is alright, because the Congress would have agreed, when it provided this ratification in 1972.

The other argument is no, it is not acceptable to amend a treaty without abtaining the advice and consent of the Senate. The Senate would not abdicate its responsibility in such a way. We would not have done it then. We would not do it now. You do not want to be party to a treaty that so directly affects world security when you do not know who the members are, what the territory is, what the responsibilities are.

There are ABM radar sites right now outside of Russia. If I am not mistaken, it would be virtually impossible for Russia to comply with this treaty as the sole other party.

So I think we find ourselves in a very troubling situation, not knowing who the members are, not knowing what the territory covered is, not knowing what the responsibilities are, and yet persisting in saying this is what the Senate authorized in 1972.

Frankly, I have not always respected prior Senates. I have sometimes thought that they have made mistakes. But I do not think they made that big of a mistake in what they were doing with regard to this treaty.

Now I have to give you another opportunity to speak because I told you I would let you speak last. Yes, Mr. Casey.

Mr. CASEY. Mr. Chairman, if I could make one point, you mentioned earlier contract law. And in fact, contract law is a very good place for us to be, because treaties are in fact contracts. And if two parties contract and one party disappears, that contract does not become merely voidable, it is void. There is in fact no other party to whom you can give notice of voidability.

I mean, if you hire me as your lawyer and the next day I die, that contract is over. You do not need to send anybody notice saying I no longer want a part of this contract. And that is exactly what happened.

Senator ASHCROFT. The question, though, is, if you hire a lawyer and he dies the next day, how can you tell?

Mr. CASEY. It would depend on the lawyer.

Senator ASHCROFT. It is so hard to communicate with lawyers. Never mind. Sorry.

Mr. CASEY. This is true.

But the fact is that when a state disappears, there is no need to send notice that you no longer consider yourself bound by the treaties. Those treaties are discharged by operation of law. The doctrines that Professor Glennon refers to do indeed exist. There is a real question, though, how they are supposed to operate when a state disappears.

And indeed, there have been instances when, for example, during World War II, President Roosevelt's attorney general was faced with the question of exactly that. Could we, using the International Law Doctrine of rebus stantibus, which is the doctrine that Professor Glennon is talking about, to declare a particular convention void?

And the answer is, well, the countries who we were parties to that treaty with are now occupied. They no longer have independent international legal personality. There is no one to send notice to. The treaty is, in fact, just void. There is nothing more that needs to be done.

The only way that the ABM Treaty could still be in force is if the Russian Federation constitutes a continuation of the international legal personality of the Soviet Union. And it does not. There is no way that you can—the President has broad discretion in this area, but he cannot be arbitrary.

And the state that is Boris Yeltsin's Russia is not the Russian State that formed the core of the Soviet Union, which included at the very minimum Great Russia, the Ukraine, and Bela-Russia. That state dissolved. It no longer exists.

And the treaties that that state was a party to, whether it was under the name of the Russian empire or the Soviet Union, dissolved along with it.

Senator ASHCROFT. I think this follows up on that, and I thank you, Mr. Casey. The President in May 1997 agreed to submit to the Senate for advice and consent, and now I am quoting, "any inter-

national agreement that would add one or more countries as states parties to the ABM Treaty or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty or that would change the geographic scope or coverage of the ABM Treaty or otherwise modify the meaning of the term national territory, as used in article 6 and article 9 of the ABM Treaty."

The President has not submitted agreement to the Senate. I find it hard to believe that the administration can allege that the treaty is still in force when the geographic scope has been changed, the number of the parties has changed, but no agreement recognizing these changes has been submitted to the Senate.

Do any of you wish to comment on that?

Mr. RIVKIN. If I may just add a brief point, Mr. Chairman. Obviously in full accord with my good colleague, Mr. Casey, I just wanted to perhaps emphasize a little bit more sharply one proposition.

I have spent most of my professional career being a strong opponent of Presidential powers. It is an ancient debate, as you know, Mr. Chairman, which goes back to the Pacificus-Helvedius debates. However, what I think is instructive here, is that even the strongest possible proponent of Presidential prerogatives cannot take the view that the President, in exercising his permittable constitutional powers, can act arbitrarily.

So the President has to be bound by the applicable doctrines of international law. There may be instances where the facts are sort of in a gray zone, and reasonable people can disagree.

But I think few people would argue that the President, in exercising admittedly a very formidable power of recognition, can recognize the Holy Roman Empire. I believe very few people can agree with the proposition that the President, in exercising his formidable power to interpret treaties, which Congress cannot easily second guess, can interpret the treaty in a way that is manifestly absurd.

So I am not troubled by the need to reconcile the President's constitutional prerogatives upon the rule of reason. It may be difficult to challenge the President in doing that. The case may not be judiciable. But again, to me, the voidness and impossibility of performance very much, insofar as they are part and parcel of, for example, the continuity doctrine, should very much structure the President's conduct.

Again, the President cannot recognize the Holy Roman Empire and say that this is reasonable conduct. It does not exist. And the facts, I would argue, may strike you as a bit of an exaggeration. But the facts are pretty similar to that here.

There may be other instances, where, depending on whether you are a Presidentialist or somebody who believes Congress possesses greater foreign affairs powers, would disagree, but not in this instance.

Thank you.

Senator ASHCROFT. Mr. Feith.

Mr. FEITH. Mr. Chairman——

Senator ASHCROFT. This is the last line, so whatever you want to say, say it with some dispatch.

Mr. FEITH. I think I have said virtually everything I wanted to say. The one point I would like to make, picking up on your last

remark, is President Bush said this issue needs to be studied. And it is a complex issue. And when the Soviet Union broke up, it was quite a shock. And people said, "We need to think this thing through."

And in the period when the administration was studying these various treaties on a case-by-case basis, Congress a number of actions that, as Professor Glennon said, reflected a thought that maybe the ABM Treaty remains in force. I think it is important to point out that they did that under circumstances where the administration said, "We do not know. We are still studying the question."

President Clinton came forward initially and said that the issue of succession is unsettled and asserted that if the Senate rejected the multilateralization MOU, the succession issue would simply remain unsettled, President Clinton said. And it was when the President was pressed by Members of Congress on the proposition that you yourself have emphasized this afternoon, which is they do not understand this idea of a treaty that is the sound of one hand clapping, a treaty that only has one party, a bilateral treaty whose other party has died. And they do not understand the concept. How can that be?

And when President Clinton was pressed after initially saying that the issue was unsettled, and then he was told, "If it is really unsettled, and you cannot identify another party, then the treaty does not exist in the view of Congress," it was only then that President Clinton came forward with a position that was flatly inconsistent with his earlier assertion that Russia alone could not be the successor, if the treaty is to fulfill the object and purpose of the agreement, as approved by the Senate.

And what has happened is the administration was put into a corner logically. And when it found itself in a corner, it simply asserted that Russia is the other party, and the treaty remains in effect.

But nobody from the administration to this day has put forward a public statement laying out a theory to justify how they can argue that Russia, in the place of the Soviet Union, is in the ABM Treaty.

There is nothing extant from the administration anywhere explaining the theory that underlies the President's assertion that Russia is the other party and that the treaty remains in force.

And it is important to point out that when President Yeltsin said, "We consider ourselves the successor to the Soviet Union for purposes of the ABM Treaty," at the very same time, a few weeks before, Russia made it absolutely clear, explicitly in the Minsk Declaration of December 1991, that Russia does not consider itself the continuation of the Soviet Union. And in the Minsk Declaration itself, there is a statement in article 11, "From the moment of signature of the present agreement," which is the agreement to create the Commonwealth of Independent States, "application of the laws of third states, including the former Union of Soviet Socialist Republics, shall not be permitted in the territories of the signatory states." Russia was one of the signatories. So Russia itself referred to the Soviet Union as a third state.

And I think it is quite clear that the only logical way to read Russia's willingness to consider itself a party to the ABM Treaty was that it was an offer. It was an offer to the United States: Let us make a new agreement based on the ABM Treaty.

That is the only reasonable interpretation. The administration has every right to make such a new agreement. But under the U.S. Constitution it can do so only if it comes to you and your colleagues and gets the requisite two-thirds approval in the advice and consent process.

Thank you.

Senator ASHCROFT. Thank you, Mr. Feith and Mr. Miron, Rivkin, Casey.

Professor Glennon, you are going to have basically the opportunity to close. I would like to ask you in your closing if you would answer this one question: The memorandum of understanding on succession includes four states that the administration has identified as critical parties to the treaty, if the original purpose of the treaty is to be fulfilled.

The administration contends that even if the Senate rejects the MOU on succession, that the treaty will still be in force and succession issues unresolved.

Now if the Senate rejects the MOU, which is really the only conceivable succession arrangement for the ABM Treaty, will that make a clear enough statement of Congress' will that the ABM Treaty is no longer in force? Basically, if we reject the MOU, would that be a clear statement of Congress? And would you consider the treaty not to be in force? I think you may have answered that before.

But would you please take another run at that and then close? And then I have a paragraph.

Professor GLENNON. Thanks, Mr. Chairman. Let me, while I have a moment, thank you for your fairness in allowing me ample time to respond to the many arguments made on the other side.

Senator ASHCROFT. Well, the poor guys over there and me——

Professor GLENNON. I do appreciate that.

I did address that question that you just put to me very briefly in my opening statement. And my answer, once again, to put it briefly, is you cannot repeal something with nothing. And if the Senate rejects the MOU on state succession, there would be no instrument in existence for there to be any legislative history to.

Now, if the MOU or some other treaty were ratified, if that treaty were inconsistent with the prior treaty, or if it said that it was the intent to supersede that prior treaty, then the prior treaty would, of course, give way to the extent that it is or was inconsistent. But you cannot, again, without ratifying a subsequent treaty, have the effect of supersession that some Senators apparently would desire.

Now with respect to a number of these other arguments that have been made, first, I would want to agree with the point that has been made that there is, so far as I have seen, no theory that the administration has put forth elaborating the administration's position on supersession and the principles of state succession.

There is, of course, an opinion of the Assistant Attorney General Walter Dellinger that addresses a slice of those issues. But by and

large, the truth is it has been like trying to pull nails to get positions on legal issues from this administration. And this is an example of many legal issues that have been fairly frustrating for the Senate to deal with.

Second, I think that with respect to this comment that the President made concerning state succession issues being unsettled, what the President was referring to was the same issue that you were referring to a moment ago, and that is the status of the ABM Treaty with respect to Belarus, Kazakhstan and Ukraine.

Clearly, state succession issues are unsettled with respect to those three states. That is the reason, as I understand it, that the MOU is seen to be necessary by the administration.

I do not believe, however, that this administration or the Bush administration has ever suggested that the status of the ABM Treaty with respect to Russia is unsettled. Since the earliest days, as I pointed out, the Bush administration took the position that the ABM Treaty is in effect and that Russia is a party.

Third, I surely agree that the President could not arbitrarily recognize the Holy Roman Empire as a successor state to the ABM Treaty. That is not this case. If the point is that the President must act with some basis in international law, as I pointed out, section 210, paragraph 3, of the Restatement, as formulated by the American Law Institute, provides all the basis that the President needs to argue that he has acted consonant with international law. It is the joint intent of Russia and the United States that Russia be regarded as a successor state to the treaty.

Finally, with respect to Mr. Casey's discussion of principles of contract law in addressing the issue of voidness versus voidability, I would really respond to Mr. Casey with all respect that this issue is not governed by American contract law. It is governed by international law and specifically principles of state succession. The two do not always coincide.

Senator ASHCROFT. Well, let me thank you. Let me thank all of you. I really have enjoyed this. It is a very serious matter. Whenever I enjoy a discussion, I sometimes wonder whether I have taken it seriously enough. But I thank each of you for the contributions you have made today. And I thank Professor Glennon for his contribution he made to this committee. He served this committee previously, and he served it again today.

I think the debate on the legal status of the ABM Treaty is long overdue. The American people need to be reminded that the present administration is intentionally pursing a policy which keeps the United States vulnerable to a ballistic missile attack. In my view, there is no treaty binding us to follow this course of vulnerability.

The fact that the administration has not declared this treaty null and void is a striking example of the defeatist policies which have kept our country defenseless for too long. George Washington once said, "If we desire to avoid insult, we must be able to repel it."

Why are North Korea and Iran pursuing advanced missile technology at breakneck speed? These terrorist governments are seeking the tools of aggression because they know that we are not prepared to repel their attacks, either here or at places that are important to our national strategic security interests.

It is my hope that this hearing has made it clear that there is no longer a treaty preventing the United States from defending itself. As Franklin Roosevelt said in September 1941, and I quote, "Let us not ask ourselves whether the Americas should begin to defend themselves after the first attack or the fifth attack or the tenth attack or the twentieth attack. The time for active defense is now." I could not agree more.

Having thanked you all there appears to be no further business and the committee is adjourned.

The hearing record will remain open until June 2 at 5 p.m. I invite any of you to supplement your remarks or to enlighten us further, if thoughts come to mind that will help us make better decisions or might even change a Senator's mind.

Thank you very much.

[Whereupon, at 4:48 p.m., the committee adjourned, to reconvene at 10 a.m., May 26, 1999.]

SUPPLEMENTARY REMARKS OF DOUGLAS J. FEITH AND GEORGE MIRON—SENATE FOREIGN RELATIONS COMMITTEE HEARING ON THE LEGAL STATUS OF THE ABM TREATY

INTRODUCTION

At a hearing of the Senate Foreign Relations Committee on May 25, 1999, Professor Michael Glennon of the University of California—Davis, Law School, stated his opinion that "the ABM Treaty" is in force and that the Russian Federation ("Russia") and the United States are parties. *The Legal Status of the ABM Treaty,* Testimony of Michael J. Glennon before the Committee on Foreign Relations, United States Senate, May 25, 1999 ["Glennon Testimony"] at 1. It is not clear from his testimony whether he was referring to the ABM Treaty of 1972, originally made by the United States and the USSR, or to a new treaty between the Russia and the United States regarding ABM—*i.e.,* anti-ballistic missile—systems. Parts of his testimony suggest that the ABM Treaty of 1972 remains in force and that Russia has simply succeeded to the rights and obligations of the USSR thereunder. Other parts suggest that Russia and the United States, as a result of statements made in January 1 1992 by the Russian President and the U.S. Secretary of State—statements in which the U.S. Congress supposedly acquiesced by refraining from making a "timely" objection—entered into a new ABM agreement, presumably with essentially the same terms as the ABM Treaty of 1972.

If Professor Glennon were to argue that the ABM Treaty of 1972, as such, remains in force, he would owe an explanation of how that two-party Treaty survived the extinction of one of its parties, the USSR. As our legal memorandum observes, for more than 200 years, legal scholars and government officials have acknowledged the international legal rule that bilateral treaties (other than "dispositive" agreements, which dispose permanently and irrevocably of rights to specific territories) lapse automatically when one of the two parties dissolves. *See* Douglas J. Feith and George Miron, *Memorandum of Law: Did the ABM Treaty of 1972 Remain in Force after the USSR Ceased to Exist in December 1991, and Did It Become a Treaty Between the United States and the Russian Federation* 27–58 (May 21, 1999). The scholars and officials who have done so come from many States, including the United States, and include such eminent figures as Vattel, Halleck and O'Connell. No scholar of note, no judicial opinion and no relevant U.S. statute contradicts this venerable rule.

Professor Glennon does not address this rule at all in his testimony. He neither acknowledges it nor denies it. He does not make a case that it is inapplicable to the ABM Treaty of 1972. He does not argue, for example, that that treaty is dispositive. Nor does he argue that the USSR's international legal personality has survived.

Rather, he builds his case that Russia and the United States are now parties to "the ABM Treaty" on the following points (page references are to Glennon Testimony):

(i) The U.S. President "has constitutional power to determine in the first instance whether there exists a successor state to a treaty." (Page 2)

(ii) International law supports the U.S. President's "conclusion that Russia is a successor state to the ABM Treaty." (*Id.*)

(iii) "[A] new state can be presumed to be bound to a treaty of a predecessor state" if the new state (Russia) agrees to be bound and if the other party (the United States) agrees to "the new relationship." (Page 3) "[B]oth treaty partners must agree to or acquiesce in the new agreement." (*Id.*)

(iv) Russia agreed to be bound by the ABM Treaty of 1972—for example, in its Foreign Ministry's January 13, 1992 note to the U.S. State Department stating that "the Ministry kindly requests that the Russian Federation be considered as the Party in all international treaties in force in place of the USSR." (*Id.*)

(v) The United States has agreed to that request, as evidenced by Secretary of State James Baker's January 29, 1992 statements (at a joint press conference with Russian President Boris Yeltsin) that "the United States remains committed to the ABM Treaty" and that "we expect the states of the Commonwealth [of Independent States] to abide by all of the international treaties and obligations that were entered into by the former Soviet Union, including the ABM Treaty." (Page 4)

(vi) The "joint intent" of Russia and the United States "suffices to establish Russia as a successor state" to the ABM Treaty of 1972. (Page 5)

(vii) The U.S. Congress "could constitutionally have enacted a statute overturning the President's determination that Russia" is the USSR's ABM Treaty successor. (Page 7)

(viii) There has been no "timely congressional objection," (page 2) however, and, in fact, "Congress and the Senate have *concurred* in the President's judgment that the ABM Treaty remains in force" (page 7; emphasis in original), as evidenced in a statute and a Senate treaty ratification resolution by references that imply a belief that the ABM Treaty of 1972 remains in force.

Point (i) begs the key question raised in our testimony to the Committee on May 25, 1999, which is not whether the President has authority to determine the successor to a treaty, but whether the Treaty lapsed by operation of law when the USSR dissolved in December 1991. If the Treaty lapsed, there can be no successor to that Treaty as such, for there is no resurrection in international law, no bringing a treaty back from the dead. The surviving party—the United States—can, as Professor Glennon notes, agree to make a treaty along the same lines as the lapsed Treaty with any State or set of States that arose on the territory of the extinct USSR, but such an agreement would constitute a new treaty, which under the U.S. Constitution could come into force only if two-thirds of the Senate approved ratification.

Point (iii) implies that Professor Glennon recognizes that the U.S.-Russian agreement on which he hinges his argument is a "new agreement" for a "new relationship" and not a continuation of the old U.S.-USSR treaty.

Point (v) is an especially dubious link in Professor Glennon's chain of logic. The record, as elaborated upon below, does not support the conclusion that Secretary Baker intended his press conference comments to create a legally-binding commitment of the United States to enter into an ABM Treaty with Russia.

As to point (viii), Professor Glennon offers no standard for determining whether a "congressional objection" is timely. Also, he ascribes more significance than is justified to the Congressionally approved language that implies that the ABM Treaty, notwithstanding the USSR's dissolution, remains in force. He asserts that such language constitutes "concurrence" with the President's judgment. But in what proposition exactly is the Congress supposed to have concurred? Nothing in that language authorized the President to create new legally-binding ABM-related obligations, if and where none now exist. There is no basis in U.S. constitutional law for the notion that the Congress now is somehow estopped from concluding that the ABM Treaty lapsed when the USSR dissolved.

QUESTION: At a press conference in January 1992 with Boris Yeltsin, did Secretary of State James Baker create a legally-binding agreement between the United States and Russia on ABM systems?

A. Professor Michael Glennon's hypothesis as to how the United States entered into a legally-binding agreement with the USSR on the subject of ABM defense

Professor Michael Glennon testified that the ABM Treaty of 1972 became a legally-binding agreement between the United States and Russia by the following process: (i) on or shortly before January 29, 1992 Russian President Yeltsin stated that Russia regarded itself as the "legal successor" to the USSR's bilateral treaties that were still in effect, including arms limitations and disarmament; (ii) Secretary Baker expressed the United States response to President Yeltsin as follows:

> I made the point to President Yeltsin that the United States remains committed to the ABM Treaty . . . [W]e expect the States of the commonwealth to abide by all of the international treaties and obligations that were entered into by the former Soviet Union, including the ABM Treaty.

Glennon Testimony at 4 (quoting Secretary of State James Baker); (iii) according to Professor Glennon, in 1994 the Congress concurred in Secretary Baker's statement, by way of Section 232(a) of Pub. L. No. 103–337, the National Defense Authorization Act for Fiscal Year 1995 (Note to 10 U.S.C.A. § 2431) as follows:

> The United States shall not be bound by any international agreement entered into by the President that would substantively modify the ABM treaty unless the agreement is entered pursuant to the treaty making power of the President under the Constitution.

Also, Professor Glennon says that the Senate in 1997 independently manifested its concurrence by way of Condition 9 to the ratification resolution for the CFE Flank Document. For Senate consideration of ratification, see 143 CONG. REC. S4451–01, 1997 WS 250192 (May 14, 1997). Condition 9 provides that:

> The President shall certify to the Senate that he will submit for Senate advice and consent to ratification any international agreement:
>
> (i) that would add one or more countries as state parties to the ABM Treaty, or otherwise convert the ABM treaty from a bilateral treaty to a multilateral treaty; or
>
> (ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national territory" as used in Article VI and Article IX of the ABM Treaty.

Finally, Professor Glennon contends as a general proposition that the concurrence of the Congress may be inferred from its silence, *i.e.* by its failing to make a "timely objection" to a President's "determination" that a treaty exists between the United States and another State. Glennon Testimony at 2. Professor Glennon offers no rule to determine Congressional timeliness, and in any event does not contend that the time for Congressional objection to the making of an ABM treaty with Russia had expired before the Congress in 1994 allegedly concurred by way of Section 232(a) of the National Defense Authorization Act for FY 1995.

Under international law, as well as U.S. law, words of commitment, accord or agreement do not create a legally-binding agreement unless they were so intended. Otherwise, the words create only a political or moral agreement. Hence, the validity of Professor Glennon's thesis that Secretary Baker's words of commitment created a legally-binding agreement with Russia depends on how Secretary Baker's words should be interpreted. The discussion below shows that under accepted rules of interpretation, Secretary Baker's words cannot reasonably be interpreted as manifesting an intent to create a legally-binding agreement. Hence, when Secretary Baker said that the United States remains "committed" to "the" ABM Treaty, he was referring to a political or moral commitment to work toward the making of an agreement on ABM systems that would account for the fundamental changes resulting from the USSR's dissolution and the emergence of fifteen successor States on what had been the USSR's territory. Such a commitment constituted what Professor Glennon has referred to in a law review article in 1983 as a declaration of "Nonbinding Adherence to a Treaty." Michael J. Glennon, *The Senate Role in Treaty Ratification,* 77 AM. J. INT'L L. 257, 267 (1983). The State Department has referred to such undertakings as "intended to have political or moral weight, but not intended to be legally binding agreements." United States Department of State, Airgram to All U.S. Diplomatic Posts (Mar. 9, 1976), *reprinted in* I UNITED STATES FOREIGN RELATIONS LAW 15 (Michael J. Glennon and Thomas Franck eds., 1980).

B. Secretary Baker's Press Statement on January 29, 1992 cannot reasonably be interpreted as accepting a Russian offer to have a legally-binding agreement between the United States and Russia

1. The United States makes commitments to other States that are not legally binding, though they may have moral or political effect

The Case-Zablocki Act of 1972, now codified at 1 U.S.C. §§ 112a, 112b, requires the Secretary of State to publish annually all the "treaties" and "international agreements other than treaties" to which the United States became a party during that year. 1 U.S.C. § 112a(a). The Secretary of State must transmit to the Congress every treaty or other international agreement to which the United States has become a party "as soon as is practicable after such agreement has entered into force with respect to the United States but in no event later than sixty days thereafter."

(There is a special provision for secret transmissions where public disclosure would prejudice national security. 1 U.S.C. § 112b). There is no evidence that the State Department ever transmitted the text of the Baker-Yeltsin exchange to the Congress pursuant to the Case-Zablocki Act, though, since the USSR's dissolution, the State Department has transmitted to the Congress 135 treaties and other international agreements with Russia.

The non-publication of the Baker-Yeltsin exchange and the failure to send the documents to the Congress suggest that the State Department did not consider the Baker-Yeltsin exchange to be either a treaty requiring Senate concurrence or otherwise an international agreement to which the United States was a party. That is not surprising, in light of the State Department regulations implementing the Case-Zablocki Act, 22 C.F.R. Part 181. According to 22 C.F.R. § 181.2(a)(1), not every undertaking is an international agreement:

> The parties must intend their undertaking to be legally binding, and not merely of political or personal effect. Documents intended to have political or moral weight, but not intended to be legally binding, are not international agreements.

The distinction between legally-binding commitments on the one hand and moral and political commitments on the other is understood by the Congress. Senator Biden emphasized the distinction in his remarks on consideration of NATO's "Strategic Concept," in the context of the National Defense Authorization for Fiscal Year 2000:

> Mr. President, one of the things that we sometimes confuse here—I know I do—is what is a political obligation and what is a constitutional obligation. I respectfully suggest that there is no constitutional requirement for the President of the United States—this President or any future President—to submit to the Senate for ratification, as if it were an amendment to a treaty, a Strategic Concept that is a political document. We use the words interchangeably on this floor. A new commitment or obligation, as I said, does not a treaty make.

145 CONG. REC. S5889–07, S5901 (daily ed. May 25, 1999) (statement of Sen. Biden).

Also, Senator Biden stated that the distinction required in U.S. law was also recognized in international law:

> The rules under U.S. law on what constitutes a binding international agreement are set forth in the Restatement of Foreign Relations Law of the United States, as well as in the State Department regulations implementing the Case-Zablocki Act.
>
> Under the Restatement, *the key criterion as to whether an international agreement is legally binding is if the parties intend that it be legally binding and governed by international law.* Restatement, Sec. 301(1)).
>
> Similarly, the State Department regulations state that "the parties must intend their understanding to be legally binding and not merely of political or personal effect." (22 Code of Federal Regulations § 181.2(a)(1)).
>
> Thus, many agreements that are not binding are essentially political statements. *There is a moral and political obligation to comply in such cases, but not a legal one.*
>
> The most well-known example of such a political statement is the Helsinki Final Act of 1975, negotiated under the Ford administration and credited by most of us as the beginning of the end of the Soviet Union, the most significant political act that began to tear the Berlin Wall down . . .

Id. at S5902 (emphasis added). See also Michael J. Glennon, *The Senate Role in Treaty Ratification,* 77 AM. J. INT'L L. 257, 267 n.72 (1983), explaining that in *Nuclear Tests Case (Australia v. France),* 1974 I.C.J. Rep. 253, 472, the I.C.J. cautioned that a State's declaration of intent to pursue a course of action does not bind the State legally unless "it is the intention of the state making the declaration that it should become bound."

2. Secretary of State James Baker did not intend to create a legally-binding agreement

It is impossible to conclude from Secretary Baker's words, standing alone, that he intended to create a legally-binding agreement. Moreover, Secretary Baker's words do not stand alone. They appear in the context of adjustment to the USSR's dissolution, and uncertainty within the U.S. Executive Branch as to how to create an ABM regime that would take account of the fact that four USSR successor-States pos-

sessed on their territories substantial parts of what had been one ABM defense system under the USSR's control.

Some of the dissolution-caused uncertainties to be faced were these:

(i) Not only Russia, but each of fourteen other newly independent States, could claim a right to deploy 100 launchers of an ABM defense system around its capital.

(ii) Six of the twelve early warning radar systems permitted to the USSR by the ABM Treaty were located outside the territory of Russia, *i.e.,* in Latvia, Belarus, Ukraine, Azerbaijan and Kazakstan.

(iii) ICBM launch sites, equipped with nuclear-armed ICBMs, were located in States other than Russia, *i.e.,* in Belarus, Ukraine, and Kazakstan.

(iv) Ukraine alone was the third largest nuclear-weapon State in the world. ROMAN PAPADIUK, AMEREICAN-UKRAINIAN NUCLEAR RELATIONS 2(1996). Ukraine's nuclear arsenal included 176 ICBMs with 1,240 nuclear-tipped warheads, and 3,000 tactical nuclear weapons. *Id.* at 279.

(v) Both before and after Baker's January 29, 1992 conference with Yeltsin, the U.S. Executive Branch was troubled by Ukraine's and Kazakstan's possession and control of strategic nuclear weapons and sought to have those weapons under the control of Russia. By April 1992, "it had become obvious that this would not work, as Ukraine and Kazakstan, unable to work out their differences with Russia at CIS summits, began to insist on equal treatment with Russia." ROMAN PAPADIUK, AMERICAN-UKRAINIAN NUCLEAR RELATIONS 6 (1996). During the period before May 1992, when Ukraine signed the Lisbon Protocol to START I (a treaty that required, and received, 2/3 consent of the U.S. Senate), Ukraine had "balked" when it came to implementing its promises to give up control of, or dismantle, its nuclear weapons. *Id.* at 7. After the signing of START I, and before it was ratified, Ukraine's Prime Minister Leonid Kuchma stated that Ukraine may have to retain its more modern SS–24 missiles "temporarily." *Id.* at 12. In March 1993, the Executive Branch was "deeply concerned" that Ukraine was developing its own launch capability. *Id.* at 26, 28. Russia expressed its own concern on that score to the United States. *Id.* at 30. The issue of right-to-control Ukraine's nuclear weapons, as a practical matter, was not resolved until November 1994, when the Ukrainian parliament acceded to the Non-Proliferation Treaty. *Id.* at 41–43.

(vi) The only ABM testing site in the USSR's territory was in Kazakstan.

(vii) The distance between Moscow and the USSR's periphery (on its west and southwest) was far greater than the distance between Moscow and Russia's periphery (on its west and southwest), a change that raised questions as to Russia's capacity to protect a Moscow ABM defense area as compared to the USSR's capacity to protect a Moscow ABM defense area.

(viii) By a separate Agreement on Joint Measures with Respect to Nuclear Weapons at Alma Ata, on December 21, 1991, Russia, Ukraine, Belarus and Kazakstan agreed to "jointly develop a policy on nuclear issues," Art. 3. Also, they agreed that until nuclear weapons were eliminated from the territories of Ukraine and Belarus, a decision to use those weapons would require agreement of Belarus, Ukraine, Kazakstan and Russia (the "participating States."). Art. 4. At the same time, no participating State agreed to share with any other participating State its decision as to whether to develop and deploy an ABM defense system. By contrast, Secretary Baker expected "the States of the Commonwealth to abide by all of the international treaties and obligations that were entered into by the former Soviet Union, including the ABM treaty." Yet, the Commonwealth included seven states that were not "participating States" within the meaning of the Alma Ata separate agreement on nuclear weapons. Hence, it was not clear how much control Secretary Baker assumed the seven nonparticipating States would have over the four participating States as regards ABM defense matters.

As regards facts of that character, George Bunn and John B. Rhinelander who, as U.S. officials, participated substantially in the development of U.S. arms-control policies and treaties, and who advocate the continuation of an ABM Treaty regime with the USSR successor states, made these observations in 1993:

> If each of the former Soviet republics—including all the "states of the Commonwealth" in Secretary Baker's words—succeeded to all Soviet rights under the ABM treaty, each might theoretically claim the right to build 100 launchers for an ABM system around its capital. (There is already one around Moscow equipped with short- and longer-range nuclear-armed ABM missiles.) *That would clearly be inconsistent with the purpose of the ABM Treaty, as amended in 1974, to limit the ABM systems to one small, regional*

> *system on each side. Unless the ABM Treaty was formally amended, to permit each republic to have an ABM system would change the basic bargain of the ABM Treaty as much as permitting each to become a nuclear-weapon state would change the NPT.* Nevertheless, as in the case of each of the other three arms control treaties discussed in this Article, further negotiations between the United States and the pertinent former republics will be necessary.
>
> At the Commonwealth of Independent States summit in Bishkek on October 9, 1992, ten of the Commonwealth members, including Ukraine, stated that they "will implement the terms" of the ABM Treaty "as applied to their territories and in consideration of the national security interests of each of them." The simplest way of doing this might have been to treat Russia as the primary successor to the Soviet Union and ask it to work out whatever implementation steps are necessary with other former republics concerning the ABM Treaty. This method, however, did not work for the START I Treaty. . . . An alternative that is suggested by the Bishkek resolution is the method used for START I: a multilateral agreement between the United States and all of the relevant former republics with either treaty-limited facilities on their territories or with the possibility of building defensive missile systems.

George Bunn & John B. Rhinelander, *The Arms Control Obligations of the Former Soviet Union,* 33 VA. J. INT'L L. 323, 339–40 (1993) (footnotes omitted) (emphasis added.).

Bunn and Rhinelander's observation predicted the course that the U.S. Executive Branch has pursued, and that led to the publication of a proposed multilateralization Memorandum of Understanding of September, 1997. That MOU is a proposed multilateral agreement among the United States and all of the relevant successor States having ABM Treaty-limited facilities on their territories.

What Bunn and Rhinelander spoke of in 1993 must have been known to Secretary Baker and President Yeltsin in 1992: An ABM treaty with Russia that did not place necessary restraints on Ukraine, Belarus, and Kazakstan "would change the basic bargain of the ABM Treaty." Secretary Baker therefore must have known at the time of his January 29, 1992 press conference that he was not, as a matter of law, committing the United States to continue to abjure strategic missile defense while Belarus, Kazakstan and Ukraine (which together had massive ICBM-delivery capacity and substantial ABM early warning radars on their western and southern peripheries) were legally free to develop and deploy full ABM systems. And it is equally implausible that Yeltsin understood Baker as committing the United States to such a one-sided bargain.

Moreover, the words of Baker and Yeltsin do not have to be read to reach such an absurd result. Baker must have known that, at that time, his Department was studying the question of which U.S.-USSR treaties (if any) legally survived the USSR's dissolution, and he surely knew that his Department had not declared the ABM Treaty to be in effect with any State other than the USSR. Indeed, the next issue of his Department's official annual listing of treaties in force (on January 1, 1993) does not list an ABM Treaty as in force between the United States and Russia. Moreover, with respect to the USSR, that listing states that the ABM Treaty's status is "under review" in view of the developments with respect to the USSR in 1991. UNITED STATES DEPARTMENT OF STATE, TREATIES IN FORCE 252–53 (1993).

3. Secretary of State Baker's remarks can be read as a moral or political commitment

Finally, Secretary Baker's remarks can be understood as a moral and political commitment to make an ABM treaty that would take into account the changes resulting from the USSR's dissolution and thereby fulfill the object and purpose of the ABM Treaty of 1972. Such a reading not only comports with the reality of changed circumstances, but adheres to the rule that the words of an agreement should be construed in context to avoid producing an absurd result. The rule for using context to avoid absurdity applies to treaties and other international agreements because the general rules of construction apply. *See, e.g., Smith v. Maryland,* 10 U.S. (6 Cranch) 286, 294 (1810) ("No construction of a treaty is to be admitted which leads to an absurdity . . . ") (citing Vattel at 380–382). *See also Chan v. Korean Air Lines, Ltd,* 490 U.S. 122 (1989); *Societe Nationale Industrielle Aerospatiale v. United States District Court for the Southern District of Iowa,* 482 U.S. 522, 533 (1987) (quoting *Trans World Airlines, Inc. v. Franklin Mint Corp.* 466 U.S. 243, 253 (1984)); *Air France v. Saks,* 470 U.S. 392, 397 (1985), *quoted in Societe Nationale Industrielle Aerospatiale v. United States District Court for the Southern District of Iowa,* 482 U.S. 522, 533–34 (1987). In *O'Connor v. United States,* 479 U.S. 27, 31 (1986), the

Court rejected the reading of a treaty out of context where that would lead to an "utterly implausible" result. *See also Eastern Airlines, Inc. v. Floyd,* 499 U.S. 530, 534 (1991) (listing cases standing for the proposition that "when interpreting a treaty, we 'begin with the text of the treaty and the context in which the words are used.'"). *See generally* Jeffrey L. Dunoff & Joel P. Trachtman, *Economic Analysis of International Law,* 24 YALE J. INT'L L. 1, 29 (1999); David J. Bederman, *Revivalist Canons and Treaty Interpretation,* 41 UCLA L. REV. 953, 975–1015 (1994). An ABM treaty that did not place under its control the ABM assets of Ukraine, Belarus, and Kazakstan would have been absurd because, as Bunn and Rhinelander observed, it "would change the basic bargain of the ABM Treaty."

4. The Executive Branch's conduct after January, 1992 also shows that Secretary Baker's words were not understood to have created a legally-binding ABM Treaty with Russia.

Executive Branch conduct after January 29, 1992 includes the following:

(i) Neither the President, the Department of Justice, nor the State Department has ever claimed that Secretary Baker's January 29, 1992 response to President Yeltsin created a legally binding ABM agreement with Russia.

(ii) The purpose of Assistant Attorney General Walter Dellinger's Memorandum to John Quinn, Counsel to President Clinton of June 26, 1996, was to establish support for an argument that the ABM treaty of 1972 survived the USSR's dissolution. Yet, the Memorandum does not even mention the Baker-Yeltsin exchange.

(iii) As recently as October, 1997, the Arms Control and Disarmament Agency's Chief Negotiator on the MOU and START II, claimed that the conclusions of those agreements in September 1997 preserved and enhanced the "viability" of the ABM Treaty in three ways, the first of which was "by settling the issue of which states of the former Soviet Union are parties to the ABM Treaty." Matt Murphy, *ACDA: Threat Control Through Arms Control,* State Magazine (November/December 1997).

In any case, Secretary Baker should be imputed with knowledge of 22 U.S.C. § 2573, Pub. L. No. 87–297, Sept. 26, 1961, amended in 1994; by Pub. L. No. 103–236, § 709, which provided in pertinent part as follows:

> The Director [of the Arms Control and Disarmament Agency] is authorized and directed to prepare for the President, the Secretary of State, and the heads of such other Government agencies, as the President may determine, recommendations concerning United States arms control and disarmament policy: *Provided, however,* That no action shall be taken under this chapter or any other law that will obligate the United States to disarm or to reduce or to limit the Armed Forces or armaments of the United States, except pursuant to the treaty making power of the President under the Constitution or unless authorized by further affirmative legislation by the Congress of the United States. . . .

Thus, Secretary Baker knew that the President was statutorily barred from obligating the United States, pursuant to any law, to "limit" the "armaments" of the United States, except pursuant to a Senate-approved treaty or if authorized by "further affirmative legislation." Secretary Baker could not have reasonably read that prohibition as containing a loophole whereby he could legally obligate the United States if he did so in a manner that was not pursuant to a law of the United States.

5. The United States is not required by international law to denounce a lapsed treaty

Professor Glennon separately invokes the principle of international law that if a party to a treaty in force wishes to terminate it or to declare it invalid, that party must take an affirmative step toward doing so. That is a correct statement of the rule, but the rule assumes that a treaty is in effect. If no treaty is in effect, there is no treaty to terminate or to declare invalid. When a State becomes extinct, all of its bilateral treaties (other than dispositive ones) lapse by operation of law, a principle that Professor Glennon does not take into account. *See* Feith & Miron, *supra,* at 27–5 8; Hunton & Williams, *The Collapse of the Soviet Union and the End of the 1972 Anti-Ballistic Missile Treaty: A Memorandum of Law* 4–10 (June 15, 1998) (David B. Rivkin, Jr., Lee A. Casey, Darin R. Bartram, authors). Hence, when the USSR became extinct, there was no ABM Treaty in effect with the USSR. Indeed, Professor Glennon implicitly concedes that point because he argues that only after Secretary Baker's press statement on January 29, 1992, did a process begin for making the United States a party to a legally-binding ABM agreement with Russia.

The difference between denouncing a treaty that is in effect and taking as given that an extinct state's bilateral non-dispositive treaties lapsed by operation of law is illustrated by the fact that the drafters of the 1969 Convention on the Law of Treaties (which includes provision for giving notification of intention to denounce treaties that are in effect) intentionally avoided dealing with treaty relations in the context of State succession. Article 72 provides:

> The provisions of the present Convention shall not prejudge any question that may arise in regard to a treaty from a succession of States or from the international responsibility of a State or from the outbreak of hostilities between States.

6. Article 34 of the 1978 Vienna Convention on Succession of States in Respect of Treaties is not legally binding on the United States

Professor Glennon also cites Article 34 of the 1978 Vienna Convention on Succession of States in Respect of Treaties as support for his thesis that the Baker-Yeltsin press conference of January 29, 1997 produced a legally-binding ABM agreement between the United States and Russia. Glennon Testimony at 5 n.1. The 1978 Vienna Convention, however, does not legally bind the United States because the United States is not a party and because rules embodied in the 1978 Vienna Convention have not passed into customary international law. *See* Feith & Miron, *supra,* at 49–54.

7. The United States is not estopped to deny that it has a legally-binding ABM Treaty with Russia

Citing *Nuclear Tests Case (Australia v. France),* 1974 I.C.J. 253, Professor Glennon asserts that the United States is barred from denying that a legally-binding ABM agreement between the United States and Russia came into existence because, in Professor Glennon's opinion, U.S. officials (Executive Branch and the Congress) had made public statements that the ABM Treaty of 1972 was in effect between the United States and Russia. Glennon Testimony at 5. Presumably, Professor Glennon believes that Russia would argue that the United States was estopped to deny that it made a legally-binding agreement with Russia. But the law of promissory estoppel, like the law on agreements, does not enforce a promise that the promissee knew or should have known was absurd. *See, e.g. Principal Mut. Life Ins. Co. v. Charter Barclay Hosp., Inc.,* 81 F.3d 53, 57 (7th Cir. 1996); *Wilsmann v. The Upjohn Co.,* 865 F.2d 1269, 1989 WL 835 **4 (6th Cir. 1989) (unpublished opinion) (promissory estoppel is not an available remedy if the alleged obligation appears to be totally implausible). And, Russia knew or should have known that it would have been absurd for Secretary Baker to have promised that the United States would abjure a defense against ICBMs irrespective of whether the three ICBM powers (Ukraine, Belarus and Kazakstan) were legally bound as tightly as the United States and Russia allegedly were bound to obligations of the character imposed by the ABM Treaty of 1972. Moreover, Russia knew or should have known of the practice of States of making commitments that are not legally binding, though they may have moral or political effect. The distinction between legally-binding agreements and agreements having only political or moral effect is a recognized part of international law. MALCOLM N. SHAW, INTERNATIONAL LAW 635–36 (4th ed. 1997); III ENCYCLOPEDIA OF INTERNATIONAL LAW 606–12 (1997); Marian Nash (Liech), *Contemporary Practice of the United States Relating to International Law,* 88 AM. J. INT'L L. 515–19 (1994); Oscar Schachter, *Editorial Comment, The Twilight Existence of Nonbinding International Agreements,* 71 AM. J. INT'L L. 296 (1977). For example, Russia, as one of the USSR's successors, must have known of the final Act of the Helsinki Conference on Security and Cooperation in Europe, Aug. 1, 1975, 73 DEP'T ST. BULL. 323 (1975), which has been described as not intended to create legal rights. Remarks of Senator Joseph Biden, 145 CONG. REC. S5902 (May 25, 1999); *see also* Robert F. Turner, *International Law and the "Exit Tax": Does Section 203 of the Tax Compliance Act of 1995 Violate the "Right to Emigrate" Recognized in the U.N. Covenant on Civil and Political Rights and Other U.S. and International Legal Instruments?, reprinted at* 141 CONG. REC. S5304–01, S5308 (Apr. 6, 1995). In short, Russia cannot make a case that it understood that the United States, by means of Secretary Baker's oral comments, had legally foregone its right to develop a defense against ICBMs.

8. The Nuclear Test Case *decision of the International Court of Justice does not support a conclusion that Secretary Baker intended to make a legally-binding ABM treaty with Russia*

As noted, Professor Glennon invokes the *Nuclear Test Case (Australia v. France),* 1974 I.C.J. 253 in support of his estoppel argument. That case, however, does not depart from, indeed, does not address, the rule that words should be interpreted so

as to avoid (to the extent possible) an absurd construction. The case turned on an interpretation of statements by the government of France that it intended to end atmospheric nuclear testing in the Pacific after the summer of 1974. France did not appear in the proceedings. After Australia filed its claim, France announced several times that it did not intend to conduct atmospheric nuclear tests after 1974. France's announcement included a proviso, *i.e.,* "Thus, atmospheric tests which are soon to be carried out will, *in the normal course of events,* be the last of this type." 1974 I.C.J. at 266 (emphasis added). Australia tried to convince the Court that France's announcements were inadequate because a proviso therein left France free to resume testing. Therefore, Australia argued, France's announced intention to end testing was not by itself legally binding. *Id.* at 268–69. The Court disagreed. "The Court finds that the unilateral undertaking resulting from [France's] statements cannot be interpreted as having been made in implicit reliance of an arbitrary power of reconsideration." *Id.* at 270. Thus, the Court ruled that France's announcement gave Australia all the relief it sought in Court, *i.e.,* an unambiguous promise to end the testing, and Australia's claim therefore need not be given further consideration. *Id.* at 272. In short, the *Nuclear Tests Case* involved an interpretation of a particular State's announcement of a particular commitment, not the establishment of a broad rule that every State's announcement of a commitment on any subject must be read as intending to create a legally-binding obligation. In any event, to the extent that the Court opined on the method of interpreting the promise of a State, it cautioned that "when the States make statements by which their freedom of action is to be limited, a restrictive interpretation is called for." *Id.* at 267.

CONCLUSION

The principal gap in Professor Glennon's analysis is the failure to address the question of what became of the ABM Treaty of 1972 upon the USSR's dissolution in December 1991. Professor Glennon supports President Clinton's position that that Treaty (indisputably in force until the dissolution) remains in force today. Yet he bases this latter contention on an exchange of statements by U.S. and Russian officials that did not occur until some weeks after the USSR's dissolution. What was the Treaty's status in the interim?

Are we to suppose that the Treaty remained in force for several weeks with only one party, the United States? If so, what would have been the Treaty's status if the U.S.-Russian exchange of official statements had occurred not a few weeks but a few years after the USSR's dissolution? What if that exchange had never occurred? The notion that the Treaty could continue uninterruptedly to bind the United States despite the USSR's extinction, for years or even weeks defies the logic and prudence embodied in the longstanding international legal rule that bilateral treaties lapse by operation of law if and when one of the two parties dissolves.

As noted, Professor Glennon's testimony did not acknowledge that rule. His testimony, however, did not contradict it and, in fact, comports with it, if we interpret that testimony as contending that the post-dissolution U.S.-Russian agreement on the ABM Treaty (based on the aforementioned statements in January 1992 of President Yeltsin and Secretary Baker) aimed to create a new treaty. One can square our testimony with that of Professor Glennon to a substantial degree by (1) accepting that the ABM Treaty of 1972 did automatically cease to be in force when the USSR dissolved and (2) acknowledging that, after the dissolution, the United States and Russia could, by mutual consent, apply the terms of that treaty to themselves *mutatis mutandis.*

We part company from Professor Glennon when he asserts that the Yeltsin-Baker agreement constituted more than an agreement to agree on terms for a new accord regarding the subject matter of the ABM Treaty of 1972. He believes that agreement in and of itself produced a legally-binding accord between the United States and Russia that can accurately be referred to as "the ABM Treaty." As explained above, however, the record refutes the claim that Secretary Baker intended his oral remarks to create a new, legally-binding ABM treaty. Moreover, even if he had so intended, no such treaty could come into force under U.S. law—to wit, Article II, Section 2 of the U.S. Constitution—without the advice and consent of two-thirds of the U.S. Senate.

Hence, the ABM Treaty of 1972 is not now in force and no new treaty on the same subject matter between the United States and Russia has come into force.

PREPARED STATEMENT OF ROBERT F. TURNER, ASSOCIATE DIRECTOR, SCHOOL OF LAW, CENTER FOR NATIONAL SECURITY LAW, UNIVERSITY OF VIRGINIA

Dear Mr. Chairman: Thank you for your letter of October 11th, seeking my written views on the legal status of the 1972 ABM Treaty with the Soviet Union and offering to include them in the published record of the Committee's May 25th hearing. As I explained to Senator Ashcroft's staff when they called to invite me to testify, I had a prior commitment for that date involving the education and welfare of my six-year-old son, Thomas. Had it been any other conflict, I would have done everything possible to take part in the hearing, as this is in my view among the most important national security issues facing the nation today. I am therefore especially grateful to you for providing me with the opportunity to submit my thoughts in writing at this time.

Perhaps I should begin with a quick summary of some of my relevant background on these issues. I hold both professional and academic doctorates from the University of Virginia School of Law, where in 1981 I co-founded the Center for National Security Law. My 1700-page SJD dissertation was entitled: "National Security and the Constitution: An Inquiry into the Separation of Powers." After teaching, inter alia, the basic International Law course here at Virginia in the Woodrow Wilson Department of Government and Foreign Affairs for several years, I held the Charles H. Stockton Chair of International Law at the U.S. Naval War College in Newport, RI. I wrote the separation-of-powers chapter in the law school casebook, National Security Law, which I also co-edited. For three terms each I chaired the ABA Standing Committee on Law and National Security and the Committee on Executive-Congressional Relations of the ABA Section of International Law and Practice. I am a former senior editor of the Virginia Journal of International Law, and since 1992 I have edited the ABA National Security Law Report. I've also written or edited more than a dozen books, many of which dealt specifically with issues of International Law and/or the constitutional separation of national security powers. Finally, as a practitioner, I worked for five years in the mid-1970s as national security adviser to a member of your committee, and subsequently served in the Pentagon, the White House, as Principal Deputy Assistant Secretary of State for Legislative and Intergovernmental Affairs, and as the first President of the U.S. Institute of Peace. Having mentioned a variety of organizations and institutions, I should emphasize that the views which follow are entirely personal and should not be attributed to the Center, the School of Law, the University of Virginia, the ABA, or any other group or entity with which I am or have been affiliated.

Over the years I have had the pleasure of testifying on several occasions as an expert witness before your Committee, and roughly a dozen other congressional committees as well. I think it is fair to say that I have usually been chosen to reflect a "pro-Executive" perspective, and much (if not most) of the time I suspect I have not been the most popular witness on the panel. (Not all legislators like to be told that what they want to do is unconstitutional, and that has often been my conclusion.) I take some pride in the fact that I haven't shifted my legal views over the years to reflect partisan or personal policy preferences. I have consistently championed the President's role as "senior partner" in America's dealings with the external world, whether the President in question was named Nixon, Ford, Carter, Reagan, Bush, or Clinton. Indeed, on the ABM Treaty itself, I was sharply critical of Senate efforts a dozen years ago to overturn President Reagan's interpretation of the Treaty during the so-called "broad-narrow" debate.

But I have also always acknowledged that there were important national security powers clearly vested in Congress and the Senate, and the President has a constitutional obligation to respect them. I believe that the current controversy involves just such a power, and if the President carries through on his threat to keep the 1972 ABM Treaty in force with Russia (and/or any other former Soviet republics) following a Senate rejection of the 1997 Memorandum of Understanding, I believe he will be in clear violation of his oath of office to "protect and defend" the Constitution. Indeed, I fear such a course of action could precipitate a constitutional crisis of the first order—rivaling any dispute since Vietnam.

These issues are complex and tremendously important to the security of the nation, but I shall try to be reasonably brief. My full analysis of these issues is contained in a 70,000-word monograph (The ABM Treaty and the Senate: Issues of International and Constitutional Law) scheduled for publication by our Center later this month, and I will be happy to provide a copy to the Committee for its files. Since that study includes several hundred footnotes to scores of sources, I shall not attempt to duplicate that effort here.

I. THE LAW GOVERNING STATE SUCCESSION TO TREATIES AND THE ABM TREATY

The international law governing the succession of States to treaty obligations is both complex and highly unsettled. I devote more than twenty-five pages to it in my monograph. Briefly summarized, a nondispositive bilateral treaty like the 1972 ABM accord with the Soviet Union would normally cease to exist with the demise of either of the Parties. Efforts by very able administration lawyers to portray the Treaty as creating permanent burdens on the territory of the former Soviet Union are highly unpersuasive.

It is therefore tempting to conclude, as have several respected legal writers and at least some Senators, that the ABM Treaty ceased to exist ipso jure on December 24, 1991, with the death of the Soviet Union. While such a conclusion is not unreasonable, it fails to acknowledge the right of sovereign States to agree to depart from traditional rules and to maintain the terms of a treaty in force even in a setting where international law would otherwise not permit either State to enforce its terms against the will of the other.

Put differently, the law of State succession to treaties does not prohibit the United States from maintaining the terms of the U.S.-Soviet ABM Treaty in force with Russia or other States that have arisen from the ashes of the Soviet Union; it merely provides that the Treaty will not remain in force unless both States—or, if the agreement is to be multilateralized, unless all concerned States—clearly express their consent to be legally bound.

Presidents Bush, Clinton, and Yeltsin have repeatedly affirmed that the ABM Treaty remains in force. At various times following the collapse of the Soviet Union, other Newly Independent States occupying former Soviet territory affirmed a similar intent. Under well-established principles of international law, heads of state are recognized as having the power to speak for their countries in diplomatic intercourse.

This, in turn, might seem to suggest that the 1972 Treaty remains in full force today—but the situation is more complex than that. In a setting of State succession in which a preexisting treaty would normally expire, it is true that the surviving treaty partner and one or more "successor States" may consent to keep the agreement in force; but this is done through a new international agreement which, under international law, is of equal dignity to the original accord.

How each State allocates authority to make such a new commitment is of little concern to the international community and is normally governed by a domestic constitution or other instrument of domestic law. In the United States, the President often resolves simple and uncontroversial succession issues by executive agreement (often referred to as "sole executive agreements" or "presidential agreements," to distinguish them from agreements made by the President pursuant to authority granted by legislation or a prior treaty). However, if the new agreement involves substantive changes to the original treaty, under the Constitution the President must submit it to the Senate like any other new treaty. And like any other new treaty, it may not be ratified by the President unless two-thirds of those Senators present affirm their consent.

II. THE LEGAL EFFECT OF SIGNING THE 1997 MOU

As President Clinton explained in a letter to Chairman Gilman dated November 21, 1997, "[n]either a simple recognition of Russia as the sole ABM successor . . . nor a simple recognition of all NIS as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972." To resolve the future status of the Treaty, a new international agreement was clearly necessary.

During a meeting in New York City on September 26, 1997, the foreign ministers of Belarus, Kazakhstan, the Russian Federation, and Ukraine joined U.S. Secretary of State Madeleine Albright in signing a "Memorandum of Understanding" (MOU) relating to the 1972 ABM Treaty. The first article is worth quoting in its entirety:

Article I

> The United States of America, the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation, and Ukraine, upon entry into force of this Memorandum, shall constitute the Parties to the Treaty.

In other words, the five States agreed to become Parties to the 1972 ABM Treaty—subject to the changes and other provisions of the MOU—if, and when, the MOU entered into force. It did not become effective upon signature. And Article IX

of the MOU specified that it was "subject to ratification or approval by the signatory States, in accordance with the constitutional procedures of those States."

The "constitutional procedures" of the United States permit international agreements by formal treaty or by various forms of executive agreements. However, it is well established that the terms of a treaty may not be changed by the President alone. Both sides of the current debate have acknowledged that if the ABM Treaty is "substantially changed" it must be submitted to (and approved by) the Senate like any other treaty before entering into force.

III. SUBSTANTIVE CHANGES IN THE 1972 TREATY

From my perspective, it is preposterous to argue that the MOU does not involve "substantive changes" to the 1972 Treaty, and the same conclusion would result from any effort to transform the U.S.-Soviet treaty into a bilateral accord with Russia alone. I discuss this at length in my monograph, but the changes in territory alone are clearly sufficiently substantial to require resubmission to the Senate.

To be sure, in some settings of State succession a change in territory would not be critical, but the ABM Treaty is specifically designed to prevent the territory under the sovereign control of the two Parties from being used for a certain purpose. If you have any doubts about this, ask yourself how many of the 88 Senators who consented to the ratification of the 1972 Treaty would have voted that way had they been told that the Soviets had reserved, say, ten sites around their territory of five square kilometers each, which they insisted would not be constrained by the Treaty? I worked for a member of the Foreign Relations Committee for five years after that Treaty was ratified, and I would be shocked if as many as eight Senators would have consented to such an accord—which would have permitted the Soviet Union to deploy a national ballistic-missile defense system totally contrary to the object and purpose of the treaty.

If the MOU goes into effect, it will exclude from the legal constraints of the 1972 ABM Treaty approximately 1.5 million square kilometers of territory formerly belonging to the Soviet Union. Based upon the territory required for the various elements of the U.S. Safeguard ABM system deployed near Grand Forks, ND, in 1974 (which I visited as a Senate staff member that year), approximately 400,000 new ABM sites, with millions of new interceptor missiles, could be constructed in such a vast expanse of territory.

On the other hand, if the President attempted to keep the ABM Treaty in force with Russia alone, he would by presidential fiat be excluding roughly 5.5 million square kilometers from coverage by the Treaty—an area roughly fifty times larger than the Commonwealth of Virginia. A space this large could hold approximately 1.5 million ABM sites, housing 150 million interceptor missiles (and half of this space would be used for each site to have its own PAR radar, whereas a small number of PARs could actually support numerous launcher sites each). Since the ABM Treaty, as amended in 1994, limits each side to a single site with no more than 100 interceptor missiles, exempting these vast tracts of land (without exempting so much as a single square foot of U.S. territory) obviously constitutes a substantive change in the Treaty.

Yet another major change involves the number of Parties to the Treaty. Under the MOU, the bilateral ABM Treaty would be changed to a multilateral agreement—which, in turn, involves different legal rules governing things like amendment and remedies for material breach. This, by itself, is enough to clearly require submission to the Senate, and I know of not a single instance in U.S. history where a president has even attempted to multilateralize a treaty without Senate consent.

Last January, Secretary of Defense Cohen announced that next summer the United States may seek to amend the terms of the ABM Treaty. As that Treaty was approved by the Senate in 1972, the Soviet Union would have had a veto over any proposed U.S. amendment(s). Under the MOU, Belarus, Kazakhstan, the Russian Federation, and Ukraine would each have a veto. Obviously that is a very relevant 'substantive change."

From this it is absolutely clear that the President may not unilaterally commit the United States to a long-term extension of the 1972 ABM Treaty without the advice and consent of the Senate as required by Article II, Section 2, Clause 2, of the Constitution.

IV. CURRENT U.S. ABM OBLIGATIONS

This leads to the question of our current international legal obligations regarding ABM defenses. The situation is complex, and honorable people may disagree. Some may argue that the statements made by the leaders of the United States and the Russian Federation (and perhaps other former Soviet republics) resulted in the in-

terim continuation of the 1972 Treaty pending negotiation and ratification (or rejection) of a new ABM agreement. There is considerable precedent for American presidents making interim policy decisions even in areas where Congress or the Senate are given a constitutional veto, at least until Congress or the Senate have had an opportunity to examine the issues and take a position.

However, in this instance, both Congress and the Senate had taken positions long before the MOU was negotiated. For example:

- Section 33 of the Arms Control and Disarmament Act of 1961 prohibits action under that, or any other, statute that would limit U.S. armaments "in a militarily significant manner, except pursuant to the treaty-making power of the President . . . or unless authorized by the enactment of further affirmative legislation by the Congress. . . ."
- In 1987, during the so-called "Broad-Narrow" ABM reinterpretation debate (in which I believe the Senate exceeded its proper authority), the Senate passed a resolution declaring that "no amendment to the ABM Treaty may occur without the agreement of the parties and the advice and consent of the Senate."
- The Defense Authorization Act for FY 1995 expressly provides that "the United States shall not be bound by any international agreement entered into by the President that would substantively modify the ABM Treaty unless the agreement is entered into pursuant to the treaty making power of the President under the Constitution."
- Four months before the signing of the MOU, the Senate attached "Condition 9" to its resolution consenting to the ratification of the CFE Flank Document, again demanding that any effort to continue the ABM Treaty in force be submitted to the Senate; and President Clinton agreed to these terms.

Given this clear history, it would be very difficult to argue with a straight face that the President believed the Senate would acquiesce to his unilaterally making any international agreement to continue the 1972 ABM Treaty in force.

International law does not require States to be familiar with the internal political processes—including the legislative process and its products—of its treaty partners. Thus, the fact that a State's own domestic laws prohibited the making of a particular treaty or category of treaties is not legal justification to avoid the obligations of such a treaty if it is otherwise properly made. This is reflected in Article 46 of the Vienna Convention on the Law of Treaties, which the United States has long recognized reflects binding customary international law. Article 46 provides:

> 1. A State may not invoke the fact that its consent to be bound by a treaty has been expressed in violation of a provision of its internal law regarding competence to conclude treaties as invalidating its consent unless that violation was manifest and concerned a rule of its internal law of fundamental importance.

Note the exception here: "unless that violation was manifest and concerned a rule of its internal law offundamental importance." What that means is that the United States can not be bound by a treaty—whether a new treaty, or one incorporating amendments to an earlier treaty—concluded in manifest violation of the constitutional requirement for Senate approval.

One might argue that the initial statements about continuing the ABM Treaty in force were, upon more careful reflection, superseded by the decision to negotiate and sign the MOU. By this reasoning, the terms of the 1972 Treaty will only come into effect between the MOU signatory States if and when it is properly ratified. On the other hand, one might also contend that the intent of the Parties was to keep the Treaty in force on an interim basis until the MOU could be negotiated and ratified. Given some ambiguity, the obligation of "good faith" inherent in all diplomatic intercourse might suggest that the terms of the 1972 Treaty ought not be violated until its future is decided by approval or rejection of the MOU.

Fortunately, as a practical matter, it is not necessary to resolve this issue. When Secretary Albright signed the 1997 MOU, the United States clearly incurred a legal duty not to "defeat the object or purpose" of the treaty (the MOU) "until it shall have made its intention clear not to become a party . . . ." This widely recognized principle of customary international treaty law is reflected in Article 18 of the Vienna Convention on the Law of Treaties.

The United States has historically (and I think properly) interpreted this obligation as one not to take "irreversible" actions contrary to a signed but unratified treaty. Thus, I argue in my monograph, that while enactment of the National Missile Defense Act of 1999 clearly established a national policy that is contrary to the clear object and purpose of the MOU, it did not violate our interim obligations under that Treaty because the policy could be changed prior to the entry into force of the MOU.

On the other hand, research and testing that is prohibited by a signed treaty is clearly improper during the interval between signature and ratification or rejection, as there is no way to verify that a State has destroyed or "forgotten" the acquired knowledge which the treaty was designed to prohibit.

V. WHERE TO FROM HERE?

A few conclusions may now be in order.

- While academically interesting arguments can be made for or against the proposition that the 1972 ABM Treaty ceased to exist with the demise of the Soviet Union at the end of 1991, it is not as a practical matter necessary to resolve that issue. When Secretary of State Albright signed the MOU in 1997, the United States incurred a clear legal obligation not to defeat the object or purpose of that agreement—which for practical purposes incorporates the terms of the 1972 ABM Treaty.
- The President has a clear constitutional duty to submit the MOU to the Senate before attempting to implement it; and, given his position that the United States is bound by the terms of the 1972 Treaty in the interim, submission of the MOU to the Senate should not be unreasonably delayed.[1]
- Even more clearly, if the Senate rejects the MOU, the President has absolutely no constitutional authority to keep the 1972 ABM Treaty in force with any country other than the Soviet Union, which no longer exists. To attempt to do so would likely precipitate a most unfortunate confrontation that might dwarf the "broad-narrow" dispute of a dozen years ago.

No one would benefit from such a confrontation: neither political branch of the Government, neither political party, and certainly not the American people. It can only be hoped that the President will reconsider his earlier threats to act unilaterally in the event the Senate rejects his proposed treaty.

So where do we go from here? My belief when I first began examining this problem more than two years ago was that we needed a fundamental national debate to decide who we are as a nation, what our threats are, where we want to go from here, and how to get there. The issue of ballistic-missile defenses would be a major part of that debate. But within the past year I have sensed a major change. That debate may be over, at least with respect to the ABM issue. The successful testing of ABM components has certainly undercut contentions that the technology can't work, and the reports of the Rumsfeld Commission and Cox Committee were clearly influential in producing a bipartisan 97 to 3 Senate vote last March in favor of building a national ballistic missile defense system. Despite earlier threats of a veto, the President made that policy the law this summer.

Fifteen years ago, I served for several months as acting Assistant Secretary of State for Legislative and Intergovernmental Affairs. In that capacity, I spent many hours paving the way for ratification of the Genocide Convention, which the United States had signed more than three decades earlier. Based upon that experience—and the knowledge that 97 Senators voted just seven months ago to build a national missile defense as soon a technologically possible, in the hope of reducing the risk to tens of millions of Americans from newly emerging ballistic missile threats—I submit that anyone who would predict that two-thirds of the Senate will now vote in favor of ratification of the ABM MOU ought to be tested for possible recreational chemical abuse. The MOU is clearly not going to be approved unless there are some major changes in attitudes.

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[1] I have intentionally chosen an imprecise term because we address here one of the "gray areas" of constitutional law. Historically, in making a new international commitment, the President was seen as being under no duty to submit a signed treaty to the Senate at any particular time. The constitutional requirement was merely that he not "ratify" the agreement (i.e., establish a legally-binding obligation for the United States) until after two-thirds of the Senators present had voiced their consent. The modern rule found in Article 18 of the Vienna Convention—essentially a clarification of a traditionally recognized duty of "good faith" in such matters—raises an interesting constitutional problem, as the President may be able to incur legal obligations on the nation that are strongly opposed by more than a third of the Senate by merely withholding signed treaties from that body. At the same time, the President needs to have some discretion as to his timing in such matters. While I personally have some reservations about holding up action on the ABM MOU until after President Yeltsin can persuade the Russian State Duma to consent to the ratification of the START II agreement—reservations premised upon the knowledge that our apparent duplicity may incur ill will towards the United States within the Duma and the Russian people that will transcend the current administrations in both countries—I nevertheless recognize that this is the President's call and would caution against any constitutional interpretation that would deny him reasonable discretion in such matters.

If one accepts that conclusion, then we are left asking when and how to deal with this reality. And a major consideration in this decision is the importance of dealing in good faith with the Russians and our other potential treaty partners.

Our own leaders (first in the Bush administration and more recently the Clinton administration) have given assurances to Russia and other former Soviet republics concerning the status of the 1972 Treaty, and even if we have the legal option of simply disavowing these assurances that would be horrible policy. If your checks aren't good, you either have to bring cash or people will refuse to do business with you.

From my perspective, the answer is fairly simple. It is my impression that, were the United States to move forward expeditiously with the development and deployment of a national ballistic-missile defense system, no steps likely to occur during the first six months would violate the terms of the 1972 ABM Treaty. Assuming that this is true (or, if it is mistaken, that any such steps could be postponed briefly to ensure compliance during that period), there is thus no need to undermine the President's assurances that the Treaty is still in force. Nor, for that matter, is it necessary to affirm those statements. All we need to do is to clearly comply with the provisions of Article XV (2) of the Treaty, which provides:

> Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawing from the Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

To begin with, the test for exercising this option is entirely subjective: If the United States "decides" that the emerging new ballistic-missile threats discussed by the Rumsfeld Commission jeopardize our "supreme interests" (which clearly they do, as they involve threats to the lives of millions of our people), then withdrawal is permitted by simply giving six-months notice.

Just as American presidents from both political parties have for the past quarter-century finessed the issue of whether they are bound by the controversial 1973 War Powers Resolution by submitting required reports pursuant to a "desire that Congress be kept fully informed of this matter and consistent with the War Powers Resolution," the United States could address diplomatic communications to the other MOU signatories that fully satisfied the requirement of Article XV of the ABM Treaty without necessarily resolving the current status of that Treaty. If a former Soviet republic believes the 1972 Treaty to still be in force, such a notice would serve lawfully to terminate it. If another MOU signatory State does not consider the 1972 Treaty to be in force, then the same notice would relieve the United States of its obligations as reflected in Article 18 of the Vienna Convention.

Before closing, I would make four more brief observations:

- As a matter of international law, the Senate has no authority to communicate directly with foreign States; and thus any such notice will have to come from the President. Ideally, this should be worked out through consultations and in a spirit of bipartisan cooperation and mutual comity. However, there is also precedent for either Congress or the Senate to instruct the President to give notice of termination of a treaty, and it is my understanding that presidents have always followed those congressional instructions.[2]
- While the Senate ought not attempt to communicate formally with any foreign government or people, its Members should keep in mind that the Russians can read. They will draw conclusions from Senate action in this area, and it would be prudent for Senators to keep this in mind. A few carefully crafted, bipartisan, colloquies during the course of related hearings or debates—emphasizing that the perceived ballistic missile threat is not from Russia but from radical States that ought also to be of concern to our new Russian friends—might be very helpful. This is an area where close coordination with the Department of State might prove especially wise.
- The United States is today the world's most powerful country, which ironically makes it all the more important for us both to be honorable, and to be perceived as being honorable, in our relations with other States. To be sure, we can prob-

[2] Candidly, whether the Congress or Senate has the constitutional power to direct the President to terminate a treaty is not clear to me. Past precedent may be largely a result of presidential prudence, especially in a setting where Congress was likely to enact (or perhaps had already enacted) legislation in conflict with treaty obligations, or when the President knew that future treaty implementation would require additional funding by legislative appropriations.

ably defend ourselves against any existing threat for the foreseeable future. But we can not beat every existing or foreseeable threat, and we ought to be trying hard to reassure the world that there is no need to unite against America. The examples we set in our diplomacy in the years following World War II are instructive, as then we were also the world's most powerful nation.

- Our relationships with Russia and the other former Soviet republics are important, and it is in our interest to treat these countries honorably and with appropriate respect. The reason the United States is concerned about the threat of nuclear- or biologically-armed ballistic missiles has little to do with a democratic Russia and almost everything to do with rogue States like North Korea, Iraq, and Iran. These States are also potential threats to the Russian people, and we ought to be emphasizing both points as we move forward on this issue. Consistent with preserving critical national security secrets, I would recommend broad cooperation with Russia in developing and building ABM facilities that might be able to protect both countries, and other potential victims around the world as well. I believe that, if properly handled, a clarification of our ABM policy might actually improve relations with Russia; as the mixed signals we have been sending have exacerbated paranoia and long-standing mistrust among Russians.

Mr. Chairman, I hope these views have been helpful. Again, I was delighted to have been invited to testify on May 25th, and I deeply regret that my prior commitment precluded my participation in person at that time. Nevertheless, I am pleased to have been able to provide my views for the record at this later date. I will of course be happy to attempt to answer any questions which you or any of your colleagues might have for the record.

CORNERSTONE OF OUR SECURITY: SHOULD THE SENATE REJECT A PROTOCOL TO RECONSTITUTE THE ABM TREATY WITH FOUR NEW PARTNERS?

WEDNESDAY, MAY 26, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met at 10:21 a.m., in room SD–562, Dirksen Senate Office Building, Hon. Jesse Helms (chairman of the committee) presiding.

Present: Senators Helms, Hagel, Frist, and Biden.

The CHAIRMAN. The committee will come to order.

Today the Senate Foreign Relations Committee continues its scheduled series of hearings on the ABM Treaty. This morning the committee welcomes the distinguished Dr. Henry Kissinger who served as National Security Adviser to President Nixon and as Secretary of State to both Presidents Nixon and Ford. I should note for the record that Dr. Kissinger is the principal architect of the 1972 Anti-Ballistic Missile Treaty. Accordingly, I think he is uniquely qualified to advise this committee on the extent to which the concept of mutual assured destruction is a useful notion in today's world of proliferating missile threats.

Before beginning my comments, I commend the leadership of Senator Hagel in steering the committee's study of the ABM Treaty. Senator Hagel is arriving at this moment.

Senator HAGEL. Right on cue.

The CHAIRMAN. For 2 months, Senator Hagel has directed the committee's examination of the growing threat and has assessed the feasibility of various missile defense technologies, all the while uncovering the pernicious effect that the ABM Treaty has had and is continuing to have on U.S. defense plans.

Also, I am deeply grateful for the work being done in the committee on the ABM Treaty by Senators Ashcroft and Lugar. Now, Senator Lugar, who will be shortly—no, he will not. He has an important meeting of his own committee, and I am supposed to be there, but I cannot be there and he cannot be here.

But in any event, Senator Lugar steered the committee's hearing on the technical aspects of missile defense, and Senator Ashcroft chaired a critical hearing just yesterday relating to the legal status of the ABM Treaty.

It is widely recognized that the treaty itself lapsed with the dissolution of the Soviet Union, but what some may not know is that

the Clinton administration is seeking to reconstitute the ABM Treaty with four new partners. The fine work being done by Senator Ashcroft is central to the question of whether the Senate should approve this effort.

In any case, the committee has determined, through the aforementioned work of one colleague on this committee, that the Clinton administration continues to cling to ABM Treaty strictures despite the clear and growing menace of ballistic missile attack. I must conclude, for one, that the administration has developed blueprints for national missile defense not on the basis of the best technology available, but on the basis of what can be most easily negotiated with Russia in a revised ABM Treaty.

Which leads me to one main point which I feel obliged to stress. I'm sure that Dr. Kissinger will help the committee assess the merits of my proposition which is that the time has come to dispense with the ABM Treaty.

The concept of mutual assured destruction was negotiated with an adversary that no longer exists in a world without rogue nations armed with ICBM's. The MAD concept emerged at a time when it was cheaper and easier to build offensive systems rather than defensive ones, and if the ABM Treaty ever served a useful purpose—and that is a debatable suggestion in my judgment—it is undeniably out of touch with today's post-cold war world. In short, the ABM Treaty buys the United States nothing whatsoever today. All it is doing, even while in legal abeyance, is complicating U.S. missile defense plans while talk continues about this proposal or that proposal which would need to be negotiated with Russia.

I think Senator Hagel put it best when he emphasized the moral bankruptcy of strategic vulnerability in this day and age. No nation has the right to obliterate United States cities and no nation has the right to veto U.S. defense plans. Russia is not the Soviet Union and Russia should not be encouraged to think in ABM Treaty terms as the Soviet Union did.

Parenthetically, Red China, a nation which has just been caught stealing atomic secrets for their nuclear ICBM's, with which it has already explicitly threatened our cities, has absolutely no right to complain about U.S. deployment of a missile defense.

Now, I am going to do everything within my power to ensure that the ABM Treaty is never resurrected or reconstituted regardless of whether the President proposes one other party to the treaty or twenty. The concept of limiting missile defense is a moral and defunct proposition for a Nation that has both the ability and the urgent need for such defenses.

Now, I say to my distinguished guest that I have given the President until next week to fulfill his legally binding certification that he will submit a succession arrangement to the treaty. As I have said, consideration of such a document will be more than a political referendum on the treaty. It will be a very real debate over whether the Senate will bring the ABM Treaty out of legal limbo or hold it in abeyance forever.

[The prepared statement of Senator Helms follows:]

PREPARED STATEMENT OF SENATOR JESSE HELMS

Today the Senate Foreign Relations Committee continues its scheduled series of hearings on the ABM Treaty. This morning the Committee welcomes Dr. Henry Kissinger, who served as National Security Advisor to President Nixon, and as Secretary of State to both Presidents Nixon and Ford.

I should note for the record that Dr. Kissinger is the principal architect of the 1972 Anti-Ballistic Missile Treaty. Accordingly, he is uniquely qualified to advise the Committee on the extent to which the concept of "mutually-assured destruction" is a useful notion in today's world of proliferating missile threats.

Before proceeding with my comments, I commend the leadership of Senator Hagel in steering the Committee's study of the ABM Treaty. For two months, Senator Hagel has directed the Committee's examination of the growing threat, and assessed the feasibility of various missile defense technologies, all the while uncovering the pernicious effect that the ABM Treaty has had—and is continuing to have—on U.S. defense plans.

I also am deeply grateful for the work being done in the Committee on the ABM Treaty by Senators Ashcroft and Lugar. Senator Lugar steered the Committee's hearing on the technical aspects of missile defense and Senator Ashcroft chaired a critical hearing yesterday relating to the legal status of the ABM Treaty.

It is widely recognized that the treaty itself lapsed with the dissolution of the Soviet Union. But what some may not know is that the Clinton Administration is seeking to reconstitute the ABM Treaty with four new partners. The fine work being done by Senator Ashcroft is central to the question of whether the Senate should approve this effort.

The Committee has determined, through the aforementioned work of my colleagues, that the Clinton Administration continues to cling to ABM Treaty strictures despite the clear and growing menace of ballistic missile attack. I must conclude that the Administration has developed blueprints for a national missile defense—not on the basis of the best technology available—but on the basis of what can be most easily negotiated with Russia in a revised ABM Treaty.

Which leads me to the main point I feel obliged to stress—and Dr. Kissinger will help the Committee assess the merits of my proposition—that the time has come to dispense with the ABM Treaty.

The concept of mutually-assured destruction was negotiated with an adversary that no longer exists, in a world without rogue nations armed with ICBMs. The "MAD" concept emerged at a time when it was cheaper and easier to build offensive systems rather than defensive ones.

If the ABM Treaty ever served a useful purpose—and that is a debatable suggestion—it is UNDENIABLY out of touch with today's post-Cold War world. In short, the ABM Treaty buys the United States nothing today. All it is doing, even while in legal abeyance, is complicating U.S. missile defense plans. Talk continues about this proposal or that proposal which would need to be negotiated with Russia.

Senator Hagel put it best, I think, when he emphasized the moral bankruptcy of strategic vulnerability in this day and age. No nation has a right to obliterate U.S. cities, and no nation has a right to veto U.S. defense plans. Russia is not the Soviet Union, and Russia should not be encouraged to think in ABM Treaty terms as the Soviet Union did.

And, parenthetically, Red China—a nation which has just been caught stealing atomic secrets for the nuclear ICBMs with which it has already explicitly threatened our cities—has absolutely no right to complain about U.S. deployment of missile defenses.

I shall do everything within my power to ensure that the ABM Treaty is never resurrected or reconstituted, regardless of whether the President proposes one other party to the treaty, or twenty. The concept of limiting missile defenses is a morally-defunct proposition for a Nation that has both the ability, and the urgent need, for such defenses.

I have given the President until next week to fulfill his legally-binding certification that he will submit a succession arrangement to the treaty. As I have said, consideration of such a document will be more than a political referendum on the treaty. It will be a very real debate over whether the Senate will bring the ABM Treaty out of legal limbo, or hold it in abeyance forever.

Today marks the 740th day that the President's promise has gone unhonored. More than 2 years have passed since the President made his pledge, which, significantly, was the basis upon which the CFE Flank Agreement was brought into force.

The President's delay, together with his repeated efforts to circumvent his pledge (by calling Russia a Party to the treaty), now call into question to validity of the CFE Flank Agreement and the ongoing CFE negotiations in Vienna. I must urge

the President to fulfill his promise immediately, or risk being forced to explain to various European nations why the Senate has judged that U.S. agreement to the revised Flank Document is defective under law.

The Senate Foreign Relations Committee has enjoyed a tremendously productive working relationship with the Administration this session. Both the International Nuclear Safety Convention and the Amended Mines Protocol (two treaties desperately wanted by the executive branch) were moved expeditiously to the Senate floor at the Administration's request. In both cases the Committee bent over backwards to accommodate the White House and to secure ratification in time for the United States to participate in treaty-related meetings.

But the treaty-making power under Article II, Section II, clause 2 of the Constitution is a two-way street. The President cannot violate the letter and spirit of his ratification-related pledges without undermining the confidence of the Senate in the cooperative ratification process. This is an issue larger than just the legal status of the ABM Treaty. It goes to the heart of the manner by which the United States enters into, and is bound by, treaties. If the President cannot be relied upon to fulfill his commitment and submit a document that has been collecting dust for 2 years, he should not be surprised when the Senate takes action to enforce previously-imposed legal conditions.

With this final exhortation to the President to fulfill his legal obligations, I turn to Senator Biden for any comments he might have.

THE CHAIRMAN. Senator Biden, we will be glad to hear from you.

Senator BIDEN. Mr. Secretary, believe it or not, the chairman and I are good friends. We agree on everything. The only thing that has not changed is our view on strategic defense and the ABM Treaty. I wish the chairman would be more blunt about how he feels about this.

I take it very seriously, Mr. Secretary, when the chairman says that, in so many words, over his prostrate body will we see the ABM Treaty remain in force. I have no doubt about his conviction on that point, and I have no doubt about his ability to generate sufficient votes on this committee.

But I do have a little bit of a doubt about the contention that the committee has already concluded this. If it has already reached the same conclusion as the chairman, I missed the meeting. But I have no doubt that it will be a difficult meeting—not in a personal sense, but a difficult meeting in terms of the intellectual debate that is going to take place over this issue. The storm clouds are gathering.

And I read your statement, Mr. Secretary, and I do not think my case is going to be helped by your statement. But I mean this sincerely when I say it is always a pleasure to have you come and consult with this committee.

You and I often kid when we are together with those around us about the first consultation that I had as a young United States Senator, when I was 30 years old. I am going to repeat it for my friend from the Midwest. I walked into the hearing late. It was an executive session. The chairman may remember it. He was on the committee at the time, I think, as well. I walked in late. I sat at this hearing table thinking this was where the meeting was, not realizing that we had an executive committee meeting room.

Then I went running over. It was late spring. It was hot. The Secretary was giving his "world view," which is the way it was titled. I went running in. The guard stopped me, spun me around when I tried to go in the door, and demanded identification, which sort of heightened things a little bit. My hand was perspiring. You know that door that opens inward in our committee room? There used to be filing cabinets, the chairman will remember, right on

the right-hand side. The door slipped out of my hand. There was no restraining device on the door then, because they did not want to spoil the look of the wall. So the door smashed against the filing cabinets and I arrived in the middle of the hearing literally upon the back of the Secretary.

The chairman at that time was the acting chairman, our Majority Leader, Mike Mansfield. He said, "sit down." I sat down, making myself the second ranking member of the committee.

The hearing was almost over. The leader said, are there any more questions? And I can tell the Senator remembers this. And I said, yes, I have a question. I had rehearsed my question. It was my first appearance. The question had been asked 17 times already, I suspect. And I asked my question with as much sense of authority as I could muster. The Secretary looked across and he said to the chairman, "I thought no staff was permitted in this meeting."

At which point Joe Sisco, who was his assistant at the time, passed over a note that said, Biden-Delaware. He said, "oh, I apologize, Senator Bidden."

And I said, "Secretary Dulles, it does not bother me a bit."

But from that moment, from that time to now, there is no one whose views I listen to more closely than yours, Mr. Secretary. You are probably the most knowledgeable person in this country on American foreign policy, and as the old joke goes, you have been there and you have done that. And you did the ABM Treaty as well. I am anxious to hear what you say and to get a chance to ask you some questions.

But let me digress for another 2 minutes, Mr. Chairman, before we move to the topic. I want to commend you, Mr. Chairman, for your speedy appointment of Steve Biegun to be the staff director of this committee. Nobody will really fill the shoes of Admiral Bud Nance. We are going to miss him, no one more than you. But the committee work has to go on and I think you have made a fine choice, and I look forward to working with him.

I got to know Steve during work on NATO enlargement and the CFE Flank Document, and he has been able and honorable. I am confident we can continue the kind of relationship we have had.

Let me conclude by saying, Mr. Chairman, I appreciate you having these hearings. I look forward to the debate we are going to have on the future of ABM. I would like to urge you again. I wish you were willing to move us forward with the Comprehensive Test Ban Treaty hearings, as well. I told you I am going to raise that question with you every time I can. I think that it is critical that we have hearings on that issue, but we can get underway here. I do not want to delay the Secretary any longer.

Again, welcome, Mr. Secretary. It is a delight to have you here.

The CHAIRMAN. Mr. Secretary, he has a needle about that long in his right-hand pocket.

Senator BIDEN. But I keep telling him about it.

The CHAIRMAN. Senator Hagel.

Senator HAGEL. Mr. Chairman, thank you. I too wish to add my welcome, Mr. Secretary. Thank you for spending some time with us listening to Senator Bidden here.

I thought that is the way it was done, Joe. But I appreciate Joe Biden's leadership and the chairman's leadership on this issue. Hardly an American understands as well as you, Mr. Secretary, the importance of what we are dealing with here.

I wish to also express to you, as I have heard it over the last 48 hours many times, the excellent framing piece that you did in Newsweek this week. Those of you who have not read it, should read it. You connect the world better, as you normally do, than about anybody around. In this piece, I think it is not only eloquent but it is right on the mark as to not only the short-term challenges this country and the world must deal with, but more importantly what is ahead for the next millennium. So, thank you for that contribution.

I do have a statement for the record, Mr. Chairman.

I would, in my brief statement, wish the Secretary Happy Birthday tomorrow. I have been told that somewhere around 51 or 52 is the appropriate age. But Happy Birthday. We wish you many more. And if Senator Bidden really cared about you, he would have baked a cake I think.

Senator BIDEN. We still have time, Mr. Secretary. Look, the cake has already been baked. I remember he used to come up here and everybody would say, "Kissinger, what are you doing?" Now everybody comes up and says, "Mr. Secretary, it is so good to see you."

So, he has gotten his cake. He has been through a lot over the years before this committee, although he always has given more than he has taken.

Senator HAGEL. Senator Biden has just finished my statement. So, thank you, Mr. Secretary.

The CHAIRMAN. You finally get a chance. You may proceed, Mr. Secretary.

STATEMENT OF HON. HENRY A. KISSINGER, CHAIRMAN, KISSINGER & ASSOCIATES, NEW YORK, NY

Dr. KISSINGER. Mr. Chairman, before I turn to my testimony, I would like to pay tribute to Admiral Bud Nance, whom I had the honor to meet as your chief of staff and who then became a good friend. Our country needs leaders who reflect about the national interest without partisanship, who dedicate their lives to the service of their country. There is nobody more fair-minded, more knowledgeable than Admiral Nance. He was, in addition, a remarkable human being, whom I miss personally, but I know how much more he must be missed by those who have been his friends since childhood.

The CHAIRMAN. Thank you very much. That means so much to me personally, and I know his family will appreciate it.

Dr. KISSINGER. Now, Mr. Chairman, since Senator Biden has pointed out he has read the statement, I will not read my statement again unless you wish me to. And I will just sum up my views so that we can turn to questions.

I would like to point out that I have not studied the treaty recently and I am no technical expert on which weapons system is the most suitable. In preparation for this hearing, I tried, and I did get myself briefings from various groups. I have talked to those involved with the various studies that have been made, including

Don Rumsfeld and the Heritage Foundation study. But the thrust of my remarks will deal with the strategic and geopolitical environment and not with the technical aspects of the treaty, though I will be glad to respond to questions insofar as I can.

I have been in a complicated position with respect to the ABM Treaty. So long as I have been writing on strategic issues, I have been deeply worried about the doctrine of mutual assured destruction. When I came to Washington as Security Adviser, I looked at the estimates of damage in a nuclear war on both sides. I am speaking here very informally. This is obviously not part of my statement. I called up the former Secretary of Defense McNamara, and I said, what are they holding out? What is it that they are not showing me, because there has got to be something else? Because we cannot risk the future of this country on such casualty figures and on such risks. He said, well, I never meant to carry it out, which is what he has repeatedly said publicly since then. Well, that is a very dangerous strategy.

We then tried to modify in an environment of no defense, and we just found that there was no way to reduce casualties to what could be described as an acceptable level even by the widest stretch of the imagination.

So, I have always been extremely uneasy—and I have said so repeatedly and in all my writings—about the doctrine of mutual assured destruction. That doctrine, briefly stated, is that if one can keep the level of damage to both sides above a certain level—not below a certain level, above a certain level—neither side would ever go to a nuclear war. Therefore, the best guarantee for peace was the certainty of the destruction of one civilization and maybe of human life on the planet as we have known it.

This is an absolutely unprecedented concept and it violates one of the basic reasons for the existence of government in general in the history of mankind—which is to improve the security of the people under their charge. So, intellectually I have always opposed this concept, and I have looked for limited applications of force and a better relationship between force and diplomacy. In fact, my personal preference was always for missile defense.

When President Nixon took office, he recommended a system of 12 ABM sites designed to prevent light attacks, of a protection against light attacks, accidental launches, and emerging third countries. And this concept passed with one vote, the Vice President's, in I think 1969 or early 1970. It faced violent opposition because the doctrine of mutual assured destruction had captured most of the intellectual community and most of those who were working on arms control.

The arguments that have persisted for 30 years now began evolving then: one, that the system made war more likely; two, that it would not work. It was both destabilizing and would not work, even though both of these propositions could not be true. A lot of ingenuity was devoted to showing how one could penetrate it.

Now, our view was that it is true, of course, that a system that protects against light attack can, by definition, be overwhelmed by a large attack. But we thought that even if an adversary were forced into a substantial attack, this would be a much less likely risk for him to take than to try just one or two missiles which

would assuredly get through. Of course, the third country problem is self-explanatory.

This was during the period of the Vietnam war and it was not a technically effective system. In the bitter debates of that period—in which the defense budget became a surrogate for other issues—the number of sites for the system was reduced each year. So, what started out as a 12-site system was reduced to a 2-site system by 1972.

It was at that point, in early 1972, that President Nixon decided, with my strong concurrence, that, before we lost the whole concept, we would be better off saving what we could and limiting the Soviet Union. It was not our preferred strategic and geopolitical choice. Nevertheless, in a two-power world, mutual assured destruction had a significant plausibility, and I respect the serious people who held the view even though I disagreed with it.

But we are now in a different world. Nuclear weapons are clearly spreading. Secretary Cohen has testified before this committee—I believe on January 20 of this year—that when he confirmed the findings of the Rumsfeld Commission, "we are affirming that: there is a threat, and that the threat is growing and that we expect it will soon pose a danger not only to our troops overseas but also to Americans here at home."

Therefore, however valid the reasoning was in the 1970's and however much mutual assured destruction may have been taken seriously at that time, I do not believe mutual assured destruction can possibly work in a world of many nuclear powers. And frankly, I do not think it could work over an indefinite period of time in a world of two powers. But this is now an esoteric issue because we will not be facing it. We will face a different one.

I also have always been concerned about the position of a government that leaves its population defenseless by a deliberate policy choice, when demonstrably, other choices are available. If the judgment turns out to be wrong and mutual assured destruction does not work and if then massive damage from a nuclear attack were to occur—or any significant damage from a nuclear attack—how would such a government explain to the American people that, knowing a technology was available that might have resisted it, it deliberately rejected it for the sake of theories that were surely esoteric?

Therefore, when President Reagan proposed the SDI, I was among those who supported it. And I was influenced by a group of scientists who came to see me to ask me to join them in opposing it by giving me a lot of evidence that proved that, if the Soviet Union launched an all-out attack, it would overwhelm the SDI system. And that was surely true.

When I asked these scientists what would happen if they launched—I forget now how many—50 missiles, 100 missiles—it became apparent to me that the system might work quite well at low levels of attack and would require an increasingly higher level to be overwhelmed. And I thought even that was significant progress if the opponent could be forced into making a massive decision and could not use it in a limited way.

Be that as it may, I believe there is now a consensus in the United States: one, that we need missile defense for theater de-

fense; second, that the principle of a national defense seems to be more or less accepted, including by the administration. The issue is whether that defense should be within the framework of the existing ABM Treaty or whether it should proceed unconstrained by the ABM Treaty.

There are many questions about the ABM Treaty, including whether the entities that signed it still exist and whether it is, therefore, still valid.

I believe that we should proceed with the development of the best technology for the defense of the United States and for theater defense, including our allies. I would recommend against having the research constrained by the treaty. Now, there is again some dispute on whether the treaty prevents development or whether it prevents only deployment. I would certainly be in favor of proceeding with unconstrained research into the best available technologies and then making the decision on the basis of what is most suitable.

Is it possible to negotiate a modification of the ABM Treaty? Well, since the basic concept of the ABM Treaty is so contrary to the concept of an effective missile defense, I find it very difficult to imagine this. But I would be open to argument, provided we do not use the treaty as a constraint on pushing forward on the most effective development of a national and theater missile defense. I believe we owe it to the security of our country.

I regret that this is happening at a time when our relations with Russia are overloaded with a lot of other problems. There is no Soviet Union anymore. But I think our relations with Russia, as I pointed out in the article to which Senator Hagel was friendly enough to refer, needs a realistic basis of mutual interests, and it does not serve either side to pretend to an arrangement that, in the end, threatens the populations of both sides.

Now, this in essence is my view which I expressed in greater detail in my formal statement and which I would like to put before this committee. It is a feeling I have had for 30 years about the concept of mutual assured destruction, a conviction that leaves no other choice except to take a position which is going to hurt many people who were associated with the evolution of this treaty, who feel strongly about it and whom I respect.

Thank you, Mr. Chairman.

[The prepared statement of Dr. Kissinger follows:]

PREPARED STATEMENT OF HON. HENRY A. KISSINGER

I would like to thank the Committee for the opportunity to testify on the ABM treaty and missile defense.

Let me begin with some qualifications. I am not a technical expert. I have not had the opportunity to review the provisions of the treaty in detail. But I have thought about the political and strategic implications of missile defense and the impact of the ABM treaty on it. And the ABM treaty was negotiated under my general aegis during the Nixon Administration. Therefore let me explain my general view about missile defense, how the ABM treaty came to be negotiated, and where in my view we are now in a general sense with respect to it.

I was always uneasy about the doctrine of mutual assured destruction. The first responsibility of government is to provide for the security of the people. To the extent the U.S. has the ability to provide for the defense of the country, it would be a dereliction of duty not to do so. I cannot accept the proposition that we contribute to peace by exposing our population to vast and foreseeable dangers as an act of policy. I cannot imagine what an American President would say to the American

public if there should be an attack, and if he would have to explain that he did nothing to prevent or defeat the resulting catastrophe. I think the legitimacy of government would be threatened if such a condition existed. So, for all these reasons, I have been an advocate of missile defense ever since I entered government.

Then how did the ABM treaty come about? When President Nixon came into office, one of his first acts was to propose an ABM system. It was based on much more elementary technology than now exists, but it provided for twelve defense sites circling the United States and was put forward with the argument that it would disabuse the Soviets of any temptations to risk a limited nuclear attack, prevent third country attacks, and protect against an accidental missile launch.

But then we faced various oppositions from groups dedicated to the theory of mutual destruction. One group maintained that the ABM system would not work. Another group said that it would be destabilizing. Though the criticisms contradicted each other, they affected the Congress. As a result, in every Congressional session, the number of defense sites was reduced. By 1971, Congress had whittled the proposed ABM system down to two defense sites. And it was clear that these last two sites would be under pressure in every budgetary cycle thereafter.

Limiting an ABM system to only two sites did not make any strategic sense. And by that point, the Joint Chiefs of Staff did not want to spend scarce resources on what they considered to be an essentially useless enterprise. We negotiated the ABM treaty because we wanted to get something for what the U.S. Congress was going to do anyway—kill the ABM program. The Soviet Union was expanding its military strength and our Congress was cutting back U.S. military strength. And it was under those conditions that we thought we would put a ceiling on the ABM in order to limit the Soviet ABM system, which Moscow had already started to build. We also used the ABM treaty to extract concessions from the Soviet Union in the SALT talks.

I never felt comfortable with the ABM treaty. But there was nothing we could do about it because the defense budget was being cut deeper each year by Congress. It was not really until the advent of the Reagan Administration that a plausible technology for strategic defense existed. As soon as Reagan put forward his 1983 Strategic Defense Initiative, I supported it. And I continue to support a missile defense for the same reasons.

When President Reagan put forward his SDI proposal, a group of concerned scientists came to see me in order to get me to join them in opposition to it. And they made the traditional arguments—first, that it was destabilizing and secondly, it wouldn't work—despite my difficulty in grasping how it can be both. When I asked them to explain to me the mechanics of how and why they believed it would not work at various levels of attack, it was plain that at a fairly low level of attack involving several hundred warheads, it worked fairly well, but became degraded only as more and more warheads were added to the attack.

That seemed to me to strengthen and not weaken the case for missile defense. In the absence of missile defense, penetration becomes totally predictable—a simple question of mathematics. But it is different even when there exists even a light missile defense. Since the aggressor does not know which of his missiles will get through, as the threshold rises the inhibitions to an attack must also rise. And in the Soviet case, I always felt that if they knew that they would have to launch several hundred missiles in order to get a significant number through the missile defenses, that was a lot safer for America than if they knew that any missile that they launched was bound to get there.

The circumstances that existed when the treaty was drafted and agreed to were notably different from the situation today. Specifically, the current threats, as set forth by our Ballistic Missile Threat Commission, have moved us into a new national security environment, one that was not even considered, let alone anticipated when the ABM treaty was signed. The country that signed it, the USSR, has disappeared as a legal entity. Missile technologies have evolved in sophistication. The acceleration in the proliferation of ballistic missile and WMD technologies are putting capabilities in the hands of nations that were not even remotely considered to be candidates to possess such destructive power when the agreement was concluded.

One of the reasons ballistic missiles are attractive to so many countries is that there are currently no defenses against them. They are almost guaranteed to arrive at their targets. Given their destructive power, they are terror weapons by their mere existence in the absence of deployed defenses. History teaches that weakness is provocative and, in a real sense, the absence of missile defense provokes others into seeking such weapons.

The threat to the U.S. from missile proliferation is real and growing. This was underscored last year by the Rumsfeld Commission, which stated that the threat posed by a number of hostile Third World states "is broader, more mature and

evolving more rapidly than has been reported in estimates and reports by the Intelligence Community." Further, the Commission stated that "the U.S. might well have little or no warning before operational deployment" of missiles capable of reaching U.S. territory by these same states.

Secretary of Defense Cohen confirmed the findings of the Rumsfeld Commission on January 20, 1999, when he stated, ". . . we are affirming that there is a threat, and the threat is growing and that we expect it will soon pose a danger not only to our troops overseas but also to Americans here at home."

All of us need to recognize that at some point, and admittedly some will differ on where this point is, the ABM treaty constrains the nation's missile defense programs to an intolerable degree. Secretary Cohen, also on January 20, stated that the Administration recognizes this fact and will require modifications to the treaty. He also suggested that if an agreement on this issue, presumably with the Russians or others, could not be obtained, then the U.S. would consider withdrawal.

I share this view. Quite apart from the legal arguments that are made by experts as to the possibility that with the end of the USSR the treaty technically may no longer be in force, the treaty was signed with an eye to an environment that simply does not exist today.

For these reasons, I believe that it is strategically and morally necessary to build a missile defense. Strategically, because of the proliferation of weapons of mass destruction and the missile technology to deliver them. Morally, because the doctrine of mutual assured destruction, which I have opposed in my writings for at least thirty years, is bankrupt. It may have had a limited theoretical sense in a two-power nuclear world, but in a multinuclear world, it is reckless.

There seems to be an emerging consensus regarding theater missile defense which I favor—though its specific geographic applications require further consideration.

I would also favor the deployment of a nationwide missile defense system as soon as technologically possible. An impressive array of technical options cannot be adequately explored until we solve the problem of ABM treaty restrictions on development and testing. We need to find a way to end the restrictions the ABM treaty impose on the research, development, testing and deployment of missile defense systems as soon as possible.

I have no clear view how to handle the ABM treaty, except that I would not let it stand in the way. First, it is possible to argue that the ABM treaty was made with an entity that no longer exists. It is also possible to use the abrogation clause in the ABM treaty, but I think that is not the key issue.

The key issue is whether it should be a national policy to build a missile defense. The battle lines are already forming along the same issue—whether the missile defense system will work. There always will be those who make the claim that a tremendous system is coming along five years down the road, at which point, those same people will argue that there is an even better one coming along five years after that. So there will never be a "right time" for deployment.

Therefore, we need to get about the task of developing and deploying ballistic missile defenses that are the most cost effective and the most technically capable of deterring and defending against these new threats, and doing so without inhibitions from the treaty. There is ample time to conduct the necessary negotiations since the shape of the system is still under consideration, and no violation would occur until deployment. There are two qualifications: (1) Research must proceed immediately and not be delayed pending negotiations, and (2) Deployment must take place as soon as a system is chosen. To the extent the Russians do not agree to the necessary amendments, the alternative is to exercise our right, as provided in the treaty, to extend six months' notification that we intend to withdraw from the treaty.

The CHAIRMAN. Before we begin questioning, I wonder if Senator Frist has a statement.

Senator FRIST. No, sir, I do not, but I will participate in the questioning. Thank you.

The CHAIRMAN. You were very clear in what you said, Dr. Kissinger. I agree with what I understood to be your message to this committee and therefore to the Senate. The ABM Treaty, you were saying, must not be allowed to stand in the way of missile defense. That was the predicate and the basis of your comments I believe.

Now, you have talked about the possibility of amending or abrogating the treaty to render it harmless, and if it came to that, Sen-

ator Biden, I would support that. I just do not want it to be harmful to the defense efforts of the United States.

I think I should call a little attention to the hearing yesterday, chaired by the distinguished Senator from Missouri, Mr. Ashcroft. They examined the legal status of the ABM Treaty and the clear conclusion, according to the constitutional lawyers who testified yesterday, is that the ABM Treaty lapsed with the demise of the Soviet Union. Now, this is a critical legal point that has some legitimate debate one way or another, even though I am pretty firm in my position on it, because it means that the agreement being peddled by the administration is actually an agreement to revive the ABM Treaty with four new partners: Russia, Belarus, and the other two.

Now, if this is the case, it raises the stakes on the significance of a Senate vote on the MOU on succession. The defeat of the MOU literally would mean defeat of the administration's efforts to reconstitute the treaty. Under such circumstances, Dr. Kissinger, would you, nevertheless, recommend that the Senate reject the MOU, the memorandum on succession?

Dr. KISSINGER. Mr. Chairman I frankly have not thought this problem through, so I am answering off the top of my head. As a general proposition, I am not in favor of attaching new significance to the ABM Treaty, and I would favor a four-power arrangement only if we could renegotiate the treaty in a manner that is compatible with what I have outlined, if that is possible.

The CHAIRMAN. Well, that is an important distinction between what some are saying and others are saying.

Dr. KISSINGER. That would be my instinct in dealing with that.

The CHAIRMAN. You mentioned I believe the Rumsfeld Commission which has warned that North Korea and Iran—and I quote the commission in its report—"would be able to inflict major destruction on the United States within about 5 years of a decision to acquire such a capability."

Now, I suppose you share the alarm at North Korea's launch of the TD–1 missile with an unexpected third stage. Similarly, according to press accounts, Iran has test fired a Scud missile in a ship-based boat.

I guess what I want to ask you is, are you concerned that unless we break ground soon on a national missile defense, that the citizens of the United States could be put in serious peril within the next 5 years?

Dr. KISSINGER. I believe we should create a national missile defense as soon as it is possible to do so with a system on which there exists a consensus. And I think it is dangerous when people say—I have heard it said—we can wait until these capabilities exist. One could also make the argument, however, that if no defense exists, the easiest way for many countries to threaten the United States is to acquire a rudimentary long-range missile capability. So, one could argue that a national missile defense is a deterrent.

My basic view is that we should make it clear we are moving to a national missile defense as soon as possible. How we achieve consensus on what is an effective defense I do not know, but it must be possible to constitute panels, like the Rumsfeld Commission, of technical experts who give us conclusive advice.

The CHAIRMAN. Well, I guess what I am driving at is, how much delay will be suitable or not objectionable? I am asking the question, should we allow negotiations with Russia to delay our deployment or development of a U.S. missile defense?

Dr. KISSINGER. Mr. Chairman, I start from the premise that we cannot envisage a concept in which we have no missile defense. Therefore, we should avoid a negotiation that leaves open no defense as an option. Also I would not encourage using negotiations as a means of protracting the final decision.

So, I would try to reduce the deployment of ballistic missile defense for the United States to a technical question, at which point technical people in whom both sides of the aisle have confidence should consider whether the time has come to deploy it. And at that point, we should do it and either manage a way to renegotiate the treaty, or propose abrogating the treaty under the abrogation clause—which, after all, must have envisaged circumstances totally different from the ones that existed then.

The CHAIRMAN. Well, if I ask another question, it will overrun my time. We have 7 minutes and I have used 6½ of mine. You will proceed, please, sir.

Senator BIDEN. Thank you, Mr. Chairman.

Mr. Chairman, are we going to get a chance to maybe have a second round?

The CHAIRMAN. Sure.

Senator BIDEN. Because I cannot think of anyone whose testimony is, quite frankly, more important or more relevant.

Mr. Secretary, you are not here to testify as to the legality of the ABM Treaty. The only thing I may know almost as much as you about is the Constitution and the treaty power. I would take issue with the proposition that the ABM Treaty has automatically lapsed. I say that not for your response, but just for the record.

Dr. KISSINGER. I had trouble hearing this last part.

Senator BIDEN. I believe that under our Constitution and the requirement of the President to take care that the laws are enforced, and his power of recognition of successor States, the break-up of a treaty partner would in fact not cause the treaty to lapse. I just want the record to state I disagree with the chairman's statement and the statement of some of the scholars yesterday.

For example, we did not require new treaty arrangements with the breakup of Yugoslavia, or regarding the CFE Treaty. We did not conclude that successor states could not be successor states and recognized by the administration. We seem to have reserved that concern totally for this issue; but that is another question.

I have some specific questions, but because you are better than anyone I know—and I mean this sincerely—at putting things in context. My fundamental problem with missile defense as an alternative to the doctrine of mutual assured destruction rests on two points: first, we need a system that can do the job. Are we giving up something to get something better? Because I agree with you that the doctrine makes one, at a minimum, uncomfortable, knowing that this notion of mutual assured destruction is the basis upon which our ultimate security rests. But the first concern is, do we have something that can do the job.

The second is, how do we get from here to there? It would be one thing if the Lord came down and sat here on this dais and said, look, we have a system that works and we can put it in place tomorrow. No problem. I do not have any problem with that because then there would be no legitimate worry about the instability that I fear would be potentially created if there were a long lead time for putting in the system—as, indeed, there is in real life.

So, what I am trying to get at is this. In a generic sense, I want you to talk about how these pieces fit together. The Soviet Union does not exist. Russia does. It is not as powerful as the Soviet Union but it still has all their nuclear weapons. It still has the capacity to devastate civilization, let alone the United States.

So, what do you see, not in terms of not wanting to offend Russia, or not wanting to complicate the relationship, or any of the things you hear some people talk about, but in stark terms, if you are sitting in Russia? The United States abrogates—and I am not suggesting you said we should do that immediately, but the United States concludes that it should abrogate the ABM Treaty and is going for a nationwide missile defense system that we are going to commit billions of dollars to build—and I believe we could probably do it if we commit the resources to it—whether it is a space-based, sea-based, land-based, or multiple-based system.

What happens today and next week and next year, in your view, within Russia as it relates to the judgments they will make relative to the arsenal that they now possess and their willingness to bring those numbers down, or their inclination to try to increase the numbers to overwhelm a ballistic missile defense system? What do you think goes on over there?

Dr. KISSINGER. Let me first go back to what influenced me so greatly in my attitudes, and it was this. When you are Security Adviser and Secretary of State, you are going to be one of the two or three people that will be asked, if there is time, whether nuclear weapons should be used. And in the two-power world in which I functioned, that was my permanent nightmare. What would I say if the moment of truth arrived?

At the same time, if you look over our actions, in crises we escalated very rapidly because we wanted to raise the level of risk to the highest level possible because we were afraid of going too slowly. So, if you look at the alerts of 1970 and 1973, we were face to face with this, and I thought that this was something I would not wish on an indefinite line of successors, either of Presidents or of people in my position. I frankly asked myself, if we survive, if I survive, what are we going to say about how this happened? And yet, I had to do it. I mean, when we thought the Soviets would go into the Middle East, we went on alert. We went on alert twice when I was there, and President Nixon was extremely courageous in doing this. So, this has affected me.

Now, the debate is usually put in terms of, does it work perfectly or must it work perfectly to be useful at all? I think if one can raise the entrance price, it will reduce the temptation to lob a few missiles. I thought that was useful and therefore I supported President Reagan's SDI.

That was not your question, though. Your question was what is the attitude in Russia.

My view about our current relations is that we have placed too much emphasis on a sort of psychological approach in which we attempt to influence the domestic structure of Russia and pay too little attention to the fundamental problem that Russia faces as a nation. It has had 400 years of imperialism. This has been the essence of Russian foreign history, partly of being invaded but also partly of expanding. Now they are back to their territories at about the time of Peter the Great, when it all started. So, now they have to get used to this environment.

It seems to me that really nothing is more important than to see whether, as nations, we can feel comfortable, both of us, in such an environment. I actually believe that if Russia acts as a nation and stays within its existing borders, there is no reason for the United States to have any significant conflict with Russia.

Then the question is, should Russia view its capacity to launch a totally devastating attack on the United States as a significant factor in our relationship? If the issue is no longer world domination—or whatever one calls the ideological conflict—I do not believe they would need to think of it in those terms. I, therefore, believe not in a negotiation on how to amend the treaty, but in a real strategic dialog that treats the Russians as adults and not as subjects that we educate entirely to our point of view. That might lead to a situation where they no longer feel that they must have this capacity to penetrate.

I am more concerned about third countries, frankly, than I am about Russia in the nuclear equation of the future.

But I do believe that we need a strategic dialog with Russia, not about the treaty——

Senator BIDEN. I understand.

Dr. KISSINGER [continuing]. But about our basic relationship, and I think we have been remiss in this.

Senator BIDEN. I will come back, Mr. Chairman. Thank you.

The CHAIRMAN. Senator Hagel.

Senator HAGEL. Mr. Chairman, thank you.

Following along the same path here, Mr. Secretary, that you and Senator Biden have been discussing, you mentioned in your remarks the importance of dealing with Russia, I believe what you said, in a way that would be based on mutual interests. It seems to me, picking up on the last 60 seconds of your response, this surely should be our approach working with the Russians. You just mentioned Third World countries. The Russians too are going to be dealing with this as they are today. No borderless challenges in the world.

I was in Russia in December. I met with General Lebed and others. When I asked General Lebed the question what he considered the most significant challenge to Russia, he said it was not NATO. It was not the West, but he said it is probably two things. One is fundamentalism coming from its southern borders, and two, China.

If in fact the grounding of your sense of this is correct—and I believe it is—then what would be the course that would take us through the process working with the Russians on trying to come together with some mutual interest, understanding and dealing through the complications of the 1972 ABM Treaty with this very clear premise that they must understand? No sovereign nation will

ever allow the security of its nation to be held hostage to any other foreign policy, and second, as you know very well, the will, the commitment, and the technology, all connected, must be clearly understood by our friends and our adversaries that we will use all of them together.

So, I would be interested in your taking this a little further in what you started in your conversation.

Dr. KISSINGER. Right now we are in a very difficult relationship with Russia because the Kosovo crisis—or the war with Yugoslavia—is deeply humiliating to Russia. Serbia has been its historic ally. I know there was this interlude in the Tito period but, historically, World War I started because Russia would not let Serbia go down.

If one looks at history, in 1908 there was a Bosnia crisis in which the Germans decided they would humiliate Russia in order to break the Franco-Russian alliance, and they succeeded. They did not break the alliance, but they humiliated Russia. But 6 years later, it guaranteed that Russia dug in and contributed to the war.

Now, I am assuming this Yugoslav crisis will end during the summer in some fashion. I do not think, frankly, Russia can make a huge contribution to settling the crisis because its interests are different from ours. We want NATO to come out of it as intact as possible, and they would not mind NATO being weakened as a result of the crisis.

But once that is behind us, I believe we have a whole range of issues to discuss with them: the future of Central Asia, the future of their relations and our relations with the constituent republics of the former Soviet Union, actions in the Third World that might affect the general equilibrium. And I think it is in our interest to treat Russia as a major power which will be taken seriously—and automatically seriously—and is made part of a general system of political consultation. If you read many of the speeches we make in Russia, they are usually sort of trying to convert them to our basic theories. One must give them an opportunity to participate.

On strategy I would also say that we cannot be without a missile defense in order to make them happy, and it is not good for them. If we made that clear as a constituent element, I believe the Russians would adjust to it. I do not think that the nuclear balance is the most worrisome thing to the Russians. I believe their loss of perceived influence in areas where they have traditionally been active is what concerns them. It is possible for us to give some of this back to them by taking their views seriously.

I believe, for example, that when the Yugoslav crisis is over, if we do not want to be having occupation forces all over the place, some political settlement of the Balkans will have to be negotiated. And in that I think Russia could play a role.

Senator HAGEL. Thank you.

The CHAIRMAN. Senator Frist.

Senator FRIST. Thank you, Mr. Chairman.

Dr. Kissinger, one of the issues that we consider again and an issue that has been one of the more contentious issues before this committee since the beginning of the 104th Congress has been the issue of arms control agreements. I am interested in how you view, if you step back, the overall value, usefulness, utility of arms con-

trol agreements and how you believe that the United States should today view them.

Dr. KISSINGER. Well, if you look at the evolution of the arms control discussions, in a lot of which I participated, when the destructiveness of nuclear weapons first became apparent in the early 1950's and when they were being built into the nuclear systems, the first reaction of the academic community and of the people who were thinking about this was to find a more limited way of using nuclear weapons than the doctrine of massive retaliation. In fact, if you go back to the early 1950's, at the Lincoln Laboratories at MIT, there was a lot of emphasis put on air defense as something to which strategic emphasis should be given.

Then, as the 1950's developed, the doctrine of defense was jettisoned, and emphasis was placed on arms control in order to prevent arms races from spiraling out of control. I participated in many seminars that were addressed to this, and within the context of that period, I believe they performed a useful role in educating our side, and both sides, to the implications of nuclear war.

The trouble was that technology was moving much faster than concepts of arms control. So when we started, for example, on the first arms limitation agreement, they were single warheads. By the time one got to SALT II, the problem was MIRV's. There were so many more warheads, even with the arms control that had been created, that the environment that had been considered highly dangerous with single warheads was now superseded even by arms control. Now even the lowest level they are talking about is twice and three times larger than what existed under SALT I conditions.

It is very difficult with any conceivable arms control system to reduce the numbers to a level at which huge damage cannot be inflicted. So, as a participant in these discussions and one who was involved in the SALT negotiation I believe that they performed a useful role in educating us and, to some extent, in calming the environment. Although if you analyze what was actually done, both sides used arms control to legitimize the programs on which they had already internally agreed. SALT I was madly controversial, but you will not find one program that was canceled as a result of SALT I. Therefore, I think it was more useful as an educational process than anything else.

But under present conditions, when you do not have one super power confronting you, the issue is much more complicated.

Senator FRIST. Although we do not want to focus on any one area, but with regard to the Comprehensive Test Ban Treaty, could you just share your thoughts whether it has any value today in our overall defense strategy either on its own or as part of a larger package of arms control agreements?

Dr. KISSINGER. Well, I have not really studied this in detail. I think we have an arms control objective and must prevent the proliferation of nuclear weapons. Anything that makes it more difficult to develop more nuclear weapons I would in principle favor. But then one has to weigh this against the constraints it places on us. But the prevention or the slowing down of nonproliferation is an arms control objective to which we should pay a great deal of attention.

Senator FRIST. Thank you, Mr. Chairman.

The CHAIRMAN. Well, we are on the horns of a dilemma, though, Dr. Kissinger. There are so many things that we are not sure about, our intelligence lacks the capability to inform at least the Senators in the controlled circumstances of room 403 of the Capitol.

For example, the black market that countries such as Russia and Ukraine now participate in. It seems to me that they may be facilitating the spread of ballistic missile capabilities, but I am not sure about it. What do you think?

Dr. KISSINGER. I am not familiar with accusations that Ukraine is helping the spread of nuclear missile capability. It does appear that Russia certainly has contributed to it, and so has North Korea and at various stages China.

The CHAIRMAN. Well, did we have the same level of concern over proliferation versus criminal elements during the cold war as we have now, more or less? It is a different ball game now because you cannot put your finger—it is sort of like trying to pick up a little bit of mercury in a saucer. You cannot really know what you are talking about based on the limited intelligence we are able to get and how much it is delayed in the case of China, for example.

Dr. KISSINGER. Well, I think we should have a great concern about proliferation.

The CHAIRMAN. Yes.

Dr. KISSINGER. Nobody is more dedicated to friendly relations with China than I am, but I have always made clear to China that nonproliferation has to be a key element in good relations between China and the United States.

The CHAIRMAN. Well, that was going to be my next specific question. What do you make of the relationship between Russia and China in terms of proliferation? Was Russia providing this degree of assistance to China at the time the ABM Treaty was negotiated, or do you recall? Or did it come up?

Dr. KISSINGER. At the time the ABM Treaty was negotiated, we were quite sure that there was enormous hostility between Russia and China because the Soviet Union at the time was increasing its military forces on the Siberian border to about 42 divisions. Our strategy toward China was premised at that time on the proposition that they felt extremely threatened by the Soviet Union.

The CHAIRMAN. Well, then you have worry about China's involvement in the India-Pakistan difficulty. I have not been able to put my fingers, based on the evidence available to me, on the impact of that. What do you think of that?

Dr. KISSINGER. Well, my impression is that this has stopped now. I suspect, if I have to interpret Chinese thinking there, that they do not want India to be the only nuclear power on the Indian subcontinent and that they want to create a balance of power so that the whole thrust of the Indian nuclear program cannot be aimed at them. This is not anything the Chinese have said to me, but this is my interpretation of why the Chinese have done what they have done in Pakistan. I do not believe that is aimed at us.

The CHAIRMAN. I am going to pass for the time being and give the ball to Senator Biden.

Senator BIDEN. Thank you, Mr. Chairman.

Mr. Secretary, back to the Russian component. I want to make it clear I am not suggesting Russia should hold anything that we

should do hostage. We should decide what is in our interest and do it.

One of the conundrums we face, though, is that notwithstanding what you said about the need to put our relationship on a more realistic footing, the fact is they still have over 6,000 very sophisticated nuclear weapons easily able to be aimed at and strike us with hard kill capacity. They still have their MIRV'ed systems.

There are two things I would like to explore with you. Again, I have specific questions, but I always find it more beneficial to let you talk, because you connect the dots so well.

One is that I can envision it being clearly in Moscow's interest to amend the ABM Treaty to accomplish two things: first, give them some sense of security and symmetry, which they are fixated on and have been for as long as I have been here; and second, gain some access to a defensive capacity for themselves. I could wave a magic wand, I would like to see us get on beyond START II to START III, get the numbers down around 1,000, and move the limited ballistic missile defense, a thin shield, to Russian soil to give them the benefit of that along with us.

All the scientists who come before us indicate that a thin missile defense, what you are talking about now, has some potential, but also real problems. The surest way to deal with North Korea, they point out, would be to have a boost phase interceptor that was located in Russia near Vladivostok. That would be the surest way to kill a launch of a North Korean missile heading toward the territory of the United States or anywhere, for that matter.

Dr. KISSINGER. Or on American ships.

Senator BIDEN. Or on American ships.

Now, one of the questions I have is beyond this missile defense, in addition to a missile defense, it seems to me there is a fair amount of room for some imaginative diplomacy. I can picture you being able to put together—and I mean this sincerely—a combination of reassurance to the Russians that would allow them to continue to bring down the number of nuclear weapons at their disposal rather than build them up, and to eliminate their MIRV'ed systems, which I think is a significant breakthrough, if we could get it done in the Duma, and us building a missile defense system that is the one we have been discussing thus far.

I guess what I am trying to get at here, in as a roundabout way as I can because I cannot think how to do it directly, is, were you putting together the strategic approach to Russia now, in addition to this overall and important sort of altar call that we may require to have here between Russia and the United States relative to how we will deal with one another across the board, how would you be trying to move the missile defense system without exacerbating the instability that exists in Russia? And I assume you would desire to continue to have the number and types of nuclear weapons at Russian disposal come down, rather than go up.

Now, I acknowledge that, given the price of the Russians going ahead and building more, you would still prefer us going down the track of a missile defense system and damn the torpedoes, full speed ahead. But is there a way to do both?

Dr. KISSINGER. I would think that even if you could get the Russian missiles down to 1,000, that would only get us back to the sit-

uation which I found when I came in in 1969 and which I really found morally unbearable even though I had to play with these weapons.

Senator BIDEN. But this would be in combination with a missile defense system that you did not have then, but that we are talking about now. It seems to me your thesis is a correct one, that notwithstanding the fact a missile defense system may not be able to be a total nuclear umbrella over the United States, the fact that it would require an overwhelming—overwhelming—offensive launch to penetrate it would dissuade a power like Russia, or anyone else, from engaging in the first place. Is there a fulcrum here?

Dr. KISSINGER. We are talking about Russia.

Senator BIDEN. Yes.

Dr. KISSINGER. Well, first of all, you apparently would agree with me. We cannot make ourselves vulnerable to third country attacks just to reassure Russia.

Senator BIDEN. Unless we thought Russia was so unstable that an attack from Russia may be a greater threat than an attack from a rogue state.

Dr. KISSINGER. No. I believe, if you look at it in a historical period—let us say 5, 10 years, which is a short historical period—there is no reason why Russia and the United States need to consider each other as mortal enemies. If the proper relationship develops, I believe that the idea of a nuclear war between our two countries, as the essence of the strategic relationship, could, over a period of time, be eliminated, or at least sharply reduced.

Senator BIDEN. I agree.

Dr. KISSINGER. We, however, need an adult view of the problem. Russia has a different history from ours. Russia has felt that it was a major player and therefore we are bound to have some adversarial relationships in various parts of the world, but not to the point where the idea that one of us or both of us would risk the destruction of our societies would enter the minds of the next generation of leaders. Therefore, I believe it is more important to bring Russia into a dialog of how we see the evolutions of, say, fundamentalism, Central Asia, and the regions not covered by alliances than some of the political science lectures and sociology lectures on which we have concentrated. So, this should be in the evolving relationship, the key element of the relationship.

Within that context, I see no reason why Russia should be particularly disturbed by the systems that I am proposing because I cannot conceive a situation in which Russia would launch an all-out attack. But I can conceive, among armed forces that have not been paid for a long time and local rulers, that somebody may want to take matters into his own hands and do the sort of thing which is precisely what I believe we should prevent with the national defense system.

Second, since I also believe in theater based systems, it is not natural for us to say we protect our allies more than ourselves. I favor protecting our allies equally with ourselves, but we are now excluding systems for ourselves that we are willing to give to theater defense. And that is not a natural state of affairs.

The CHAIRMAN. On top of everything else, Russia's economy is in shambles and they just do not have the funds to build a missile system.

Senator Hagel.

Senator HAGEL. Thank you, Mr. Chairman.

Mr. Secretary, in your opinion where does the Comprehensive Test Ban Treaty fit into all this?

Dr. KISSINGER. I really am not adequately prepared on all the nuances of the Comprehensive Test Ban Treaty. I am not ducking it. I will be glad to come back. I have not addressed that issue.

In my day it was always believed that you could not go below a certain threshold with safety. And all the analysis that I was familiar with when I was conducting these negotiations was based on the belief that you (a) could not test below a certain threshold, and that (b) you needed it to have confidence in your own weapons. But this is knowledge that I have not updated.

Senator HAGEL. Thank you.

The general theme of the hearing this morning is obviously on nuclear weapons, national security, ABM Treaty as the core of the hearing. But I think this panel would be very interested in getting your sense or whatever you would like to offer in regard to what you know about the intelligence breach that has provided China with apparently considerable nuclear knowledge of our capacity.

Dr. KISSINGER. I only know what I read in unclassified sources—I have not been briefed by the administration on what they know and what their side of it is. I have talked to Congressman Cox, and I have no reason to disbelieve his report. In fact, I accept his report.

The worrisome aspect to me in the report is not that the Chinese would try to acquire our nuclear knowledge. As the most advanced country in that field, it seems to me we are the natural target of the intelligence activities of other countries. But what I find hard to comprehend is that our security system could be so lax as to permit this. Therefore, the indignation or the concern should be focused on fixing our system so that it can never happen again and to get to the bottom of exactly what happened. This seems to me what must concern us and absolutely must be prevented.

Another aspect we need to think through is that there are two levels of criticism being made. One is the theft of nuclear secrets. The other is the commercial sale of information that is dangerous to spread.

Again, I am very worried about the deterioration of our relationship with China. I think we will pay for this insofar as we can control it.

But I do believe we need a national policy aimed, not at China, but at any non-allied country that takes into account what technology we are prepared to transfer and what technology we must put under some restrictions. I would not aim that especially at China. I would aim it in a general way at non-allied countries because, given the way commerce moves these days, it flows very easily. And for this it seems to me that we need a national policy that does not apparently now exist.

Senator HAGEL. Thank you, Mr. Chairman.

The CHAIRMAN. Senator Frist.

Senator FRIST. Thank you, Mr. Chairman.

Dr. Kissinger, I want to just extend that a little bit further, again because you are here and I want to take advantage of the opportunity of discussing an issue that we are all very involved in with the release of the report yesterday. I appreciate your comments on the commercial sale and the theft. I want to take advantage of your thoughts on the geopolitical ramifications of accepting what the Cox report has said in terms of the essence and in terms of the acquisition of warhead designs. It clearly has an impact on reliability, effectiveness of delivery systems.

By my question goes to relationships with other countries. To me it does not seem that China is on the verge of becoming the type of nuclear rival that you are so familiar with historically in the Soviet Union. But the new element seems to me to be this ability to miniaturize the thermonuclear devices and MIRV their ICBM's and, perhaps even worse than that, be able to develop the whole submarine launched capability. It seems to me that that does forever change the geopolitical climate where all of a sudden we are talking not just about an Asian theater but a true global theater. Is that right? Is that the new element that is being introduced?

Dr. KISSINGER. I believe that as China becomes an industrialized country, with or without the theft, some of these developments are almost inevitable. Probably if the facts are as damning as the report seems to imply—and I do not challenge it—that moment in time has been accelerated. I still do not think it will be here before 15 years or so because it would still have to be translated into a manufacturing capability. Even if you know what to do to build them, it would seem to me it would take 15 to 20 years.

Now, this is not your question, but I must say I am extremely disturbed by the trend of putting China into the slot vacated by the Soviet Union and gearing all of our Asian policy to a confrontation with China. That could turn into a self-fulfilling prophecy.

And it is a different problem in Asia from what it was in Europe. Communism in China does not claim universal applicability. China has neighbors, many of which are quite capable of defending themselves. So, it is not an analogous situation. I believe that, if we made confrontation, unnecessarily, the centerpiece of our foreign policy in Asia, we would lose the support of every Asian nation that I know anything about and bring about the opposite of what we are seeking.

If China challenges vital American interests, we must resist. What I am warning against is the attempt to build confrontation into an organic aspect of our policy without such a direct challenge.

Senator FRIST. Just a final question. Either in Chinese calculations or in our own calculations, even though we are talking about 15 or 20 years for full development, does the recent development of this acceleration raise the stakes to a point that they believe that we would be less willing to respond militarily to an invasion of Taiwan in any way? Again, I am looking at sort of the geopolitical ramifications.

Dr. KISSINGER. You mean the successful acquisition of this technology?

Senator FRIST. Correct.

Dr. KISSINGER. I do not think that the point at which they might make that calculation will arise for 15 to 20 years, and I believe that what they will think then depends importantly on how we both conduct ourselves in the interval. I am warning against self-fulfilling prophecies. It requires a balance between military capability and political relationships. But I am very concerned about the way this relationship is now drifting, and I am also concerned about the theft of this technology. But those two need not be brought into direct relationship with each other.

Senator FRIST. Except that that interval has gotten shorter.

Dr. KISSINGER. The interval has gotten shorter. It, therefore, makes the conduct of our relationship more urgent.

Senator FRIST. Even more important.

Thank you.

Dr. KISSINGER. For example, I am not saying we should forego theater missile defense to reassure China any more than I am saying that about Russia.

The CHAIRMAN. I do not want you to think that your prepared statement will not get any attention. It is excellent. I have read it. There is much wisdom in it, and I would suggest that the folks covering this would look carefully at it because I am going to circulate it and it is going to be part of the printed record as well, which we will circulate among Senators at the time of any action.

For example, you made the point—and it is a very good one. Let me quote you. "Deterrence during the cold war was based upon assumptions of rationality which allowed the United States and Russia to predict each other's reactions with a fair degree of success. Moreover, communication and the centralization of command-control allowed for a mutual familiarity between the United States and the Soviet Union over one another's plans for reaction in crisis situations."

Well, we do not have that. That is one thing that is lacking.

I raised a question with Steve just a minute ago about the deterioration of the stockpile of the Russian missiles. We do not have any figures on that. Perhaps we do not have any way to get it. But Russia is still making, I think, warheads and our last one was made somewhere along about 1985 or 1986, somewhere at that time.

Now, Russia is still deploying new ICBM's, the SS–27. And we have canceled all of our modernization programs. So, that is the thing, among others, that bothers me.

I do not have another question for you, but I am going to see if Senator Biden has. I wish you had not said that about Bidden because I am going to make the mistake every time.

Senator BIDEN. I do not have any further questions. I would just like to thank the Secretary. He has always been available.

The CHAIRMAN. You bet.

Senator BIDEN. There are some of us—I suspect all of us here—who appreciate the opportunity of being able to pick up the phone and call you as we do. I would really like to explore with you, Mr. Secretary, over the next couple months, at some point—and if you would be willing to see me, up in your neck of the woods—the combination of some imaginative diplomacy here, coupled with a missile defense initiative and coupled with arms reductions. It seems

to me that the debate has devolved to those like me who are portrayed as clinging to the theological touchstone of nuclear theory here, and that is ABM Treaty, and those who have always believed it was a bad idea—and I am not characterizing you in what I am about to say, Mr. Chairman—those who believe that the answer is elimination of it and going full bore on a missile defense.

It seems to me that there is a need for a new strategic concept here that incorporates more than merely the judgment that we go full bore on a national missile defense system and abandon the ABM Treaty or stick with the ABM Treaty and not move forward on any missile defense system.

Again, I know you think a lot about these things. I would like to come up and just buy you lunch and listen to you talk about it. I mean it sincerely.

Dr. KISSINGER. I would be delighted, Senator, to do this. I would always strongly support some bipartisan approach that enables us to account for this new world that has emerged, which is no longer bipolar and in which different parts of the world really operate on different principles quite often. I think that is an important challenge, but I do believe that missile defense will have to be a part of it.

Senator BIDEN. Thank you.

The CHAIRMAN. So do I. As Joe said and I have said, you have always been so good about making yourself available. I know that there are other things that you need to be doing than coming here this morning, but I appreciate that.

Maybe sometime we can not have a formal appearance but maybe have lunch with a bunch of Senators who are interested, have a bowl of soup and just talk.

Dr. KISSINGER. It would be a privilege.

The CHAIRMAN. So, I will be in touch with you about that.

I think you know I appreciate your coming here this morning and I appreciate your willingness and readiness to be helpful.

Senator Hagel.

Senator HAGEL. Mr. Secretary, thank you. Stay well. We are going to need you in the next few years. Happy Birthday.

The CHAIRMAN. And Happy Birthday to you. I cannot sing or I would sing it to you.

We stand in recess.

[Whereupon, at 11:53 a.m., the committee adjourned, to reconvene at 3 p.m., September 16, 1999.]

FOREIGN MISSILE DEVELOPMENTS AND THE BALLISTIC MISSILE THREAT TO THE UNITED STATES THROUGH 2015

THURSDAY, SEPTEMBER 16, 1999

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
Washington, DC.

The committee met, pursuant to notice, at 3 p.m., in room SD–419, Dirksen Senate Office Building, Hon. Jesse Helms (chairman of the committee) presiding.

Present: Senator Helms.

The CHAIRMAN. The committee will come to order. The Ranking Minority Senator, Senator Biden, hopes that he will be able to come a little later.

Today the Senate Foreign Relations Committee welcomes Mr. Robert Walpole, National Intelligence Officer for Strategic and Nuclear Programs. He has graciously agreed to testify today in an open, unclassified session regarding the recent National Intelligence Estimate on Foreign Missile Threats to the United States. I might add parenthetically that this is a subject that the public, that is to say the American people, need to know more about than they know, and to understand better than they do.

In any case, sir, I will state at the outset that you have done outstanding work. The unclassified report is clearly and succinctly written and possesses none of the criminally misleading caveats and hidden assumptions of previous estimates that I can identify. For these reasons, the National Intelligence Estimate will prove of enormous worth to the U.S. Senate, and I thank you in advance for that.

Now then, four and a half years ago, the President, Mr. Clinton, vetoed critical Republican legislation to deploy immediately a national missile defense, and he used as a pretext as I recall a foreign-drafted, shortsighted and in my personal view politically skewed intelligence estimate 9519. Now, I and many other Republican Senators, and some Democrats, decried the President's incredible position both before this committee and on the Senate floor, citing the fact that North Korea was known, and even in 1995, to be developing a missile capable of striking U.S. cities.

Four and a half years have passed since then, and every day since the President killed the concept of the deployment of a missile defense for the American people, the North Koreans have been working overtime on their missiles. Now, sir, I wish you had been on the job in 1995. Certainly if you had been, the President would

have been unable to use the intelligence community as he did as an excuse. Mr. Walpole today will tell this committee, the U.S. Senate, and the American people, I believe, that one of our worst fears has materialized, and he will make absolutely clear, I believe, that North Korea right now could convert its Taepo Dong–I missile to drop anthrax on the United States and that an even larger, more precise missile could be flight tested at any time.

Now, in anticipation of receiving your shocking report, I find myself deeply regretful that the Clinton-Gore administration has squandered so much time that should have been spent deploying a system to protect the American people. Instead of fulfilling his highest constitutional obligation, to protect the American people, the President has spent his time in various dalliances, some well-known, some not, not the least has been his "love affair" with the ABM Treaty.

And in addition to his thorough appraisal of the rapidly emerging missile threat, there is one other important aspect of the National Intelligence Estimate, and that is on page 16, I believe it is. It states unequivocally, and I am quoting, "Pakistan has M–11 SRBMs, short range ballistic missiles, from China." Now, this wording expresses the absolute certainty that China has, in fact, transferred M–11 missiles to Pakistan.

Now, this statement by the intelligence community stands in stark contrast to the evasive pronouncements of officials of the State Department, who have desperately sought to avoid their legal obligation to impose missile sanctions upon Communist China for this transfer. I point out, for instance, that on April 10, 1997, in a hearing before the Governmental Affairs Committee, Senator Levin asked Robert Einhorn, the Deputy Assistant Secretary of State for Nonproliferation a question, and Levin's question was, "Have you concluded whether or not full missiles, in effect, were transferred?"

And in response, Mr. Einhorn delivered the following statement which I regard as gobbledygook. He said, "We have not reached a conclusion based on the high standard of evidence that we require that complete missiles were transferred. We have not concluded one way or another because our level of confidence is not sufficient to take a decision that has very far-reaching consequences." If you can make heads or tails of that statement, I want to see you after this meeting.

In any case, first we wish that the Department of State had been as candid and forthright as you and your experts have been, but I must say to all who are listening, enough is enough. The National Intelligence Estimate is the last straw. I could not agree more with then-CIA Director John Deutch, who once said about the M–11 issue, "If you are not satisfied with the intelligence on this, you will never be satisfied with any intelligence on anything else." Quote, unquote.

Now then, I am taking up more time than I intended, but let it be clear that I am not inclined to stand back in silence, as any administration, including the present one, continues to dodge the Arms Export Control Act and break the law without suffering the consequences.

The NIE makes it absolutely clear that there is zero doubt about China's having transferred M–11 missiles to Pakistan, and I want to make it absolutely clear here today that from here on out, the administration has a choice. The administration can adhere to the MTCR law, which it has been flouting for the past 6 years, or it can make do without any Assistant Secretary of State for Nonproliferation Affairs. That I think I can assure you.

The choice is plain and simple. On the day that the Clinton-Gore administration demonstrates that it deserves an Assistant Secretary on these issues, we will try to cooperate then, but not before.

[The prepared statement of Senator Helms follows:]

PREPARED STATEMENT OF SENATOR JESSE HELMS

Today the Senate Foreign Relations Committee welcomes Robert Walpole, National Intelligence Officer for Strategic and Nuclear Programs. Mr. Walpole has graciously agreed to testify today in an open, unclassified session regarding the recent National Intelligence Estimate on Foreign Missile Threats to the United States.

Mr. Walpole, I will state at the outset that—as the National Intelligence Officer for this estimate—you have done outstanding work. The unclassified report is clearly and succinctly written, and possesses none of the criminally-misleading caveats and hidden assumptions of previous estimates. I especially applaud your decision to (1) assess the threat to the *entire* United States (as opposed to the *continental* United States); (2) to include China and Russia in your "key judgment" of the threat; and (3) to adopt the reasonable standard of "first flight test" as the initial indicator of a threat. For these reasons, and others, this National Intelligence Estimate will prove of enormous worth to the United States Senate.

Four and a half years ago, President Clinton vetoed critical Republican legislation to deploy immediately a national missile defense. In his veto message for the 1996 Defense Authorization Act, President Clinton flatly and explicitly objected to having a missile defense to protect the American people. At that time, I—and many other Republican Senators—found beyond belief the fact that the President of the United States could arrive at such a decision, all in the name of a defunct arms control treaty.

I decried the President's incredible position both before this committee and on the Senate floor, citing the fact that North Korea was *known,* even in 1995, to be developing a missile capable of striking U.S. cities.

Four and a half years have passed since then, and every day since the President killed the deployment of a missile defense, the North Koreans have been working overtime on their missiles.

Mr. Walpole today will tell this committee, the U.S. Senate, and the American people, that one of our worst fears has materialized. He will make absolutely clear that North Korea, right now, could convert its Taepo Dong–I missile to drop anthrax on the United States, and that an even larger, more precise missile could be flight tested at any time.

In anticipation of receiving Mr. Walpole's shocking report, I find myself deeply regretful that the Clinton-Gore administration has squandered so much time that should have been spent deploying a system to protect the American people. Instead of fulfilling his highest Constitutional obligation—to protect the American people—the President spent his time in various dalliances, not the least of which has been his "love affair" with the ABM Treaty.

I remind my colleagues that President Clinton made a legally-binding commitment to the Senate on May 14, 1997 (well over 2 years ago) to submit a revised ABM Treaty to the Senate. So far, Mr. Clinton has refused to keep his promise. And until we have these documents, and the opportunity to clear away the ABM Treaty obstacle, the American people will remain defenseless against incoming missile attacks.

In addition to its thorough appraisal of the rapidly emerging missile threat, there is one other important aspect of the National Intelligence Estimate upon which I feel obliged to comment: on page 16 the NIE states unequivocally: "Pakistan has M–11 SRBM's [short range ballistic missiles] from China." This wording expresses the *absolute certainty* of the U.S. intelligence community that China has, in fact, transferred M–11 missiles to Pakistan. (This statement builds upon previous testimony by Dr. Gordon Oehler, who testified that the intelligence community was "virtually certain" that complete M–11's had been transferred. I also note that a 1998 publica-

tion of the National Air Intelligence Center specifically lists Pakistan as possessing "fewer than 50" M–11 missile systems.)

These statements by the intelligence community stand in stark contrast to the evasive pronouncements of officials of the State Department, who have desperately sought to avoid their legal obligation to impose missile sanctions upon Communist China for this transfer.

I point out, for instance, that on April 10, 1997, during a hearing before a Governmental Affairs subcommittee, Senator Levin asked Robert Einhorn, the Deputy Assistant Secretary of State for Nonproliferation, "[H]ave you concluded whether or not full missiles, in effect, were transferred?" In response, Mr. Einhorn offered the following goobledigook: "We have not reached a conclusion based on the high standard of evidence that we require that complete missiles were transferred. . . . We have not concluded one way or another because our level of confidence is not sufficient to take a decision that has very far-reaching consequences."

Well, Mr. Walpole, I fervently wish that the Department of State had been as candid and forthright as you and your experts. But I must say to all who will listen: *enough is enough.* The National Intelligence Estimate is the last straw. I could not agree more with then-CIA Director John Deutch, who once said about the M–11 issue: "If you're not satisfied with the intelligence on this, you will never be satisfied with any intelligence on anything else."

I am not inclined to stand back in silence as the Clinton administration continues dodging the Arms Export Control Act and breaking the law without suffering the consequences. The National Intelligence Estimate on Missile Threats makes it *absolutely clear* that there is zero doubt about China's having transferred M–11 missiles to Pakistan. I want to make it *absolutely clear* here today, from here on out, the administration has a choice.

The administration can adhere to the MTCR law which it has been flouting for the past 6 years, or it can make do without any Assistant Secretary of State for Nonproliferation Affairs. The choice is plain and simple. On the day that the Clinton-Gore administration demonstrates that it deserves an Assistant Secretary for these issues, we will try to cooperate.

With that said, Mr. Walpole, I welcome you here today, and I turn to Senator Biden for his comments.

The CHAIRMAN. And with that, sir, we again welcome you here today, and we will await Senator Biden's statement after you have completed. You may proceed.

STATEMENT OF ROBERT D. WALPOLE, NATIONAL INTELLIGENCE OFFICER FOR STRATEGIC AND NUCLEAR PROGRAMS, CENTRAL INTELLIGENCE AGENCY

Mr. WALPOLE. Thank you, Mr. Chairman. I appreciate the opportunity to appear before you today in an open session to discuss the intelligence community's National Intelligence Estimates. We refer to them as NIE's. It is just shorter. This one covers the ballistic missile threat through the year 2015. Following that statement, I will try to answer any questions you have without providing important information to foreign countries on how they could hide more weapons developments from us. Thus, you will understand that in some cases, I may not be able to answer a question more fully than I really would like to. In such cases, though, I can provide a classified answer for the record if you like.

My statement for the record, which I think you have a copy of, does not cover all of the important information that the unclassified paper does.

The CHAIRMAN. Suppose we make that officially a part of the record.

Mr. WALPOLE. I was going to ask that both of those in fact be included as part of the record. I am going to just summarize the statement for the record.

Congress has requested the intelligence community to provide annual reports on ballistic missile developments worldwide. We did the first of those reports in March 1998, and then following the October 1998 launch of the North Korean Taepo Dong–I space launch vehicle, we did an update memorandum. We did not feel that that could wait for this NIE to be covered.

Our 1999 report, as you have noted, is a National Intelligence Estimate, in that we examined future capabilities for several countries that have or have had ballistic missiles or space launch programs or even the intentions.

Our approach for this year's report differs in three major ways from previous reports. First, we project the missile developments through the year 2015. Prior reports have only gone to 2010, so we have added five more years for development. That is important.

Second, with expertise inside and outside the intelligence community, we examined ways that a country could acquire an ICBM and assessed the likelihood that they would do so. Earlier intelligence reports only focused on what the country is likely to do, our best estimates of what they would like to do. The Rumsfeld Commission report only looked at what a country could do and didn't discuss likelihoods. We thought it was time the two were put together in one document so that people could see what they were capable of doing, these countries were capable, as well as see what we judged they were likely to do. Although I will note, in fairness to one agency, they believe the prominence given by this approach to missiles countries could develop gives more credence than is warranted to developments that may prove implausible.

Third, countries could threaten to use ballistic missiles against the United States following very limited flight testing, in fact, only one test. So we used the first successful flight test to indicate an initial threat availability. A nation may decide that the ability to threaten with one or two missiles is sufficient for its needs. I should note that our projections of future ICBM developments are based on limited information and engineering judgment. Adding to our uncertainty is that many countries surround their ballistic missile programs with secrecy and some employ deception. Recall that we did not know that the Taepo Dong–I had a third stage until a few days after the flight. That is one of the reasons that we have to keep some of this information classified. I do not think anybody in the American public wants us to tell the foreigners how to hide more from us. They hide plenty now.

I should also note that we incorporated the results of several expert academic and contractor efforts, including recommendations from former members of the Rumsfeld Commission, assistance from politico-economic experts to help examine potential ICBM sales, and assistance from multiple missile contractors to help postulate potential ICBM configurations that rogue states could pursue.

Let me mention a couple of comments about the proliferation environment we find ourselves in. Worldwide ballistic missile proliferation has continued to evolve during the past 18 months. The capabilities of the missiles that we are seen are growing, a fact underscored by North Korea's Taepo Dong launch. The number of missiles is increasing. Medium and short range ballistic missiles already pose a significant threat to U.S. interests, military forces and

allies overseas. We have seen increased trade and cooperation among countries that have been recipients of the missile technologies, and finally, some countries continue to work on longer range missiles, including ICBM's.

Projecting political and economic developments that could alter the nature of the missile threat many years into the future is virtually impossible. The threat ultimately will depend on our changing relations with foreign countries, the political and economic situation in those countries and other factors that we cannot predict with confidence.

I note, for example, that 15 years ago, the United States and the former Soviet Union were superpower adversaries in the midst of the cold war posturing forces against each other in Europe. 15 years ago, Iraq shared some significant common interests with the United States. Finally, we do not know if some of the countries that, I will not mention names, would even exist 15 years from now or even as suppliers of technology.

Understanding those uncertainties, we project that during the next 15 years the United States will most likely face a ballistic missile threat from Russia, China, and North Korea, probably from Iran and possibly from Iraq. The Russian threat, although significantly reduced, will continue to be the most robust and lethal, much more so than China's and orders of magnitude more than the threat posed by others.

North Korea, Iran, Iraq, will have fewer ICBM's, probably on the order of few to tens, constrained to smaller payloads. They will be less reliable, less accurate and they will not have the payload capability; I think I mentioned that.

The new missile threats are far different from that of the cold war during the last three decades. During that period, the ballistic threat involved relatively accurate, survivable, reliable missiles deployed in large numbers. By contrast, the new missile threats involve states with considerably fewer missiles, less accuracy, yields, survivability, reliability and payload capability. Even so, they threaten in different ways.

First, although the majority of systems being developed and produced today are short and medium range missiles, North Korea's three-stage Taepo Dong–I space launch vehicle launch demonstrated Pyongyang's potential to cross the ICBM threshold if it develops a survivable weapon for that system. Other nations could cross that threshold during the next 15 years.

Second, many of the countries that are developing longer range missiles probably assess that the threat of their use would complicate American decisionmaking during a crisis. Over the last decade the world has observed that missiles less capable than the ICBM's that the United States and others have deployed can affect another nation's decisionmaking process.

Third, the probability that a missile with a weapon of mass destruction will be used against U.S. forces or interests is higher today than during most of the cold war. Ballistic missiles, for example, were used against U.S. forces during the Gulf war. More nations now have longer range missiles and weapons of mass destruction. While the missiles used in several conflicts over the past two decades did not have weapons of mass destruction, some of the re-

gimes controlling the missiles have exhibited a willingness to use those weapons in other ways.

Thus acquiring long range ballistic missiles armed with weapons of mass destruction probably will enable weaker nations to deter, constrain and harm the United States. The missiles do not need to be deployed in large numbers. They do not need to be highly accurate. They do not need to be highly reliable, because their strategic value is derived primarily from the threat of their use, not their certain outcome of their use. In many ways, such weapons may be viewed more as strategic weapons of deterrence and coercive diplomacy.

The progress of countries in Asia and the Middle East toward acquiring long-range ballistic missiles has been dramatically demonstrated over the past 18 months, most notably, the Taepo Dong–I launch I just mentioned. Pakistan flight tested the 1,300-kilometer range Ghauri missile. Iran tested the 1,300-kilometer range Shahab–3. India recently flight tested the 2,000-kilometer range Agni II and China conducted its first flight test of a mobile ICBM, the DF–31, just last month.

Now let us turn to the threats. On North Korea: After Russia and China, North Korea is the most likely to develop ICBM's capable of threatening the United States during the next 15 years. With an operable third stage and a reentry vehicle capable of surviving ICBM flight, a converted Taepo Dong–I space launch vehicle could deliver a light payload to the United States. In these cases about two-thirds of the payload mass would be required for the reentry vehicle structure. The remaining mass is probably too light for an early generation nuclear weapon, but could deliver a biological or chemical warfare agent.

Most analysts believed that North Korea probably would test a Taepo Dong–II this year unless, as we have now seen, it is delayed for political reasons. A two-stage Taepo Dong–II could deliver a several-hundred-kilogram payload to Alaska and Hawaii and a lighter payload to the western half of the United States. A three-stage Taepo Dong–II could deliver a several hundred kilogram payload anywhere in the United States. North Korea is much more likely to weaponize the more capable Taepo Dong–II than the Taepo Dong–I as an ICBM.

Iran is the next hostile country most capable of testing an ICBM that could deliver a weapon to the United States during the next 15 years. Iran could test an ICBM that could deliver a several hundred kilogram payload to many parts of the United States in the latter half of the next decade using Russian technology and assistance. Iran could pursue a Taepo Dong type ICBM and could test either a Taepo Dong–I or a Taepo Dong–II, possibly with North Korean assistance, in the next 2 years. Iran is likely to test a space launch vehicle by the year 2010 that, once developed, could be converted to an ICBM. Beyond that, analysts differ on the likely timing of Iran's first flight test.

What you will find in our, both the unclassified and the classified papers, we get more agreement on what the countries could do than what they are likely to do. That is because what they could do is based on the infrastructure, what we have seen happen in the past, capabilities. What they are likely to do, we have factors that

are just fraught with a lot of uncertainty, but there is a spread of views on Iran. Some analysts believe that Iran is likely to test an ICBM before 2010 and very likely before 2015, and in fact probably will test a space launch vehicle like the Taepo Dong–I in the next few years. Some analysts believe there is no more than an even chance of an ICBM test from Iran by 2010 and a better than even chance by 2015. And still others believe less than an even chance by 2015.

Now let us shift to Iraq. Although the Gulf war and subsequent U.N. activities destroyed much of Iraq's infrastructure, Iraq could test an ICBM capable of reaching the United States in the next 15 years. After observing North Korean activities, Iraq would likely pursue a three-stage Taepo Dong–II type approach to an ICBM. If they got North Korean assistance with engines, they would be able to do it much faster than if they had to do it on their own. But in either case it would be the latter half in the next decade.

Although much less likely, they could try to test a much less capable ICBM patterned after one of their failed SLV prior to the Gulf war using Scud components or to try to copy a Taepo Dong–I. Now again, analysts differ on likelihood. Assessments include unlikely before the year 2015, likely before 2015, possibly before 2010 if foreign assistance were involved.

Russia's forces are experiencing serious budget constraints, but will remain a cornerstone of their military power. Russia has about 1,000 strategic ballistic missiles with 4,500 warheads. They will maintain as many strategic missiles and warheads as they feel their budget will allow, but it would be well short of START I or START II limits. If Russia ratifies START II with its ban on multiple warheads on ICBM's, it would probably be able to maintain only about half the number of weapons it could maintain without a ban. We judge that an unauthorized or accidental launch of a Russian strategic missile is highly unlikely so long as current technical and procedural safeguards are in place.

Now let me shift to China for a moment. China's doctrine calls for a survivable long-range missile force that can hold a significant portion of the U.S. population at risk in a retaliatory strike. China's current force of about 20 CSS–4's can reach targets all over the United States. China is developing two road-mobile ICBM's. The first I mentioned earlier was tested last month and we are expect they are developing a longer range mobile ICBM to be tested sometime in the next decade to be targeted primarily against the United States. They are also developing the JL–2 submarine launched ballistic missile, which we expect to be tested in the next decade as well.

By the year 2015 China will likely have tens of missiles targeted against the United States, having added a few tens of more survivable land and sea-based mobile ICBM's. When I delivered this paper to the, to a press backgrounder, I was asked what tens meant and what few tens meant. I said I am not going to declassify the numbers we have, but I will say this. Tens is more than 20 because we put the number 20 in there and it is less than 100, and few tens is less than tens. So somewhere in there people can play with the numbers and go with it.

China has had the technical capability to develop multiple-RV payloads for 20 years, has not done so, but if they wanted one, they could use the reentry vehicle from the recently tested mobile ICBM and have either a multiple-RV or a multiple independently targeted RV system in a few years. But we expect that MIRV'ing a mobile system would take many years. China is also significantly improving its theater missile capabilities opposite Taiwan and is significantly increasing the number of missiles deployed off of Taiwan. We assess that an unauthorized or unaccidental launch of a Chinese strategic missile is highly unlikely.

You have mentioned foreign assistance. I mention that as well. It continues to have demonstrable effects on missile defenses around the world. Russian missile assistance continues to be significant. China continues to contribute to missile programs in some countries. North Korea may expand its sales and some recipients are now sharing more with others and are pursuing cooperative missile ventures.

Moreover, changes in the regional and international security environment, in particular, Iran's Shahab–3 test and the Indian and Pakistani missile tests and nuclear tests are probably fueling regional interest in missiles and weapons of mass destruction. Sales of ICBM's and space launch vehicles which have inherent ICBM capabilities could further increase the threat.

North Korea continues to demonstrate a willingness to sell. Projecting the likelihood of a Russian or Chinese sale 15 years into the future is very difficult, nevertheless, we continue to judge it unlikely that Moscow or Beijing would sell a complete ICBM, SLV or technologies tantamount to an ICBM. That will all be driven by really unpredictable future economic conditions, how Moscow will perceive its position vis-a-vis the West, and future Russian and Chinese perceptions of U.S. ballistic missile defenses.

A lot has been said about warning times and the intelligence community's ability to warn. That ability depends highly on our collection capabilities from country to country. Our monitoring and warning about North Korea's efforts is an excellent case study on warning. In 1994, we were able to give 5 years' warning of North Korea's efforts to acquire an ICBM capability. In hindsight, however, we had overestimated when North Korea would test both the Taepo Dong–I and the Taepo Dong–II. We had correctly projected the timing of their developing a system that could deliver small payloads to the United States, but we had underestimated the capabilities of the Taepo Dong–I, primarily because we missed the third stage. North Korea demonstrated intercontinental range booster capabilities roughly on the timetable we projected in 1994 but with a completely unanticipated vehicle configuration. Thus detecting or suspecting a missile development program and projecting a timing of the emerging threat, although difficult, are easier than forecasting the missile's performance or configuration.

We continue to judge that we may not be able to provide much warning if a country purchased an ICBM or if the country already had a space launch vehicle. Nevertheless, we would view a space launched vehicle in the hands of a hostile country as a potential ICBM program. We also judge that we may not be able to provide

much, if any, warning of a forward-based ballistic missile or cruise missile threat.

Several other means for delivering weapons of mass destruction have probably been devised. Some more reliable than the ICBM's we have talked about. Most of these means, however, do not provide the same prestige and degree of deterrence or coercive diplomacy associated with long-range missiles. Several countries would be capable of deploying a short-range ballistic missile or if they develop one, a cruise missile on a surface ship. If they are not worried about accuracy, it is not that difficult and even reduced accuracy in many cases would be better than some of the systems that we have been looking at for ICBM's.

Finally, I should make some comments about nonmissile threats. Although nonmissile means of delivering weapons do not provide the same prestige, degree of deterrence or coercive diplomacy associated with an ICBM, such options are of significant concern. Countries or nonstate actors could pursue nondelivery missile options, most of which are less expensive than ICBM's, can be covertly developed and employed, probably would be more reliable, probably would be more accurate than emerging ICBM's during the next 15 years, probably would be more effective in disseminating biological warfare agent and certainly would avoid missile defenses.

Foreign nonstate actors, including some known terrorist or extremist groups, have used, possessed, or are interested in weapons of mass destruction or the materials to build them. Most of these groups have threatened the United States or its interests. We cannot count on obtaining warning of all planned terrorist attacks, despite the high priority we assign to this goal.

The proliferation of medium-range missiles, driven primarily by North Korean No Dong sales, has created an immediate, serious and growing threat to U.S. forces, interests and allies in the Middle East and Asia, and it has significantly altered the strategic balances in these regions. As you noted, our report said that Pakistan has M–11 SRBM's from China and Ghauri MRBM's from North Korea. We assess that both may have a nuclear role. India has Prithvi I SRBM's and recently began testing the Agni II MRBM. We assess, again, both may have a nuclear role.

We judge that countries developing missiles view their regional concerns as a primary factor in pursuing the programs. They see short- and medium-range missiles not only as deterrents, but as force-multiplying weapons of war.

On penetration agent countermeasures, we were asked specifically to address that in this year's annual report. We assess that countries developing ballistic missiles would also develop various responses to U.S. theater and national defenses. Russia and China each have developed numerous countermeasures and are probably willing to sell some of the technologies.

Many countries, such as North Korea, Iran, Iraq, probably would rely initially on readily available technology—separating RV's, spin-stabilized RV's, RV reorientation, radar absorbing material, booster fragmentation, low-power jammers, chaff, and simple balloon decoys to develop these penetration aids and countermeasures. These countries could develop countermeasures based on these technologies by the time they flight test their missiles.

Finally, I should close with a comment on espionage. Foreign espionage and other collection efforts are likely to increase. We did the damage assessment earlier this year. I was responsible for that, and we did an unclassified set of key findings on that. In that we noted that China has obtained significant nuclear weapons information from espionage, contact with scientists from the United States and other countries, publications and conferences, unauthorized media disclosures, and declassified U.S. weapons information. We assess that China, Iran and others are also targeting U.S. missile information.

So with that, I am ready to take whatever questions you have and I am sorry that took a while to go through, but I think it is kind of important to get the whole story.

[The prepared statement of Mr. Walpole follows:]

PREPARED STATEMENT OF ROBERT D. WALPOLE

Mr. Chairman, members of the committee, I appreciate the opportunity to appear before you today to discuss, in an open session, the Intelligence Community's recent National Intelligence Estimate (NIE) on the ballistic missile threat to the United States through the year 2015. Following my statement, I will try to answer your questions without providing important information to countries seeking to hide weapons developments from us. Thus, you'll understand that if I cannot answer a question more fully, it's not that I do not want to. In such cases, I could provide a classified answer for the record if you would like.

My statement for the record does not cover all the important material published in our recent unclassified paper on this subject. Moreover, in the interest of time I would like to summarize my statement verbally, so I would like to submit both the unclassified paper and my written statement for the record.

Congress has requested that the Intelligence Community produce annual reports on ballistic missile developments worldwide. We produced the first report in March 1998 and an update memorandum in October 1998 on the August North Korean launch of its Taepo Dong–I space launch vehicle. Our 1999 report is a classified NIE, but we summarized it in the unclassified paper I just mentioned. You have copies of that paper for this hearing.

This year we examined future capabilities for several countries that have or have had ballistic missiles or space launch programs or intentions. Our approach for this year's report differs with past efforts in three major ways.

- First, we have projected missile developments through the year 2015; previous reports projected the threat through 2010. Thus, we have added five years of further development.
- Second, using intelligence information and expertise inside and outside the Intelligence Community, we examined scenarios by which a country could acquire an ICBM and assessed the likelihood of various scenarios. (Earlier intelligence reports have focused on scenarios we judged as most likely; the Rumsfeld report focused only on what a country could do. We decided it was time to combine both approaches, although one agency believes that the prominence given by this approach to missiles countries "could" develop gives more credence than is warranted to developments that may prove implausible.) We did not attempt to address all of the potential political, economic, and social changes that could occur. Rather, we analyzed the level of success and the pace countries have experienced in their development efforts, technology transfers, political motives, military incentives, and economic resources. From that basis, we projected possible and likely missile developments by 2015 independent of significant political and economic changes.
- Third, because countries could threaten to use ballistic missiles following limited flight-testing and before a missile is deployed in the traditional sense, we use the first successful flight test to indicate an "initial threat availability." Emerging long-range missile powers do not appear to rely on robust test programs to ensure a missile's accuracy and reliability or to intend to deploy a large number of long-range missiles to dedicated, long-term sites. A nation may decide that the ability to threaten with one or two missiles is sufficient. With shorter flight test programs—perhaps only one test—and potentially simple deployment schemes, the time between the initial flight test and the availability

of a missile for military use is likely to be shortened. Using the date of the first projected flight test as the initial indicator of the threat recognizes that an adversary armed with even a single missile capable of delivering a weapon of mass destruction may consider it threatening. Using the first flight test also results in threat projections a few years earlier than those based on traditional definitions of deployment.

I should note that our projections are based largely on limited information and engineering judgment. Adding to our uncertainty is that many countries surround their ballistic missile programs with secrecy, and some employ deception. Although some key milestones are difficult to hide, we may miss others, at least until flight testing; recall that we did not know until its launch that North Korea had acquired a third stage for its Taepo Dong–I.

I should also note that we incorporated the results of several expert, academic and contractor efforts, including the recommendations of former members of the Commission to Access the Ballistic Missile Threat to the United States, assistance from politico-economic experts to help examine future environments that might foster ICBM sales, and the expertise of missile contractors to help postulate potential ICBM configurations others could pursue.

THE EVOLVING MISSILE THREAT IN THE CURRENT PROLIFERATION ENVIRONMENT

Worldwide ballistic missile proliferation has continued to evolve during the past 18 months. The capabilities of the missiles are growing, a fact underscored by North Korea's Taepo Dong–I launch. The number of missiles is increasing. Medium- and short-range ballistic missile systems, particularly if armed with weapons of mass destruction, already pose a significant threat to U.S. interests, military forces, and allies overseas. We have seen increased trade and cooperation among countries that have been recipients of missile technologies. Finally, some countries continue to work toward longer-range systems, including ICBMs.

Projecting political and economic developments that could alter the missile threat many years into the future is virtually impossible. The threat facing the United States in the year 2015 will depend on our changing relations with foreign countries, the political situation within those countries, economic factors, and numerous other factors that we cannot predict with confidence.

- For example, 15 years ago the United States and Soviet Union were superpower adversaries in the midst of the Cold War, with military forces facing off in central Europe and competing for global power.
- Fifteen years ago Iraq shared common interests with the United States.
- Finally, we do not know whether some of the countries of concern will exist in 15 years.

Understanding the uncertainties, we project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq. The Russian threat, although significantly reduced, will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that potentially posed by the others, whose missiles are likely to be fewer in number—probably a few to tens, constrained to smaller payloads, and less reliable and accurate.

The new missile threats confronting the United States are far different from the Cold War threat during the last three decades. During that period, the ballistic missile threat to the United States involved relatively accurate, survivable, and reliable missiles deployed in large numbers. Soviet—and to a much lesser extent Chinese—strategic forces threatened, as they still do, the potential for catastrophic, nation-killing damage. By contrast, the new missile threats involve states with considerably fewer missiles with less accuracy, yield, survivability, reliability, and range-payload capability than the hostile strategic forces we have faced for 30 years. Even so, the new systems are threatening, but in different ways.

- First, although the majority of systems being developed and produced today are short- or medium-range ballistic missiles, North Korea's three-stage Taepo Dong–I SLV demonstrated Pyongyang's potential to cross the ICBM threshold if it develops a survivable weapon for the system. Other potentially hostile nations could cross that threshold during the next 15 years.
- Second, many of the countries that are developing longer-range missiles probably assess that the threat of their use would complicate American decision-making during crises. Over the last decade, the world has observed that missiles less capable than the ICBMs the United States and others have deployed can affect another nation's decision-making process.

- Third, the probability that a missile with a weapon of mass destruction will be used against U.S. forces or interests is higher today than during most of the Cold War. Ballistic missiles, for example, were used against U.S. forces during the Gulf war. More nations now have longer-range missiles and weapons of mass destruction. Missiles have been used in several conflicts over the past two decades, although not with weapons of mass destruction. Nevertheless, some of the regimes controlling these missiles have exhibited a willingness to use such weapons.

Thus, acquiring long-range ballistic missiles armed with a weapon of mass destruction probably will enable weaker countries to do three things that they otherwise might not be able to do: deter, constrain, and harm the United States. To achieve these objectives, the missiles need not be deployed in large numbers; with even a few such weapons, these countries would judge that they had the capability to threaten at least politically significant damage to the United States or its allies. They need not be highly accurate; the ability to target a large urban area is sufficient. They need not be highly reliable, because their strategic value is derived primarily from the implicit or explicit threat of their use, not the near certain outcome of such use. Some of these systems may be intended for their political impact as potential terror weapons, while others may be built to perform more specific military missions, facing the United States with a broad spectrum of motivations, development timelines, and resulting hostile capabilities. In many ways, such weapons are not envisioned at the outset as operational weapons of war, but primarily as strategic weapons of deterrence and coercive diplomacy.

The progress of countries in Asia and the Middle East toward acquiring longer-range ballistic missiles has been dramatically demonstrated over the past 18 months:

- Most notably, North Korea's three-stage Taepo Dong–I SLV has inherent, albeit limited, capabilities to deliver small payloads to ICBM ranges. The much more capable Taepo Dong–II could be flight tested this year, unless it is delayed for political reasons.
- Pakistan flight-tested its 1,300 km range Ghauri missile, which it produced with North Korean assistance.
- Iran flight-tested its 1,300 km range Shahab–3—a version of North Korea's No Dong, which Iran has produced with Russian assistance.
- India flight-tested its Agni II MRBM, which we estimate will have a range of about 2,000 km.
- China conduced the first flight test of its DF–31 mobile ICBM in August 1999; it will have a range of about 8,000 km.

POTENTIAL ICBM THREATS TO THE UNITED STATES FROM FIVE COUNTRIES

North Korea. After Russia and China, North Korea is the most likely to develop ICBMs capable of threatening the United States during the next 15 years.

- With an operable third stage and a reentry vehicle capable of surviving ICBM flight, a converted Taepo Dong–I SLV could deliver a light payload to the United States. In these cases, about two-thirds of the payload mass would be required for the reentry vehicle structure. The remaining mass is probably too light for an early generation nuclear weapon but could deliver biological or chemical (BW/CW) warfare agent.
- Most analysts believe that North Korea probably will test a Taepo Dong–II this year, unless delayed for political reasons. A two-stage Taepo Dong–II could deliver a several-hundred kilogram payload to Alaska and Hawaii, and a lighter payload to the western half of the United States. A three-stage Taepo Dong–II could deliver a several-hundred kilogram payload anywhere in the United States.
- North Korea is much more likely to weaponize the more capable Taepo Dong–II than the three-stage Taepo Dong–I as an ICBM.

Iran. Iran is the next hostile country most capable of testing an ICBM capable of delivering a weapon to the United States during the next 15 years.

- Iran could test an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the latter half of the next decade, using Russian technology and assistance.
- Iran could pursue a Taepo Dong-type ICBM and could test a Taepo Dong–I or Taepo Dong–II-type ICBM, possibly with North Korean assistance, in the next few years.

- Iran is likely to test an SLV by 2010 that—once developed-could be converted into an ICBM capable of delivering a several-hundred kilogram payload to the United States.
- Beyond that, analysts differ on the likely timing of Iran's first flight test of an ICBM that could threaten the United States. Assessments include:

  —likely before 2010 and very likely before 2015 (noting that an SLV with ICBM capabilities will probably be tested within the next few years);

  —no more than an even chance by 2010 and a better than even chance by 2015;

  —and less than an even chance by 2015.

Iraq. Although the Gulf war and subsequent United Nations activities destroyed much of Iraq's missile infrastructure, Iraq could test an ICBM capable of reaching the United States during the next 15 years.

- After observing North Korean activities, Iraq most likely would pursue a three-stage Taepo Dong–II approach to an ICBM (or SLV), which could deliver a several-hundred kilogram payload to parts of the United States. If Iraq could buy a Taepo Dong–II from North Korea, it could have a launch capability within months of the purchase; if it bought Taepo Dong engines, it could test an ICBM by the middle of the next decade. Iraq probably would take until the end of the next decade to develop the system domestically.
- Although much less likely, most analysts believe that if Iraq were to begin development today, it could test a much less capable ICBM in a few years using Scud components and based on its prior SLV experience or on the Taepo Dong–I.
- Analysts differ on the likely timing of Iraq's first flight test of an ICBM that could threaten the United States. Assessments include unlikely before 2015; and likely before 2015, possibly before 2010—foreign assistance would affect the capability and timing.

Russia. Russia's strategic offensive forces are experiencing serious budget constraints but will remain the cornerstone of its military power.

- Russia currently has about 1,000 strategic ballistic missiles with 4,500 warheads.
- Russia will maintain as many strategic missiles and associated nuclear warheads as it believes it can afford, but well short of START I or II limitations.

  —If Russia ratifies START II, with its ban on multiple warheads on ICBMs, it would probably be able to maintain only about half of the weapons it could maintain without the ban.
- We judge that an unauthorized or accidental launch of a Russian strategic missile is highly unlikely so long as current technical and procedural safeguards are in place.

China. Chinese strategic nuclear doctrine calls for a survivable long-range missile force that can hold a significant portion of the U.S. population at risk in a retaliatory strike.

- China's current force of about 20 CSS–4 ICBMs can reach targets in all of the United States.
- Beijing also is developing two new road-mobile, solid propellant ICBMs.

  —It conducted the first flight test of the mobile DF–31 ICBM in August 1999; we judge it will have a range of about 8,000 km and will be targeted primarily against Russia and Asia.

  —We expect a test of a longer range mobile ICBM within the next several years; it will be targeted primarily against the United States.
- China is developing the JL–2 SLBM, which we expect to be tested within the next decade. The JL–2 probably will be able to target the United States from launch areas near China.
- By 2015, China will likely have tens of missiles targeted against the United States, having added a few tens of more survivable land- and sea-based mobile missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage.
- China has had the technical capability to develop multiple RV payloads for 20 years. If China needed a multiple-RV (MRV) capability in the near term, Beijing could use a DF–31-type RV to develop and deploy a simple MRV or multiple independently targetable reentry vehicle (MIRV) for the CSS–4 in a few years. MIRVing a future mobile missile would be many years off.
- China is also significantly improving its theater missile capabilities and is increasing the size of its SRBM force deployed opposite Taiwan.

- We assess that an unauthorized launch of a Chinese strategic missile is highly unlikely.

FOREIGN ASSISTANCE

Foreign assistance continues to have demonstrable effects on missile advances around the world.

- Russian missile assistance continues to be significant.
- China continues to contribute to missile programs in some countries.
- North Korea may expand sales.
- Some countries that have been recipients of technology are now sharing more amongst themselves and are pursuing cooperative missile ventures.

Moreover, changes in the regional and international security environment—in particular, Iran's Shahab–3 missile test and the Indian and Pakistani missile and nuclear tests—probably will fuel missile and WMD interests in the region.

Sales of ICBMs or SLVs, which have inherent ICBM capabilities, could further increase the number of countries that will be able to threaten the United States. North Korea continues to demonstrate a willingness to sell its missiles. Projecting the likelihood of a Russian or Chinese ICBM transfer 15 years into the future is very uncertain, driven in part by unpredictable future economic conditions, how Moscow will perceive its position vis-a-vis the West, and future Russian and Chinese perceptions of U.S. ballistic missile defenses. Nevertheless, we continue to judge it unlikely that Moscow or Beijing would sell a complete ICBM., SLV, or the technologies tantamount to a complete ICBM.

WARNING TIMES AND OUR ABILITY TO FORECAST MISSILE DEVELOPMENT AND ACQUISITION

Our ability to provide warning for a particular country depends highly on our collection capabilities. For some countries, we have relatively large bodies of evidence on which to base our assessments; for others, our knowledge of the programs being pursued is limited. Our monitoring and warning about North Korea's efforts to achieve an ICBM capability constitute an important case study on warning. In 1994, we were able to give five years warning of North Korea's efforts to acquire an ICBM capability. In hindsight, however, we had overestimated that North Korea would begin flight testing the Taepo Dong–I and Taepo Dong–II missiles years earlier than turned out to be the case; projected correctly the timing of a North Korean missile with the potential to deliver payloads to the ICBM range of 5,500-km; and underestimated the capabilities of the Taepo Dong–I by failing to anticipate the use of the third stage.

North Korea demonstrated intercontinental-range booster capabilities roughly on the timetable we projected in 1994, but with a completely unanticipated vehicle configuration. Thus, detecting or suspecting a missile development program and projecting the timing of the emerging threat, although difficult, are easier than forecasting the vehicle's configuration or performance with accuracy. Furthermore, countries practice denial and deception to hide or mask their intentions—for example, testing an ICBM as a space launch vehicle.

We continue to judge that we may not be able to provide much warning if a country purchased an ICBM or if a country already had an SLV capability. Nevertheless, the initiation of an SLV program is an indicator of a potential ICBM program. We also judge that we may not be able to provide much, if any, warning of a forward-based ballistic missile or land-attack cruise missile (LACM) threat to the United States. Moreover, LACM development can draw upon dual-use technologies. We expect to see acquisition of LACMs by many countries to meet regional military requirements.

SPACE LAUNCH VEHICLE (SLV) CONVERSION

Nations with SLVs could convert them into ICBMs relatively quickly with little or no chance of detection before the first flight test. Such a conversion would include the development of a reentry vehicle (RV).

- If the country had Russian or Chinese assistance in a covert development effort, it could have relatively high confidence that a covertly-developed RV would survive and function properly.
- If a country developed an untested RV without foreign assistance, its confidence would diminish, but we could not be confident it would fail. Significant amounts of information about reentry vehicles are available in open sources. The developing country could have some confidence that the system would survive re-

entry, although confidence in its proper delivery of the weapon would be lower without testing.

ALTERNATIVE THREATS TO THE UNITED STATES

Several other means to deliver WMD to the United States have probably been devised, some more reliable than ICBMs that have not completed rigorous testing and validation programs. The goal of an adversary would be to move the weapon within striking distance without a long-range ICBM. Most of these means, however, do not provide the same prestige and degree of deterrence or coercive diplomacy associated with long-range missiles, but they might be the means of choice for terrorists.

Several countries are technically capable of developing a missile-launch mechanism to use from forward-based ships or other platforms to launch SRBMs and MRBMs, or land-attack cruise missiles against the United States. Some countries may develop and deploy a forward-based system during the period of the next 15 years. A short- or medium-range ballistic missile could be launched at the United States from a forward-based sea platform positioned within a few hundred kilometers of U.S. territory. If the attacking country were willing to accept significantly reduced accuracy for the missile, forward-basing on a sea-based platform would not be a major technical hurdle. The reduced accuracy in such a case, however, would probably be better than that of some early ICBMs. A concept similar to a sea-based ballistic missile launch system would be to launch cruise missiles from forward-based platforms. A country could also launch cruise missiles from fighter, bomber, or commercial transport aircraft outside U.S. airspace.

Although non-missile means of delivering weapons of mass destruction do not provide the same prestige or degree of deterrence and coercive diplomacy associated with an ICBM, such options are of significant concern. Countries or non-state actors could pursue non-missile delivery options, most of which:

- Are less expensive than developing and producing ICBMs.
- Can be covertly developed and employed; the source of the weapon could be masked in an attempt to evade retaliation.
- Probably would be more reliable than ICBMs that have not completed rigorous testing and validation programs.
- Probably would be more accurate than emerging ICBMs over the next 15 years.
- Probably would be more effective for disseminating biological warfare agent than a ballistic missile.
- Would avoid missile defenses.

Foreign non-state actors, including some terrorist or extremist groups, have used, possessed, or are interested in weapons of mass destruction or the materials to build them. Most of these groups have threatened the United States or its interests. We cannot count on obtaining warning of all planned terrorist attacks, despite the high priority we assign to this goal.

Recent trends suggest the likelihood is increasing that a foreign group or individual will conduct a terrorist attack against U.S. interests using chemical agents or toxic industrial chemicals in an attempt to produce a significant number of casualties, damage infrastructure, or create fear among a population. Past terrorist events, such as the World Trade Center bombing and the Aum Shinrikyo chemical attack on the Tokyo subway system, demonstrated the feasibility and willingness to undertake an attack capable of producing massive casualties.

IMMEDIATE THEATER MISSILE THREATS TO U.S. INTERESTS AND ALLIES

The proliferation of MRBMs—driven primarily by North Korean No Dong sales—has created an immediate, serious, and growing threat to U.S. forces, interests, and allies in the Middle East and Asia, and has significantly altered the strategic balances in the regions.

- Pakistan has M–11 SRBMs from China and Ghauri MRBMs from North Korea; we assess both may have a nuclear role.
- India has Prithvi I SRBMs and recently began testing the Agni II MRBM; we assess both may have a nuclear role.

We judge that countries developing missiles view their regional concerns as one of the primary factors in tailoring their programs. They see their short- and medium-range missiles not only as deterrents but also as force-multiplying weapons of war, primarily with conventional weapons but with options for delivering biological, chemical, and eventually nuclear weapons.

PENETRATION AIDS AND COUNTERMEASURES

We assess that countries developing ballistic missiles would also develop various responses to U.S. theater and national defenses. Russia and China each have developed numerous countermeasures and probably are willing to sell the requisite technologies.

- Many countries, such as North Korea, Iran, and Iraq probably would rely initially on readily available technology—including separating RVs, spin-stabilized RVs, RV reorientation, radar absorbing material (RAM), booster fragmentation, low-power jammers, chaff, and simple (balloon) decoys—to develop penetration aids and countermeasures.
- These countries could develop countermeasures based on these technologies by the time they flight test their missiles.

ESPIONAGE

Foreign espionage and other collection efforts are likely to increase. China, for example, has been able to obtain significant nuclear weapons information from espionage, contact with scientists from the United States and other countries, publications and conferences, unauthorized media disclosures, and declassified U.S. weapons information. We assess that China, Iran, and others are targeting U.S. missile information as well.

That concludes my opening statement and I am prepared to take your questions.

FOREIGN MISSILE DEVELOPMENTS AND THE BALLISTIC MISSILE THREAT TO THE UNITED STATES THROUGH 2015

PREFACE

Congress has requested that the Intelligence Community produce annual reports on ballistic missile developments. We produced the first report in March 1998 and an update memorandum in October 1998 on the August North Korean launch of its Taepo Dong–I space launch vehicle (SLV). Our 1999 report is a classified National Intelligence Estimate, which we have summarized in unclassified form in this paper.

This year we examined future capabilities for several countries that have or have had ballistic missiles or SLV programs or intentions to pursue such programs. Using intelligence information and expertise from inside and outside the Intelligence Community, we examined scenarios by which a country could acquire an ICBM by 2015, including by purchase, and assessed the likelihood of various scenarios. (Some analysts believe that the prominence given to missiles countries "could" develop gives more credence than is warranted to developments that may prove implausible.) We did not attempt to address all of the potential political, economic, and social changes that could occur. Rather, we analyzed the level of success and the pace countries have experienced in their development efforts, international technology transfers, political motives, military incentives, and economic resources. From that basis, we projected possible and likely missile developments by 2015 independent of significant political and economic changes. Subsequent annual reports will be able to account for such changes.

Our projections for future ICBM developments are based on limited information and engineering judgment. Adding to our uncertainty is that many countries surround their ballistic missile programs with secrecy, and some employ deception. Although some key milestones are difficult to hide, we may miss others. For example, we may not know all aspects of a missile system's configuration until flight testing; we did not know until the launch last August that North Korea had acquired a third stage for its Taepo Dong–I.

We took into account recommendations made in July 1998 by the Commission to Assess the Ballistic Missile Threat to the United States and incorporated the results of several academic and contractor efforts, including politico-economic experts to help examine future environments that might foster ICBM sales and missile contractors to help postulate potential ICBM configurations that rogue states could pursue.

KEY POINTS

We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq. The Russian threat, although significantly reduced, will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that potentially posed by other nations, whose mis-

siles are likely to be fewer in number—probably a few to tens, constrained to smaller payloads, and less reliable and accurate than their Russian and Chinese counterparts.

We judge that North Korea, Iran, and Iraq would view their ICBMs more as strategic weapons of deterrence and coercive diplomacy than as weapons of war. We assess that:

- North Korea could convert its Taepo Dong–I space launch vehicle (SLV) into an ICBM that could deliver a light payload (sufficient for a biological or chemical weapon) to the United States, albeit with inaccuracies that would make hitting large urban targets improbable. North Korea is more likely to weaponize the larger Taepo Dong–II as an ICBM that could deliver a several-hundred kilogram payload (sufficient for early generation nuclear weapons) to the United States. Most analysts believe it could be tested at any time, probably initially as an SLV, unless it is delayed for political reasons.
- Iran could test an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the last half of the next decade using Russian technology and assistance. Most analysts believe it could test an ICBM capable of delivering a lighter payload to the United States in the next few years following the North Korean pattern.
  —Analysts differ on the likely timing of Iran's first test of an ICBM that could threaten the United States—assessments range from likely before 2010 and very likely before 2015 (although an SLV with ICBM capability probably will be tested in the next few years) to less than an even chance of an ICBM test by 2015.
- Iraq could test a North Korean-type ICBM that could deliver a several-hundred kilogram payload to the United States in the last half of the next decade depending on the level of foreign assistance. Although less likely, most analysts believe it could test an ICBM that could deliver a lighter payload to the United States in a few years based on its failed SLV or the Taepo Dong–I, if it began development now.
  —Analysts differ on the likely timing of Iraq's first test of an ICBM that could threaten the United States-assessments range from likely before 2015, possibly before 2010 (foreign assistance would affect capability and timing) to unlikely before 2015.
- By 2015, Russia will maintain as many nuclear weapons on ballistic missiles as its economy will allow but well short of START I or II limitations.
- By 2015, China is likely to have tens of missiles capable of targeting the United States, including a few tens of more survivable, land- and sea-based mobile missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage. China tested its first mobile ICBM in August 1999.

Sales of ICBMs or SLVs, which have inherent ICBM capabilities and could be converted relatively quickly with little or no warning, could increase the number of countries able to threaten the United States. North Korea continues to demonstrate a willingness to sell its missiles. Although we judge that Russia or China are unlikely to sell an ICBM or SLV in the next fifteen years, the consequences of even one sale would be extremely serious.

Several other means to deliver weapons of mass destruction to the United States have probably been devised, some more reliable than ICBMs that have not completed rigorous testing programs. For example, biological or chemical weapons could be prepared in the United States and used in large population centers, or short-range missiles could be deployed on surface ships. However, these means do not provide a nation the same prestige and degree of deterrence or coercive diplomacy associated with ICBMs.

The proliferation of medium-range ballistic missiles (MRBMs)—driven primarily by North Korean No Dong sales-has created an immediate, serious, and growing threat to U.S. forces, interests, and allies, and has significantly altered the strategic balances in the Middle East and Asia. We judge that countries developing missiles view their regional concerns as one of the primary factors in tailoring their programs. They see their short- and medium-range missiles not only as deterrents but also as force-multiplying weapons of war, primarily with conventional weapons, but with options for delivering biological, chemical, and eventually nuclear weapons. South Asia provides one of the most telling examples of regional ballistic missile and nuclear proliferation:

- Pakistan has Chinese-supplied M–11 short-range ballistic missiles (SRBMs) and Ghauri MRBMs from North Korea.
- India has Prithvi I SRBMs and recently began testing the Agni II MRBM.
- We assess these missiles may have nuclear roles.

Foreign assistance continues to have demonstrable effects on missile advances around the world, particularly from Russia and North Korea. Moreover, some countries that have traditionally been recipients of foreign missile technology are now sharing more amongst themselves and are pursuing cooperative missile ventures.

We assess that countries developing missiles also will respond to U.S. theater and national missile defenses by deploying larger forces, penetration aids, and countermeasures. Russia and China each have developed numerous countermeasures and probably will sell some related technologies.

DISCUSSION

Introduction

The worldwide ballistic missile proliferation problem has continued to evolve during the past year. The proliferation of technology and components continues. The capabilities of the missiles in the countries seeking to acquire them are growing, a fact underscored by North Korea's launch of the Taepo Dong–I in August 1998. The number of missiles in these countries is also increasing. Medium- and short-range ballistic missile systems, particularly if armed with weapons of mass destruction (WMD) warheads, already pose a significant threat to U.S. interests, military forces, and allies overseas. We have seen increased trade and cooperation among countries that have been recipients of missile technologies from others. Finally, some countries continue to work toward longer-range systems, including ICBMs.

We expect the threat to the United States and its interests to increase over the next 15 years. However, projecting political and economic developments that could alter the nature of the missile threat many years into the future is virtually impossible. The threat facing the United States in the year 2015 will depend on our changing relations with foreign countries, the political situation within those countries, economic factors, and numerous other factors that we cannot predict with confidence.

- For example, 15 years ago the United States and the Soviet Union were superpower adversaries in the midst of the Cold War, with military forces facing off in central Europe and competing for global power. Today, by contrast, the differences that separated the two countries during that period have been replaced by differences expected between modern nation states.
- Iraq is another example; 15 years ago it shared common interests with the United States. Since Iraq's invasion of Kuwait in 1990, Washington and Baghdad have been in numerous military and diplomatic conflicts.
- Finally, we do not know whether some of the countries of concern will exist in 15 years in their current state or as suppliers of missiles and technology.

Recognizing these uncertainties, we have projected foreign ballistic missile capabilities into the future largely based on technical capabilities and with a general premise that relations with the United States will not change significantly enough to alter the intentions of those states pursuing ballistic missile capabilities. Future annual reports will be able to take account of any contemporary information that alters our projections.

The Evolving Missile Threat in the Current Proliferation Environment

The new missile threats confronting the United States are far different from the Cold War threat during the last three decades. During that period, the ballistic missile threat to the United States involved relatively accurate, survivable, and reliable missiles deployed in large numbers. Soviet—and to a much lesser extent Chinese—strategic forces threatened, as they still do, the potential for catastrophic, nation-killing damage. By contrast, the new missile threats involve states with considerably fewer missiles with less accuracy, yield, survivability, reliability, and range-payload capability than the hostile strategic forces we have faced for 30 years. Even so, the new systems are threatening, but in different ways.

First, although the majority of systems being developed and produced today are short- or medium-range ballistic missiles, North Korea's three-stage Taepo Dong–I SLV demonstrated Pyongyang's potential to cross the 5,500-km ICBM threshold if it develops a survivable weapon for the system. Other potentially hostile nations could cross that threshold during the next 15 years. While it remains extremely unlikely that any potential adversary could inflict damage to the United States or its forces comparable to the damage that Russian or Chinese forces could inflict, emerging systems potentially can kill tens of thousands, or even millions of Americans, depending on the type of warhead, the accuracy, and the intended target.

Classification of Ballistic Missiles by Range:

Short-range ballistic missile (SRBM)	Under 1,000 km
Medium-range ballistic missile (MRBM)	1,000 to 3,000 km
Intermediate-range ballistic missile (IRBM)	3,000 to 5,500 km
Intercontinental-range ballistic missile (ICBM)	Over 5,500 km

Second, many of the countries that are developing longer-range missiles probably assess that the threat of their use would complicate American decision-making during crises. Over the last decade, the world has observed that missiles less capable than the ICBMs the United States and others have deployed can affect another nation's decision-making process. Though U.S. potential adversaries recognize American military superiority, they are likely to assess that their growing missile capabilities would enable them to increase the cost of a U.S. victory and potentially deter Washington from pursuing certain objectives. Moreover, some countries, including some without hostile intent towards the United States, probably view missiles as a means of providing an independent deterrent and war-fighting capabilities.

Third, the probability that a WMD-armed missile will be used against U.S. forces or interests is higher today than during most of the Cold War. Ballistic missiles, for example, were used against U.S. forces during the Gulf war. More nations now have longer-range missiles and WMD warheads. Missiles have been used in several conflicts over the past two decades, although not with WMD warheads. Nevertheless, some of the regimes controlling these missiles have exhibited a willingness to use WMD.

Thus, acquiring long-range ballistic missiles armed with WMD will enable weaker countries to do three things that they otherwise might not be able to do: deter, constrain, and harm the United States. To achieve these objectives, these WMD-armed weapons need not be deployed in large numbers; with even a few such weapons, these countries would judge that they had the capability to threaten at least politically significant damage to the United States or its allies. They need not be highly accurate; the ability to target a large urban area is sufficient. They need not be highly reliable, because their strategic value is derived primarily from the threat (implicit or explicit) of their use, not the near certain outcome of such use. Some of these systems may be intended for their political impact as potential tenor weapons, while others may be built to perform more specific military missions, facing the United States with a broad spectrum of motivations, development timelines, and resulting hostile capabilities. In many ways, such weapons are not envisioned at the outset as operational weapons of war, but primarily as strategic weapons of deterrence and coercive diplomacy.

The progress of countries in Asia and the Middle East toward acquiring longer-range ballistic missiles has been dramatically demonstrated over the past 18 months:

- Most notably, North Korea's three-stage Taepo Dong–I SLV has inherent, albeit limited, capabilities to deliver small payloads to ICBM ranges. Although the Taepo Dong–I satellite attempt in August 1998 failed, North Korea demonstrated several of the key technologies required for an ICBM, including staging. As a space launch vehicle, however, it did not demonstrate a payload capable of surviving atmospheric reentry at ICBM ranges. We judge that North Korea would be unlikely to pursue weaponizing a three-stage Taepo Dong–I as an ICBM, preferring instead to pursue the much more capable Taepo Dong–II, which we expect will be flight tested this year, unless it is delayed for political reasons.
- Pakistan flight-tested its 1,300 km range Ghauri missile, which it produced with North Korean assistance. (Pakistan also flight-tested the Shaheen I SRBM.)
- Iran flight-tested its 1,300 km range Shahab–3—a version of North Korea's No Dong, which Iran has produced with Russian assistance.
- India flight-tested its Agni II MRBM, which we estimate will have a range of about 2,000 km.
- China conduced the first flight test of its DF–31 mobile ICBM in August 1999; it will have a range of about 8,000 km.

Many of these countries probably have considered ballistic missile defense countermeasures. Historically, the development and deployment of missile defense systems have been accompanied by the development of countermeasures and penetration aids by potential adversaries, either in reaction to the threat or in anticipation of it. The Russians and Chinese have had countermeasure programs for decades and are probably willing to transfer some related technology to others. We expect that during the next 15 years, countries other than Russia and China will develop countermeasures to Theater and National Missile Defenses.

Threat Availability Before "Deployment"

Emerging long-range missile powers do not appear to rely on robust test programs to ensure a missile's accuracy and reliability—as the United States and the Soviet Union did during the Cold War. Similarly, deploying a large number of long-range missiles to dedicated, long-term sites—as the United States and the Soviet Union did—is not necessarily the path emerging long-range missile powers will choose. In many cases, a nation may decide that the ability to threaten with one or two long-range missiles is sufficient for its doctrinal or propaganda needs. China, for example, has only about 20 ICBMs; its doctrine requires only that it be able to hold a significant portion of an aggressor's population at risk.

With shorter flight test programs—perhaps only one test—and potentially simple deployment schemes, the time between the initial flight test and the availability of a missile for military use is likely to be shortened. Once a missile has performed successfully through its critical flight functions, it would be available for the country to use as a threat or in a military role. Thus, we project the year for a first flight test rather than the projected date for a missile's "deployment" as the initial indication of an emerging threat. Moreover, using the date of the first projected flight test as the initial indicator of the threat recognizes that emerging long-range missile powers may not choose to deploy a large number of missiles and that an adversary armed with even a single missile capable of delivering a WMD-payload may consider it threatening. Using the first flight test results in threat projections a few years earlier than those based on traditional definitions of deployment, which may not apply as well to the emerging threats.

Potential ICBM Threats to the United States

We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq, although the threats will consist of dramatically fewer weapons than today because of significant reductions we expect in Russian strategic forces.

- The Russian threat will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that posed by the other three.
- Initial North Korean, Iranian, and Iraqi ICBMs would probably be fewer in number—a few to tens rather than hundreds or thousands, constrained to smaller payload capabilities, and less reliable and accurate than their Russian and Chinese counterparts.
- Countries with emerging ICBM capabilities are likely to view their relatively few ICBMs more as weapons of deterrence and coercive diplomacy than as weapons of war, recognizing that their use could bring devastating consequences. Thus, the emerging threats posed to the United States by these countries will be very different than the Cold War threat.

North Korea. After Russia and China, North Korea is the most likely to develop ICBMs capable of threatening the United States during the next 15 years.

- North Korea attempted to orbit a small satellite using the Taepo Dong–I SLV in August 1998, but the third stage failed during powered flight; other aspects of the flight, including stage separation, appear to have been successful.
- If it had an operable third stage and a reentry vehicle capable of surviving ICBM flight, a converted Taepo Dong–I SLV could deliver a light payload to the United States. In these cases, about two-thirds of the payload mass would be required for the reentry vehicle structure. The remaining mass is probably too light for an early generation nuclear weapon but could deliver biological or chemical (BW/CW) warfare agent.
- Most analysts believe that North Korea probably will test a Taepo Dong–II this year, unless delayed for political reasons. A two-stage Taepo Dong–II could deliver a several-hundred kilogram payload to Alaska and Hawaii, and a lighter payload to the western half of the United States. A three-stage Taepo Dong–II could deliver a several-hundred kilogram payload anywhere in the United States.
- North Korea is much more likely to weaponize the more capable Taepo Dong–II than the three-stage Taepo Dong–II as an ICBM.

Iran. Iran is the next hostile country most capable of testing an ICBM capable of delivering a weapon to the United States during the next 15 years.

- Iran could test an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the latter half of the next decade, using Russian technology and assistance.
- Iran could pursue a Taepo Dong-type ICBM. Most analysts believe it could test a three-stage ICBM patterned after the Taepo Dong–I SLV or a three-stage

Taepo Dong–II-type ICBM, possibly with North Korean assistance, in the next few years.

- Iran is likely to test an SLV by 2010 that—once developed—could be converted into an ICBM capable of delivering a several-hundred kilogram payload to the United States.
- Analysts differ on the likely timing of Iran's first flight test of an ICBM that could threaten the United States. Assessments include:

  —likely before 2010 and very likely before 2015 (noting that an SLV with ICBM capabilities will probably be tested within the next few years);

  —no more than an even chance by 2010 and a better than even chance by 2015;

  —and less than an even chance by 2015.

Iraq. Although the Gulf war and subsequent United Nations activities destroyed much of Iraq's missile infrastructure, Iraq could test an ICBM capable of reaching the United States during the next 15 years.

- After observing North Korean activities, Iraq most likely would pursue a three-stage Taepo Dong–II approach to an ICBM (or SLV), which could deliver a several-hundred kilogram payload to parts of the United States. If Iraq could buy a Taepo Dong–II from North Korea, it could have a launch capability within months of the purchase; if it bought Taepo Dong engines, it could test an ICBM by the middle of the next decade. Iraq probably would take until the end of the next decade to develop the system domestically.
- Although much less likely, most analysts believe that if Iraq were to begin development today, it could test a much less capable ICBM in a few years using Scud components and based on its prior SLV experience or on the Taepo Dong–I.
- If it could acquire No Dongs from North Korea, Iraq could test a more capable ICBM along the same lines within a few years of the No Dong acquisition.
- Analysts differ on the likely timing of Iraq's first flight test of an ICBM that could threaten the United States. Assessments include unlikely before 2015; and likely before 2015, possibly before 2010—foreign assistance would affect the capability and timing.

Russia. Russia's strategic offensive forces are experiencing serious budget constraints but will remain the cornerstone of its military power. Russia expects its forces to deter both nuclear and conventional military threats and is prepared to conduct limited nuclear strikes to warn off an enemy or alter the course of a battle.

- Russia currently has about 1,000 strategic ballistic missiles with 4,500 warheads.
- Its strategic force will remain formidable through and beyond 2015, but the size of this force will decrease dramatically—well below arms control limits—primarily because of budget constraints.
- Russia will maintain as many strategic missiles and associated nuclear warheads as it believes it can afford, but well short of START I or II limitations.

  —If Russia ratifies START II, with its ban on multiple warheads on ICBMs, it would probably be able to maintain only about half of the weapons it could maintain without the ban.
- We judge that an unauthorized or accidental launch of a Russian strategic missile is highly unlikely so long as current technical and procedural safeguards are in place.

China. Chinese strategic nuclear doctrine calls for a survivable long-range missile force that can hold a significant portion of the U.S. population at risk in a retaliatory strike.

- China's current force of about 20 CSS–4 ICBMs can reach targets in all of the United States.
- Beijing also is developing two new road-mobile, solid propellant ICBMs.

  —It conducted the first flight test of the mobile DF–31 ICBM in August 1999; we judge it will have a range of about 8,000 km and will be targeted primarily against Russia and Asia.

  —We expect a test of a longer range mobile ICBM within the next several years; it will be targeted primarily against the United States.
- China is developing the JL–2 SLBM, which we expect to be tested within the next decade. The JL–2 probably will be able to target the United States from launch areas near China.
- By 2015, China will likely have tens of missiles targeted against the United States, having added a few tens of more survivable land- and sea-based mobile

missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage.

- China has had the technical capability to develop multiple RV payloads for 20 years. If China needed a multiple-RV (MRV) capability in the near term, Beijing could use a DF–31-type RV to develop and deploy a simple MRV or multiple independently targetable reentry vehicle (MIRV)[1] for the CSS–4 in a few years. MIRVing a future mobile missile would be many years off.
- China is also significantly improving its theater missile capabilities and is increasing the size of its SRBM force deployed opposite Taiwan.
- We assess that an unauthorized launch of a Chinese strategic missile is highly unlikely.

Foreign Assistance

Foreign assistance continues to have demonstrable effects on missile advances around the world. Moreover, some countries that have traditionally been recipients of foreign missile technology are now sharing more amongst themselves and are pursuing cooperative missile ventures.

- Russian missile assistance continues to be significant.
- China continues to contribute to missile programs in some countries.
- North Korea may expand sales.

Moreover, changes in the regional and international security environment—in particular, Iran's Shahab–3 missile test and the Indian and Pakistani missile and nuclear tests—probably will fuel missile and WMD interests in the region.

Sales of ICBMs or SLVs, which have inherent ICBM capabilities, could further increase the number of countries that will be able to threaten the United States with a missile strike. North Korea continues to demonstrate a willingness to sell its missiles and related technologies and will probably continue doing so, perhaps under the guise of selling SLVs. In the past, we judged that political conditions made the sale of a Russian or Chinese ICBM unlikely and that the geopolitical situation would not change enough for either to decide that the sale of an ICBM would be in its national interest. We have not detected the transfer of a complete ICBM by Russia or China, nor do we have any information to indicate either plans to transfer one. Projecting the likelihood of such a transfer 15 years into the future is very uncertain, driven in part by unpredictable future economic conditions, how Moscow will perceive its position vis-a-vis the West, and future Russian and Chinese perceptions of U.S. ballistic missile defenses. As we attempt to project the politico-military-economic environment for that period, we continue to judge it unlikely that Moscow or Beijing would decide that the financial and perhaps strategic inducements to sell a complete ICBM, SLV, or the technologies tantamount to a complete ICBM, would outweigh the perceived political and economic risks of doing so.[2]

Warning Times and our Ability to Forecast Missile Development and Acquisition

In our 1998 annual report, we stated we had high confidence that we could provide warning five years before deployment that a potentially hostile country was trying to develop and deploy an ICBM. Because countries of concern could threaten to use ballistic missiles following limited flight-testing and before a missile is deployed in the traditional sense, we broadened our warning in the 1998 update memorandum to encompass the first successful flight test as the beginning of an "initial threat availability."

Our ability to provide warning for a particular country is depends highly on our collection capabilities. For some countries, we have relatively large bodies of evidence on which to base our assessments; for others, our knowledge of the programs being pursued is limited. Our monitoring and warning about North Korea's efforts to achieve an ICBM capability constitute an important case study on warning. In 1994, we were able to give five years warning of North Korea's efforts to acquire an ICBM capability. At that time, the Intelligence Community judged that:

- The Taepo Dong–I was a two-stage, medium-range missile that could be tested in 1994 and deployed as early as 1996.
- The Taepo Dong–II was a larger two-stage missile that would provide Pyongyang and other countries the potential to deliver nuclear weapons to parts of the United States, and biological and chemical weapons further. The Commu-

[1] An MRV system releases multiple RVs along the missile's linear flight path, often at a single target; a MIRV system can maneuver to several different release points to provide targeting flexibility.

[2] The sale of an ICBM is prohibited by the START Treaty.

nity judged that the Taepo Dong–II flight test program would begin within a few years of 1994 with initial deployment in 2000 or later.

Thus, the Intelligence Community warned that North Korea was pursuing an ICBM capability and would flight test an ICBM (the Taepo Dong–II) in the mid- to late l990s. When North Korea did not flight test either Taepo Dong missile until 1998, and then used the Taepo Dong–I as a space launch vehicle, it became clear that the Intelligence Community had:

- Overestimated that North Korea would begin flight testing the Taepo Dong–I and Taepo Dong–II missiles years earlier than turned out to be the case.
- Projected correctly the timing of a North Korean missile with the potential to deliver payloads to the ICBM range of 5,500-km.
- Underestimated the capabilities of the Taepo Dong–II by failing to anticipate the use of the third stage.

North Korea demonstrated intercontinental-range booster capabilities roughly on the timetable projected in 1994, but with a completely unanticipated vehicle configuration. The Intelligence Community had expected North Korea to achieve an ICBM-range capability initially with the two-stage Taepo Dong–II, not the Taepo Dong–II with an unguided third stage. North Korea's use of the Taepo Dong–I with a third stage as a space launch vehicle was completely unexpected. Until the flight test, the Intelligence Community was unaware of the third stage and the intended use of the Taepo Dong–I as a space launch vehicle.

Detecting or suspecting a missile development program and projecting the timing of the emerging threat, although difficult, are easier than forecasting the vehicle's configuration or performance with accuracy. Thus, we have more confidence in our ability to warn of efforts by countries to develop ICBMs than we have in our ability to describe accurately the missile configurations that will comprise that threat, especially years prior to flight testing. Furthermore, countries practice denial and deception to hide or mask their intentions—for example, testing an ICBM as a space launch vehicle.

We continue to judge that we may not be able to provide much warning if a country purchased an ICBM or if a country already had an SLV capability. Nevertheless, the initiation of an SLV program is an indicator of a potential ICBM program. North Korea and other countries, such as Iran and an unconstrained Iraq, could develop an SLV booster, then flight-test it as an ICBM with a reentry vehicle (RV) with little or no warning. Thus, we consider space launch vehicles, especially in the hands of countries hostile to the United States, to have significant ballistic missile potential.

We also judge that we may not be able to provide much, if any, warning of a forward-based ballistic missile or land-attack cruise missile (LACM) threat to the United States. Moreover, LACM development can draw upon dual-use technologies. We expect to see acquisition of LACMs by many countries to meet regional military requirements.

Space Launch Vehicle (SLV) Conversion

Nations with SLVs could convert them into ICBMs relatively quickly with little or no chance of detection before the first flight test. Such a conversion would include the development of a reentry vehicle (RV). A nation could try to buy an SLV with the intent to convert it into an ICBM; detection of the sale should provide a few years of warning before a flight test, although we are not confident that we could detect a covert sale. Finally, many SLVs would be cumbersome as converted military systems and could not be made readily survivable, a task that in many cases would be technologically and economically formidable.

Countries might mask their ICBM developments as SLV programs. They could test the complete booster and in most cases the guidance system, which would have to be reprogrammed to fly a ballistic missile trajectory. They could not mask a warhead reentry under the guise of a space launch. Nevertheless, they could develop RVs and maintain them untested for future use, albeit with significantly reduced confidence in their reliability.

- If the country had Russian or Chinese assistance in a covert development effort, it could have relatively high confidence that the RV would survive and function properly.
- If a country developed an untested RV without foreign assistance, its confidence would diminish, but we could not be confident it would fail. Significant amounts of information about reentry vehicles are available in open sources. A low performing RV with high flight stability would be a logical choice for developing an ICBM RV with minimal, or no, testing. The developing country could have

some confidence that the system would survive reentry, although confidence in its proper delivery of the weapon would be lower without testing.

Alternative Threats to the United States

Several other means to deliver WMD to the United States have probably been devised, some more reliable than ICBMs that have not completed rigorous testing and validation programs. The goal of an adversary would be to move the weapon within striking distance without a long-range ICBM. Most of these means, however, do not provide the same prestige and degree of deterrence or coercive diplomacy associated with long-range missiles, but they might be the means of choice for terrorists.

Forward-Based Threats

Several countries are technically capable of developing a missile-launch mechanism to use from forward-based ships or other platforms to launch SRBMs and MRBMs, or land-attack cruise missiles against the United States. Some countries may develop and deploy a forward-based system during the period of the next 15 years.

A short- or medium-range ballistic missile could be launched at the United States from a forward-based sea platform positioned within a few hundred kilometers of U.S. territory. If the attacking country were willing to accept significantly reduced accuracy for the missile, forward-basing on a sea-based platform would not be a major technical hurdle. The reduced accuracy in such a case, however, would probably be better than that of some early ICBMs. The simplest method for launching a ship-borne ballistic missile would be to place a secured TEL onboard the ship and launch the missile from its TEL. If accuracy were a major concern, the missile and launcher would be placed on a stabilization platform to compensate for wave movement of the ocean, or the country would need to add satellite-aided navigation to the missile.

A concept similar to a sea-based ballistic missile launch system would be to launch cruise missiles from forward-based platforms. This method would enable a country to use cruise missiles acquired for regional purposes to attack targets in the United States.

- A country could launch cruise missiles from fighter, bomber, or commercial transport aircraft outside U.S. airspace. U.S. capability to detect planes approaching the coast, and the limited range of fighter and bomber aircraft of most countries, probably would preclude the choice of military aircraft for the attack. Using a commercial aircraft, however, would be feasible for staging a covert cruise missile attack, but it still would be difficult.
- A commercial surface vessel, covertly equipped to launch cruise missiles, would be a plausible alternative for a forward-based launch platform. This method would provide a large and potentially inconspicuous platform to launch a cruise missile while providing at least some cover for launch deniability.
- A submarine would have the advantage of being relatively covert. The technical sophistication required to launch a cruise missile from a submarine torpedo or missile tube most likely would require detailed assistance from the defense industry of a major naval power.

Non-Missile WMD Threats to the United States

Although non-missile means of delivering WMD do not provide the same prestige or degree of deterrence and coercive diplomacy associated with an ICBM, such options are of significant concern. Countries or non-state actors could pursue non-missile delivery options, most of which:

- Are less expensive than developing and producing ICBMs.
- Can be covertly developed and employed; the source of the weapon could be masked in an attempt to evade retaliation.
- Probably would be more reliable than ICBMs that have not completed rigorous testing and validation programs.
- Probably would be more accurate than emerging ICBMs over the next 15 years.
- Probably would be more effective for disseminating biological warfare agent than a ballistic missile.
- Would avoid missile defenses.

The requirements for missile delivery of WMD impose additional, stringent design requirements on the already difficult technical problem of designing such weapons. For example, initial indigenous nuclear weapon designs are likely to be too large and heavy for a modest-sized ballistic missile but still suitable for delivery by ship, truck, or even airplane. Furthermore, a country (or non-state actor) is likely to have only a few nuclear weapons, at least during the next 15 years. Reliability of delivery would be a critical factor; covert delivery methods could offer reliability advantages

over a missile. Not only would a country want the warhead to reach its target, it would want to avoid an accident with a WMD warhead at the missile-launch area. On the other hand, a ship sailing into a port could provide secure delivery to limited locations, and a nuclear detonation, either in the ship or on the dock, could achieve the intended purpose. An airplane, either manned or unmanned, could also deliver a nuclear weapon before any local inspection, and perhaps before landing. Finally, a nuclear weapon might also be smuggled across a border or brought ashore covertly.

Foreign non-state actors, including some terrorist or extremist groups, have used, possessed, or are interested in weapons of mass destruction or the materials to build them. Most of these groups have threatened the United States or its interests. We cannot count on obtaining warning of all planned terrorist attacks, despite the high priority we assign to this goal.

Recent trends suggest the likelihood is increasing that a foreign group or individual will conduct a terrorist attack against U.S. interests using chemical agents or toxic industrial chemicals in an attempt to produce a significant number of casualties, damage infrastructure, or create fear among a population. Past terrorist events, such as the World Trade Center bombing and the Aum Shinrikyo chemical attack on the Tokyo subway system, demonstrated the feasibility and willingness to undertake an attack capable of producing massive casualties.

Immediate Theater Missile Threats to U.S. Interests and Allies

The proliferation of MRBMs—driven primarily by North Korean No Dong sales—has created an immediate, serious, and growing threat to U.S. forces, interests, and allies in the Middle East and Asia, and has significantly altered the strategic balances in the regions.

- Iran's flight test of its Shahab–3, which is based on the No Dong, and Indian and Pakistani missile and nuclear tests may fuel additional interest in MRBMs.
- Pakistan has M–11 SRBMs from China and Ghauri MRBMs from North Korea; we assess both may have a nuclear role.
- India has Prithvi I SRBMs and recently began testing the Agni II MRBM; we assess both may have a nuclear role.

We judge that countries developing missiles view their regional concerns as one of the primary factors in tailoring their programs.

They see their short- and medium-range missiles not only as deterrents but also as force-multiplying weapons of war, primarily with conventional weapons but with options for delivering biological, chemical, and eventually nuclear weapons.

Penetration Aids and Countermeasures

We assess that countries developing ballistic missiles would also develop various responses to U.S. theater and national defenses. Russia and China each have developed numerous countermeasures and probably are willing to sell the requisite technologies.

- Many countries, such as North Korea, Iran, and Iraq probably would rely initially on readily available technology—including separating RVs, spin-stabilized RVs, RV reorientation, radar absorbing material (RAM), booster fragmentation, low-power jammers, chaff, and simple (balloon) decoys—to develop penetration aids and countermeasures.
- These countries could develop countermeasures based on these technologies by the time they flight test their missiles.

Foreign espionage and other collection efforts are likely to increase. China, for example, has been able to obtain significant nuclear weapons information from espionage, contact with scientists from the United States and other countries, publications and conferences, unauthorized media disclosures, and declassified U.S. weapons information. We assess that China, Iran, and others are targeting U.S. missile information as well.

The CHAIRMAN. That proves fascinating and frightening to me. I hope that everybody here is aware that you were emphasizing that North Korea is a threat now. And it will be an even bigger threat in a couple of years. Iran will be a threat in the next 10 years and Iraq might be.

But I do not understand people who say, well, we do not need any missile defense in the United States because we have all these treaties. Sam Rayburn used to laugh as he told about Will Rogers,

and everybody here that is not old enough to remember Will Rogers, he was a popular American entertainer, he used to say at that time that "the United States never lost a war or won a treaty." And that was about right.

Mr. Walpole, a commission chaired by former Secretary of Defense Rumsfeld released a study last year which found in part between Iran and Iraq, and I am quoting specifically and precisely, "all of these would be able to inflict major destruction on the United States within about 5 years of a decision to acquire such capabilities." Then he said 10 years in the case of Iraq. Do you agree with that?

Mr. WALPOLE. I know they have since modified their Iraq judgments, and backed that back to 5 years as well. As you can see from our unclassified piece and you would see in the classified report as well, we have the countries having the capability of testing an ICBM well within that 5-year period of time, actually earlier than that. But that is what I said before about the Rumsfeld report; it talked about what the country could do and did not walk through the likelihood. And as you can see from our judgment, we certainly have countries that could do things sooner. We think they are likely to take a little longer.

The CHAIRMAN. Do you know Don Rumsfeld personally?

Mr. WALPOLE. Yes; in fact, as we started this report, we decided to use the former commissioners as some outside experts to read through the report, and let us know what they thought. We thought here is a ready-made group of people who know all the intelligence; they have worked it inside and out. And while we did not agree on everything, and Don will tell you that, I just got a fax from him today saying he thought the report was great.

The CHAIRMAN. He said what?

Mr. WALPOLE. I did not bring the letter with me, but he said he thought it was a very good report. Now, all he had at this point was the unclassified. We will provide him next week with the classified.

The CHAIRMAN. What did the Rumsfeld report say? As I understood, it said that the United States may have less than 5 years in which to deploy a missile defense to protect the American people, but you said that you do not always agree. How does your National Intelligence Estimate contrast with the Rumsfeld report with regard to the timeliness of emergence of Iranian, North Korean and Iraqi threats? Do you have a difference with them, or do you agree with them, or what?

Mr. WALPOLE. On what the country could do, we probably had the countries getting weapons even faster than what they were suggesting. On what the country was likely to do, they did not address that. They did not address what Iran was likely to do or what Iraq was likely to do, so I do not know how they would view that, other than their comments to us as we were walking through this. Their report did not address that.

The CHAIRMAN. Some of the questions I am asking, I know what your answer is going to be, but I want you to answer them for the record. One is, should the Senate, U.S. Senate where I work, be concerned about continuing reports that China may be pursuing

multiple independently targetable reentry vehicles, that is to say MIRV's; should we be concerned about this?

Mr. WALPOLE. Part of that would defend on how you would define concern. They have had the technical capability to put multiple reentry vehicles on the CSS–4 for quite a while and have not pursued that. They probably view the silos as vulnerable, our systems, that is why they want to move to a mobile system.

The CHAIRMAN. Which they are.

Mr. WALPOLE. Which they are. So I do not know whether we should be concerned that they would do that because they may view it just as throwing good money after bad, on the side they are vulnerable. At the same time, they certainly are capable of doing that and that is why I pointed out in my statement here that they could do a multiple payload off that CSS–4 in just a matter of a few years if they really thought they needed to.

The CHAIRMAN. Well, I have seen three or four recent intelligence assessments, and none of them paid a great deal of attention to the possibility of an accidental or unauthorized launch from the former Soviet Union. How do you feel? Do you believe that the danger of such a launch has increased, decreased, or remained substantially the same during the past 5 years?

Mr. WALPOLE. Again, as I said, we judge an accidental or unauthorized launch from both Russia and China as highly unlikely. In the case of Russia, obviously we would want to watch for turmoil that could erupt, that could cause some problems with procedural safeguards, but the way things are and the way we see them, at least for the foreseeable future that is highly unlikely.

The CHAIRMAN. Now, the NIA 9519 assumed that the missile technology control regime will continue significantly to limit international transfers of missiles and components and related technology. Now does the current NIE make such an assumption?

Mr. WALPOLE. It does not. That is actually an interesting question not only for me as having worked the estimate, but personally back in my career. For a number of years, I was an intelligence analyst in the Bureau of Intelligence and Research in the Department of State and then later was Deputy Assistant Secretary for Defense in Arms Control, and in both those capacities, I ended up working to help stop the Condor II program. Which, for those that do not know, that was a program being worked on by Argentina, Iraq, and Egypt, and had it completed to fruition, it would have made the No Dong and the Taepo Dong–I—it would have been a much better system.

And so there I think we have had an example where nonproliferation efforts, the MTCR, worked extremely well and put a stop to the program. We did not make an assumption in our estimate that nonproliferation efforts were going to succeed and stop programs. We based our judgments on what the countries are capable of doing, what technology transfers we see going on today, and projecting those types of transfers out into the future. It would be wonderful if those transfers were absent, but my perception of proliferation is, there are four aspects. There is preventing acquisition. There is rollback, which I think is the case of the Condor II. There is deterring use, which we would like to continue to see occurring between India and Pakistan, and then there is making sure we

have the ability to operate against the systems and at least deal with the systems in one way or another.

So that is really the perception that we took in the report, is that it is going to have an effect in some areas, in some cases people are going to skirt these restrictions, and the program is going to proceed.

The CHAIRMAN. Well, you talk a lot about, in the report and elsewhere, about China's commitment to the missile technology control regime. How do you evaluate it, China's commitment to the missile technology control regime?

Mr. WALPOLE. I am trying to figure out how to answer that one. In part, I am the wrong guy to be asking that of because it is really more directed toward policy. From an intelligence perspective, as I indicated, China's assistance to foreign countries continues to be of concern to us.

The CHAIRMAN. How about Russia?

Mr. WALPOLE. The same.

The CHAIRMAN. Now the NIE 9519 assumed that no country with ICBM's will sell them. Does the current NIE make such an assumption?

Mr. WALPOLE. The current NIE judges that it is unlikely that a country would sell them, but notes that there are conditions that we have to continue to monitor. That it is extremely uncertain to project that far, 15 years into the future. That is why we have right up front, both in the statement and the NIE to remind us that—15 years ago you and I were in the same group talking about the IMF treaty. Now, I was sitting back behind Secretary Shultz at the time. But that was a totally different Soviet Union than we are facing today. And I do not know that 15 years from now if it will be totally different again. So it is hard to project that.

The CHAIRMAN. I do not know whether we will be here 15 years from now, since I do not know whether we will be paying enough attention to it.

You know, it seems to me that the increasing availability of dual-use technologies, particularly through the space launch programs, is enhancing the ability of governments to produce ballistic missiles and reentry vehicles? What do you think about that?

Mr. WALPOLE. If I may take that a piece at a time. To produce the boosters, the answer is yes. Really there is not a whole lot of difference between a space launch vehicle and a missile. There can be if you design them differently, but there does not have to be. The primary difference is the missile has a reentry vehicle. It has a weapon on top; the space launch vehicle does not. You have to modify, you have to reprogram the guidance system to fly a different trajectory if you do not want to put your RV in orbit, if you are trying to hit some target somewhere.

So countries that do not already have a robust missile or space launch vehicle program would gain a lot from working with someone else that already has that, on a space launch program that could help them with the missile program.

The CHAIRMAN. I want you to talk about that because I have a question about the limitations contained in the START Treaty. Russia had been constrained in its ability to set up space launch facilities in foreign countries such as Iran and China, but the Clin-

ton administration has offered to change the START Treaty and give Russia the opportunity to locate as many as three new space launch facilities outside of its own territory. What will be the impact on U.S. intelligence capabilities if Russia were allowed to locate or designate a space launch facility in, say, China or in Iran?

Mr. WALPOLE. It would provide Russia an ability to share technologies in a manner that would look like it was all for space launch, that could help the country with missiles. And so discerning whether it was missile or space launch alone would be difficult. I think that is best exemplified by what we called the Taepo Dong–I last year. When it first flew we called it a missile. For a couple of days we kept calling it a missile. Now you hear it is being called a space launch vehicle. That should tell you something about the difference between the two. So yes, it would make our job more difficult in being able to explain to someone whether something that was transferred was purely for space launch or was going to be used for a missile.

The CHAIRMAN. Why are such a large number of countries including Libya, Syria, Iran, Iraq, North Korea, India and Pakistan pursuing long-range ballistic missile systems? All of a sudden, they are on the front pages. Why are they doing this?

Mr. WALPOLE. Well, they view them as force-multiplying weapons of war. They have regional concerns. They want to be able to reach regional adversaries. Now, in some cases, the countries are going to want to reach a little further, and that is where we lead in with North Korea and Iran. There is an interest there in being able to reach the United States. Now whether they do that under the guise of a space launch vehicle program or an outright show of an ICBM remains to be seen.

The CHAIRMAN. I was very much interested when Pakistan did their little bit, everybody was concentrating on the dispute between India and Pakistan, and they were planning on who is going to produce a nuclear blast. But I think that their fear and apprehension about China had as much to do with that as anything, but there is also an opinion about why they want to possess such a capability. Do you have any additional opinions that you want to state for the record? Why would they spend the money? Why would they do this?

Mr. WALPOLE. Well again, it is a force-multiplying weapon of war. If they can purchase the missiles from somebody else they do not have to go through long development time to get there, and right now, Pakistan's missiles do not reach all of India. So they may want to go after something that would give them a little longer range, then they could cover those targets.

The CHAIRMAN. Then we sit back in the United States while they figure out long-range missiles and say we do not need a missile defense system. That is what some Senators are telling me. They are trying to push me into paying more attention to the ABM Treaty and the treaty that the President is considering at this time. But, the President made a commitment to me in writing that he would send ABM up maybe 2 years ago and I am going to hold him to his word. And he has not mentioned a syllable about that, nor has any spokesman.

The black market countries, they pay well. I think that is a given, is it not?

Mr. WALPOLE. Now we are getting into an area where I do not want to tread into classified information. But let us say that some of the assistance that we see from multiple countries, some of it appears that the government leaders might be aware of it and in other cases government leaders are not aware of it. It is just entities in the country working on it. Let me just leave that one at that.

The CHAIRMAN. I have enjoyed this. I have been able to be candid about it, I have enjoyed having you to myself, even though I know that the other Senators will probably want to file some questions in writing, and I know you will respond to them in writing.

I have one final question. If you will not answer it, I will understand. But as a United States citizen in this year of our Lord, do you, sir, want to create a national missile defense for the United States of America?

Mr. WALPOLE. I do not think as an intelligence officer I even get to answer that question. I might answer that within the walls of my own home to my wife, but that is probably as far as that one goes.

The CHAIRMAN. I will not push you further. I know that Joe Biden would have enjoyed an exchange with you, as well as the rest of the Senators. But just speaking for myself, I certainly appreciate the efforts you have made to come here today and to be so helpful in making a record for us, which we are trying to do. I often say that the best speeches that I make are ones that I do not make until I get in the car going back home at night. I wish I could have one to deliver now. Do you have anything else to add to what you have said?

Mr. WALPOLE. No. I think I built everything into the statement.

The CHAIRMAN. Well, I think you have done exceedingly well. And I compliment you, sir. I thank you for coming.

Mr. WALPOLE. Thank you.

The CHAIRMAN. And there being no further business, the full committee will stand in recess.

[Whereupon, at 3:45 p.m., the hearing was adjourned.]

APPENDICES

APPENDIX 1

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
April 20, 1999.

MEMORANDUM

To: Republican Members, Committee on Foreign Relations
Through: James W. Nance
From: Marshall Billingslea and Sherry Grandjean
Subject: Current and Growing Missile Threats to the United States and the Need for Ballistic Missile Defense

The Committee will hold a hearing on the ballistic missile threat to the United States and the need for a national missile defense on Tuesday, April 20, at 9:30 AM in SD–562. The first witness will be the Honorable Jim Schlesinger, former Secretary of Defense. A second panel will be comprised of the Honorable Bill Schneider, former Undersecretary of State for Security Assistance, Science and Technology, and the Honorable Jim Lilley, former Ambassador to China. Senator Hagel will preside.

Attachment.

THE CURRENT AND GROWING BALLISTIC MISSILE THREAT TO THE UNITED STATES

Introduction and Key Judgment

The ballistic missile threat to the United States is present, and growing. A number of countries possess the capability today to hold U.S. cities hostage to the threat of ballistic missile attack. Both Russia and China have long fielded nuclear intercontinental ballistic missiles that are targeted, or are capable of being rapidly retargeted, at the United States. Several other countries, such as North Korea, Iran, India, and Pakistan, are making rapid progress in the development of missile systems with intercontinental ranges. (Iraq, too, can be expected to join this club in the absence of UNSCOM inspections). Moreover, a large number of countries possess the capacity to mount a ship-based, short range ballistic missile attack against the United States and its territories.

The spread of ballistic missiles and missile production capability is global in character, and is not limited to any specific geographic region. Between 20 and 25 countries throughout the Middle East, Asia, Europe, and Latin America possess (or are seeking to obtain) ballistic missiles, and a small number of countries are pursuing acquisition of large inventories of missiles. During testimony before the Senate Committee on Governmental Affairs on February 24, 1993, then-Director of Central Intelligence, R. James Woolsey, stated:

> More than 25 countries, many of them hostile to the U.S. and to our friends and allies, may have or may be developing nuclear, biological, and chemical weapons—so-called weapons of mass destruction, and the means to deliver them. More than a dozen countries have operational ballistic missiles, and more have programs in place to develop them.

That judgement was echoed in a March 1995 study released by the Nonproliferation Center of the Central Intelligence Agency:

> At least 20 countries—nearly half of them in the Middle East and South Asia—already have or may be developing weapons of mass destruction and ballistic missile delivery systems. Five countries—North Korea, Iran, Iraq, Libya, and Syria (see country profiles, Annex A)—pose the greatest threat because of the aggressive nature of their WMD programs. All five already have or are developing ballistic missiles.

In addition, nine Third World countries also produce ballistic missiles—Argentina, Egypt, India, Iran, Iraq, Israel, North Korea, South Korea, and South Africa. Four others—Brazil, Libya, Pakistan, and Syria—are developing the means for production.

The threat posed to the United States by ballistic missiles is rapidly growing due to nine global trends:

- The key elements of an indigenous ballistic missile program are not overly complex, are generally related to several types of common commercial ventures, and are increasingly available to third world nations;
- Extensive foreign assistance relating to ballistic missile design, development, and deployment is now available, and is accelerating missile programs;
- Serious leakage of components and critical technologies is occurring despite limitations imposed under the Missile Technology Control Regime (MTCR);
- The United States must be concerned that a country with an ICBM might sell a complete system, or complete stages of that system;
- Countries can rapidly reconfigure their space launch vehicles to serve as ICBMs; moreover space launch vehicle programs in general can enable countries to significantly accelerate ICBM development;
- A country need not engage in a lengthy flight test program prior to deployment of an ICBM;
- Development of short and medium-range missiles will enable countries to significantly accelerate ICBM development;
- Countries are today able to deploy a ship-launched, short or medium-range ballistic missile capable of threatening the United States; and
- The possibility of unauthorized or accidental launch from existing nuclear arsenals is serious, and could increase with instability in Russia.

The principal cause for concern to the United States posed by missile proliferation is the high likelihood that these systems will be used to deliver weapons of mass destruction (WMD) against U.S. troops abroad, to attack key allies, and ultimately to threaten U.S. citizens at home. When mated with a nuclear, chemical, or biological warhead, a ballistic missile would enable a country to hold at risk populations and targets in neighboring states. Moreover, several countries of concern (e.g. North Korea, Iran, and China) are making rapid strides in enhancing the range, accuracy, and payload capabilities of their ballistic missiles, seemingly with the intent to hold U.S. cities at risk.

Whereas little agreement previously existed on the extent to which the threat of attack by ballistic missiles posed a danger to the United States, consensus on this question has begun to emerge in the wake of the findings by the Rumsfeld Commission, and in the aftermath of the launch of a Taepo Dong 1 missile by North Korea.

The Rumsfeld Commission, whose formal title was The Commission to Assess the Ballistic Missile Threat to the United States, was established by the National Defense Authorization Act for Fiscal Year 1997 (P.L. 104–201). The Commission's mandate was to "assess the nature and magnitude of the existing and emerging ballistic missile threat to the United States."

Members of the Commission were nominated by the Speaker of the House and the Majority Leader of the Senate and the Minority Leaders of the Senate and House of Representatives, and consisted of:

The Honorable Donald H. Rumsfeld, Chairman of the Board of Directors of Gilead Sciences, Inc. and former Secretary of Defense;

Dr. Barry M. Blechman, Chairman and Co-founder of the Henry L. Stimson Center and former Assistant Director of the Arms Control and Disarmament Agency;

General Lee Butler, former Commander-in-Chief of the U.S. Strategic Command and Strategic Air Command;

Dr. Richard L. Garwin, Senior Fellow for Science and Technology with the Council on Foreign Relations;

Dr. William R. Graham, Chairman of the Board and President of National Security Research and former Director of the White House Office of Science and Technology Policy

Dr. William Schneider, Jr., President of International Planning Services, Inc. and former Under Secretary of State for Security Assistance;

General Larry Welch, President and CEO of the Institute for Defense Analyses and former Chief of Staff of the U.S. Air Force;

Dr. Paul Wolfowitz, Dean of the Paul H. Nitze School at Johns Hopkins University and former Under Secretary of Defense for Policy;

The Honorable R. James Woolsey, Partner in the law Firm of Shea and Gardner and former Director of Central Intelligence.

UNANIMOUS CONCLUSIONS OF THE RUMSFELD COMMISSION REGARDING THE THREAT

The nine Commissioners are unanimous in concluding that:

- "Concerted efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear payloads pose a growing threat to the United States, its deployed forces and its friends and allies. These newer, developing threats in North Korea, Iran and Iraq are in addition to those still posed by the existing ballistic missile arsenals of Russia and China, nations with which we are not now in conflict but which remain in uncertain transitions. The newer ballistic missile-equipped nations' capabilities will not match those of U.S. systems for accuracy or reliability. *However, they would be able to inflict major destruction on the U.S. within about five years of a decision to acquire such a capability (10 years in the case of Iraq).* During several of those years, the U.S. might not be aware that such a decision had been made." [emphasis added]
- "The threat to the U.S. posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been reported in estimates and reports by the Intelligence Community."
- "The Intelligence Community's ability to provide timely and accurate estimates of ballistic missile threats to the U.S. is eroding. This erosion has roots both within and beyond the intelligence process itself. The Community's capabilities in this area need to be strengthened in terms of both resources and methodology."
- "The warning times the U.S. can expect of new, threatening ballistic missile deployments are being reduced. Under some plausible scenarios—including re-basing or transfer of operational missiles, sea-and air-launch options, shortened development programs that might include testing in a third country, or some combination of these—the U.S. might well have little or no warning before operational deployment."

KEY UNANIMOUS POLICY RECOMMENDATION OF THE RUMSFELD COMMISSION

- "Therefore, we unanimously recommend that U.S. analyses, practices and policies that depend on expectations of extended warning of deployment be reviewed and, as appropriate, revised to reflect the reality of an environment in which there may be little or no warning."

TRENDS CONTRIBUTING TO THE SPREAD OF BALLISTIC MISSILE CAPABILITY

Trend #1: The key elements of an indigenous ballistic missile program are not overly complex, generally related to several common types of commercial ventures, and are increasingly available to third world nations

This is not a new trend. In 1981 a report prepared for the Arms Control and Disarmament Agency concluded:

> The development and production of solid-fueled ballistic missiles with ranges between 1000 and 2000 kilometers is technically within the capabilities of states with experience in the production of advanced weapons systems, and military aircraft in particular.[1]

This finding was based on the judgment that the design and manufacture of a ballistic missile—whether relying primarily upon indigenous or imported components—requires technical capabilities and infrastructure which can be found in the manufacture of aircraft and other advanced systems. In particular, the study found that commercial, "off-the-shelf" inertial navigation systems could be adapted for use in ballistic missiles. "Such items are usually available as spares or replacement parts for exported aircraft, both civilian and military."[2] Certainly the United States, Britain, France, China, and the Soviet Union all used adapted materials in developing their own missile programs.

In 1993, the Congressional Office of Technology Assessment identified 12 developing countries—Egypt, Israel, Iraq, Iran, India, Pakistan, Taiwan, North Korea, South Korea, South Africa, Argentina, and Brazil—as having at least an "incipient" capability to produce ballistic missiles. This list remains today a fair representation of evolving ballistic missile production capability outside of Europe.

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[1] Balaschak, M. et al., *Assessing the Comparability of Dual-Use Technologies for Ballistic Missile Development* (Center for International Studies, Massachusetts Institute of Technology: Cambridge, MA, June 1981), p. iii.

[2] Ibid, p. 26.

Nearly all of the aforementioned countries—perhaps with the exception of Iraq—are being aided in their pursuit of the capability to indigenously develop and manufacture ballistic missiles by the global spread of precision machine tooling capabilities, aerospace ventures, and modern chemical and (in the case of biological warheads) pharmaceutical production facilities. Technological obstacles associated with two of the primary elements of a ballistic missile program (propulsion and guidance) have become increasingly easy to overcome due to this trend.[3]

The technological challenges surrounding the development of a propulsion system are formidable, but not insurmountable. For example, solid propellants suitable for medium- and even long-range systems are relatively easy to produce. Any country with a chemical production capacity suitable for manufacturing large-caliber artillery shells also is capable of mastering long range ballistic missile propulsion technology. Iran's experience with developing the Oghab artillery rocket is thought to have contributed substantially to the development of the Iran-130 short range missile. Brazil, too, is thought to have benefitted from this linkage.[4] Even the more complex, composite solids—typically a combination of ammonium perchlorate and a resin—can be produced in several Third World countries. Iraq, for example, has been constructing three factories to produce solid-fuel rocket components, engines, and to provide test facilities (as part of Project 395).[5]

Likewise, domestic development of missile guidance technology is also increasingly feasible. Any country with electronics and precision tool manufacturing industries, along with engineering laboratories, is capable of developing an inertial navigation system (INS) for use in a ballistic missile program.

Aside from INS, even simpler forms of guidance are commercially-available. Radio correction and strap-down systems, both of which use equipment present in common radars and high performance radios, have already been developed by a large number of countries—among them India and North Korea. Despite the fact that these systems may yield large inaccuracies at long ranges, nevertheless a number of countries have found these systems acceptable for their purposes. For instance, China relies exclusively upon strap-down guidance in its DF–4 ICBM. Radio correction was sufficient to give early U.S. and Soviet ICBMs CEP accuracies of 3 km or better over a 9000 km flight.[6] Indeed, because of its low cost and ease of development, a number of countries may turn to radio corrected guidance. Additionally, radio correction saves weight in the missile in comparison with INS systems, allowing for increased payload or range.

In short, due to the increasing availability of general production and manufacturing equipment and commercial off-the-shelf technology, countries with indigenous ballistic missile programs are finding it increasingly easy to overcome key technological hurdles.

Trend #2: Extensive foreign assistance relating to ballistic missile design, development, and deployment is now available, and is accelerating missile programs

Not only has the past decade seen extraordinary improvements in the indigenous production capabilities of various countries, but it also has witnessed a dramatic increase in the availability of outside help to countries seeking ballistic missiles. As the Rumsfeld Commission noted: "Foreign assistance is not a wild card. It is a fact."

Previous analyses which overly-focused on indigenous production capabilities produced flawed conclusions due to their failure to factor in the availability of foreign assistance. As Former Director of Central Intelligence, James Woolsey stated during testimony to the Senate Foreign Relations Committee on September 24, 1996:

> . . . concentrating on indigenous ICBM development seems to me to limit very sharply any general conclusions that might legitimately be drawn.
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> . . . Indigenous development of ICBM's was of interest during the Cold War because the Soviets sought to restrain their client states and maintain a monopoly. But countries such as Iraq are no longer client states of the

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[3] A flight-test capability also is important, though less so when a country seeks merely to utilize or adapt proven designs. Finally, if a country wishes to develop sophisticated warheads for its missile program, it must develop a capability to design, (or integrate, if the warhead is acquired from abroad) a re-entry vehicle onto the missile. These elements of a program have linkages to both commercial space launch ventures and to the nuclear, chemical, and/or pharmaceutical industries.

[4] Carus, Seth, "Long Range Artillery rockets in the Third World," *Jane's Intelligence Review* (Jane's Information Group: London, October 1991), p. 475.

[5] Nolan, Janne, *Trappings of Power: Ballistic Missiles in the Third World* (Brookings: Washington, 1991), p. 56.

[6] MacKenzie, D.A., *Inventing Accuracy: A Historical Sociology of Nuclear Missile Guidance* (MIT Press: Cambridge, Mass., 1990), pp. 310–313, 428–429.

> Soviet Union, which does not exist anymore, and they are not even client states of Russia. They are doing what they please.
>
> And in the aftermath of the Cold War, Russia, China, and North Korea particularly are very much in the business of export for many ballistic missile components and for some technologies that relate to weapons of mass destruction.

Foreign assistance is the norm in ballistic missile development—not the exception; this sort of help often is critical to enable countries to solve difficult developmental obstacles. Moreover, external assistance hinders and complicates the U.S. ability to predict how soon a system will be deployed. The Nonproliferation Center of the Central Intelligence Agency published an unclassified assessment in March 1995 that summed up trends in foreign assistance:

> The widening market for ballistic missiles and missile-related technologies over the past two decades has contributed to an increase in the types and number of suppliers. The growing list of suppliers includes organizations in China, North Korea, the industrialized states in Europe and South America, and in several Third World countries. Private consortiums are also among the suppliers of missile components and technologies. Iraq was able to establish its ballistic missile program through such suppliers.

Historically, countries engaged in the development of ballistic missiles have proven more than willing to collaborate with one another on projects. Through Soviet assistance, at least ten countries in the Third World and four republics of the former Soviet Union field either Soviet-made missiles or some variant, the most common of which is the single-stage, liquid-fueled SCUD B. That missile has range of 300 km and is capable of carrying a 1,000 kilogram payload.

Russia continues in the Soviet tradition of providing ballistic missile assistance to the developing world. Russia is one of the two principal suppliers of components and technological assistance to countries seeking to acquire ballistic missiles. According to a July 1997 study by the Central Intelligence Agency, while China ranked as "the most significant supplier of WMD-related goods and technology to foreign countries," Russia also supplied a variety of ballistic missile-related items to foreign countries during the same time frame, with the majority of the assistance going to Iran. Further, Russia also has served as an important source for Indian and Pakistani missile programs.

In January 1997, the Congress became aware of the widespread assistance being given Iran's ballistic missile program by a large number of Russian entities. According to various press reports, at least ten Russian firms, including the state arms export agency Rosvooruzhenie and the Russian space agency, have aided Iran in overcoming a number of technical obstacles—in direct contravention of Russia's obligations under the Missile Technology Control Regime. The cooperation consists of key assistance on navigation, guidance systems, rocket motor work, and the transfer of equipment related to the Russian SS–4 liquid-fueled, intermediate range missile. Russia has provided wind-tunnel testing for missile nose cones, and assisted in the development of a solid fuel project. Finally, Russian firms also are reported to have concluded contracts for the construction of a wind tunnel, manufacture of mock-ups, and the creation of software for Iran's missile program. The result has been that the Iranian program is advancing far more quickly than previously expected. This assistance has enabled Iran to make strides that otherwise would have taken years of research, development, and testing.

According to a September 10, 1997 story in *The Washington Times,* Russian assistance has been directed towards two systems—the *Shabab–3* and *–4*—both of which are based on North Korea's *No Dong* missile. The *Shahab–3* will have a range of up to 930 miles and is expected to carry a 1,650 pound warhead. The *Shahab–4* is to have a range of 1,240 miles and a warhead of 2,200 pounds. Two additional, unnamed systems with ranges of 5,500 km and 10,000 km respectively may also be under development in Iran.[7] Until these revelations, Iran was thought to be years away from the development of a missile capable of striking Tel Aviv or Riyadh. Now, according to various press articles, the *Shahab–3* will be deployed within a year or two, and the *Shahab–4* within three.

Russia also reportedly has provided significant and varied assistance to Chinese missile programs. During testimony before the Senate Committee on Governmental Affairs on February 24, 1993, then-Director of Central Intelligence, R. James Woolsey, stated:

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[7] Congressional Research Service, *Russian Missile Technology and Nuclear Reactor Transfers to Iran,* March 27, 1998, p. 4.

> . . . China continues to obtain missile technology from Russia and Ukraine, and China is actively pursuing agreements covering increasingly more sensitive areas. This raises concern not only because the transfers improve China's military capabilities, but also because it introduces the possibility that China could, in turn, pass more advanced Russian or Ukrainian-derived technology to other states, as Beijing has done previously with its own technology.

China, in turn, also provides a wide variety of missile assistance to various countries, ranging from the transfer of complete systems to the sharing of technical data and blueprints. China has shown a willingness to transfer ballistic and cruise missiles, as well as related production technology, to the most troubled of regions (e.g., the Indian subcontinent and the Persian Gulf). A case-in-point is China's provision of M–11 missiles and key components to Pakistan. Transfer of M–11's, for which Pakistan may have developed nuclear warheads, has contributed to heightened tensions in the region.[8] Similarly, Iran's development of medium range missiles using Chinese technology and its equipping of various patrol craft with the C–802 anti-shipping cruise missiles (provided by Beijing) has been a source of concern for the United States Armed Forces and key Middle Eastern allies alike.

On August 27, 1993, Admiral William Studeman, acting Director of Central Intelligence, wrote to Senator Glenn stating that:

> China is one of Iran's primary suppliers of defense technology. Missile-related technology cooperation, for example, has involved China's provision of technical and production expertise to Iran's indigenous missile development programs. . . . More recent press reports suggest that China may be cooperating with Iran to develop short-range ballistic missiles.

Of course, the bulk of Chinese missile cooperation with Iran has consisted of transfers of componentry, rather than complete systems. On June 22, 1995, the New York Times quoted a May 1995 Central Intelligence Agency study as concluding that China had "delivered dozens, perhaps hundreds, of missile guidance systems and computerized machine tools to Iran . . ." Other sources said rocket propellent ingredients were provided as well. The CIA reportedly had determined that the components would give Iran's Scud-type missiles improved accuracy, and possibly the ability to build such missiles on its own. On November 21, 1996, the Washington Times quoted from an alleged October 1996 CIA report documenting China's sale to Iran's Defense Industries Organization of gyroscopes, accelerometers, and test equipment meant to test and upgrade various missile systems. In May of 1997, China reportedly agreed to sell Iran X-ray equipment to study missile casings and to check for defects in solid-propellant, and a later press report added that China had supplied telemetry equipment which sends and collects missile guidance data during flight tests.[9]

China's transfer of missile design, production, and testing technology is particularly worrisome. By contributing to the development of indigenous missile manufacturing capabilities, China has enabled several countries to circumvent the Missile Technology Control Regime (MTCR), the intent of which is to slow the spread of missile technology by restricting missile-related transfers to a small club of like-minded nations. It also, by transferring such technology, has greatly complicated the United States' ability to predict when countries will be able to field systems capable of striking the U.S. and its allies.

The following represents a partial list of Chinese missile proliferation behavior, as reported in the press:

- China's Precision Machinery Import/Export Corporation is alleged to have sold M–11 missiles to Pakistan in 1995 and 1996.[10]
- "A complete factory for producing M–11 missiles or systems of similar ranges was sold to Pakistan in 1996."[11]
- China's Poly Venture's Company is alleged to have shipped specialized metal-working presses and a special furnace to a Pakistani missile production facility.[12]

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[8] *The Washington Post,* "Pakistan May Have Nuclear Tips for Rockets," May 30, 1998, p. A1.
[9] *The Washington Times,* "Russia, China aid Iran's missile program; Prototype expected within three years of weapon that could hit Central Europe," September 10, 1997, p. A1.
[10] *The Washington Times,* "U.S., China Clash Over Missile Deal," October 4, 1994, p. A8.
[11] *The Washington Times,* "China to Halt Missile Sales to Iran," January 20, 1998, p. A1.
[12] *The Washington Times,* "China Still Shipping Arms Despite Pledges," April 15, 1999, p. A1.

- Missile patrol boats equipped with scores of advanced C–802 anti-ship cruise missiles were sold to Iran in 1996." [13]
- China's Great Wall Corporation is alleged to have sold "telemetry infrastructure" and equipment to Iran. [14]
- China's Precision Engineering Institute New Technology Corp. is alleged to have agreed to sell Iran's Defense Industries Organization gyroscopes, accelerometers and test equipment.[15]
- China is alleged to have agreed to make three deliveries of specialty steel to Iran in 1999 and is alleged to have trained 10 Iranian engineers on inertial guidance systems in China.[16]
- China is alleged to have shipped "rocket motors and test equipment" to Iran for a new short-range missile "known as the NP–110." [17]
- China's Precision Machinery Import/Export Corporation is alleged to have sold "missile-related components" to Syria's Scientific Studies and Research Center.[18]
- China is alleged to have agreed to collaborate with North Korea on both selling to Iran titanium-stabilized duplex steel for its missiles, and on a variety of missile programs in North Korea—including the sale to the DPRK of "special steel." [19]

In addition to Russia and China, North Korea is a major supplier of both missiles and missile production facilities. During testimony before the Senate Committee on Governmental Affairs on February 24, 1993, then-Director of Central Intelligence, R. James Woolsey, stated:

> North Korea has sold Syria and Iran extended range Scud Cs and has apparently agreed to sell missiles to Libya. Russia and Ukraine are showing a growing willingness to sell missile technology prohibited by the Missile Technology Control Regime. Egypt and Israel are developing and producing missiles, and several Persian Gulf States have purchased whole systems as well as production technology from China and North Korea. Some have equipped these missiles with weapons of mass destruction, and others are striving to do so.
>
> . . . North Korea has sold extended range Scud missiles to—among others—Iran and Syria, and is developing and actively marketing a new, 1000 kilometer-range missile. North Korea apparently has no threshold governing its sales—it is willing to sell to any country with the cash to pay.

Admiral Studeman added, in response to a question by Senator Lieberman:

> Iran, one of North Korea's best customers for ballistic missiles and related technology, is likely to be one of the first recipients of the 1,000 km No Dong (vice Dung Ho). By the end of this decade, Iran could be able to manufacture or assemble short-range (Scud B and C) and medium-range (No Dong) ballistic missiles.

Several other countries also have transferred missiles or missile production technology in the past, including Argentina, Libya, Egypt, and various European countries. A French company, SAGEM, is believed to have developed the guidance systems for the Condor–2 program. A German firm has been alleged to have assisted Iraq in the development of a new guidance system for its enhanced Scud program. The German space agency, DFVLR, assisted Indian scientists with guidance system algorithms for the SLV–3, Agni and Prithvi.[20] Likewise, India's indigenous development of rocket propulsion systems was apparently aided by French technology and technicians. [21]

In short, nearly every Third World ballistic missile program has benefitted substantially from foreign assistance. In some cases, the assistance may have been un-

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[13] Ibid., p. A1.

[14] *The Washington Times,* "Russia, China Aid Iran's Missile Program," September 10, 1997, p. A1. See also *The Washington Times,* "U.S. Offers Deal to Stop China's Nuke Sales," October 14, 1997, p. A1.

[15] *The Washington Times,* "China Joins Forces With Iran on Short-Range Missile," June 17, 1997, p. A3.

[16] *The Washington Times,* "China Still Shipping Arms Despite Pledges," April 15, 1999, p. A1.

[17] *The Washington Times,* "China to Halt Missile Sales to Iran," January 20, 1998, p. A1.

[18] *The Washington Times,* "State Looks at Chinese Missile-Part Exports," July 24, 1996, p. A4.

[19] *The Washington Times,* "China Still Shipping Arms Despite Pledges," April 15, 1999, p. A1.

[20] Karp, Aaron, *Ballistic Missile Proliferation: The Politics and Technics* (SIPRI: Oxford, 1996), p. 119.

[21] Balaschak, M. et al., *Assessing the Comparability of Dual-Use Technologies for Ballistic Missile Development,* p. 46.

knowing, consisting of end-use diversion of dual-use items such as accelerometers. However, in most cases the assistance has been deliberate and has consisted not only of the transfer of sensitive componentry (such as German-built gyroscopes for Iraq's Project 1728), but of production capabilities. For these reasons, we assess that no country is significantly inhibited from acquiring key technologies. Those that have been stymied in their ability to obtain assistance from the West are now shopping in China, Russia, and North Korea.

Trend #3: Serious leakage of components and critical technologies is occurring despite limitations imposed under the Missile Technology Control Regime (MTCR)

An unclassified version of a 1993 CIA report stated: "The MTCR has been moderately successful at slowing the transfer of missile-related technologies between member and nonmember countries."[22] The authors of the CIA report were careful to make clear that the MTCR did not, of course, prevent transfers between nonmembers, such as China and Iran. Moreover, it must be clear that the intelligence community assessed that the MTCR has not prevented ballistic missile collaboration, but rather has "slowed" its pace.

In 1993, then-Director of Central Intelligence, James Woolsey, put it another way:

> A short-cut approach that is prohibited by the Missile Technology Control Regime and by the Non-Proliferation Treaty would be for such Third World countries to buy ICBMs or major components covertly, together with suitable nuclear warheads or fissile materials. Anything such as that would, of course, speed up ICBM acquisition by such nations.
>
> . . . If through violations of the Missile Technology Control Regime and the Non-Proliferation Treaty countries other than Russia and China are able to acquire components and technology from other countries, that could make such things a concern sooner.

An independent panel tasked with reviewing intelligence community assessments of the missile threat (chaired by former Director of Central Intelligence Robert Gates) warned against placing too much stock in the MTCR. In testimony before the Senate Intelligence Committee on December 4, 1996, Mr. Gates noted that: "the panel believes the Estimate [NIE 95–19] places too much of a burden on the Missile Technology Control Regime as a means of limiting the flow of missile technology to rogue states."

This criticism would seem to be well-founded given that members of the MTCR continue to violate their commitments. For example, in a May 10, 1996 response to questions asked by Senator Specter, the Central Intelligence Agency stated:

> Russian firms are marketing dual-use hardware and technology—including items covered by the guidelines of the Missile Technology Control Regime—at international aerospace exhibitions.

Similarly, on May 6, 1996, Lt. General Patrick Hughes, Director of the Defense Intelligence Agency, wrote to Senator Specter stating that:

> Russia is known to be marketing worldwide dual-use technology which may enhance a purchasing country's ballistic missile program. Some of the dual-use technology is most likely covered by the Missile Technology Control Regime (MTCR) Annex. Another possible conduit for the transfer of ballistic missile-applicable technology is through aerospace-related joint ventures. Both Russia and Ukraine are pursuing such cooperation.

He added that:

> Rampant corruption and decentralized control have also increased the potential for illegal arms exports since Soviet military trade was consolidated under the Foreign Economic Relations Ministry. In addition, many Russian scientists and engineers are known to be working in/for several non-FSU countries. These individuals were directly involved in defensive missile system research and development programs in the FSU and, more recently, in the successor states.

The December 1995 interdiction by Jordanian officials of advanced Russian ballistic missile gyroscopes and accelerometers destined for an Iraqi missile plant serves as a case in point. Indeed, in testimony before the Senate Armed Services Committee on March 5, 1996, Secretary of Defense Perry admitted that time needed by various countries to deploy ballistic missiles "could be foreshortened if any of those nations

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[22] Attachment to letter from CIA Director of Congressional Affairs Stanley Moskowitz to Chairmen Dellums, Schroeder and Glickman, November 17, 1993.

were able . . . to get direct assistance from countries that already have [such systems], either sending them missiles, selling them missiles, or giving them an important component or technology assistance."

The Pentagon's November, 1997, proliferation threat assessment clearly indicates that China, like Russia, continues to proliferate missile technology in spite of its MTCR commitments:

> Also, China has a bilateral agreement with the United States under which it has agreed to ban all exports of MTCR-class ground-to-ground missiles and to abide by the original 1987 MTCR guidelines and parameters. Nonetheless, the United States remains concerned about continuing Chinese assistance to missile programs in some countries of proliferation concern.

And of course, other countries which are not MTCR members continue to provide direct assistance to Third World missile programs. With respect to North Korea, the Pentagon's 1997 study determines:

> North Korea operates a complex, integrated network of trading companies, brokers, shippers, and banks that facilitate NBC weapon and ballistic missile-related trade. This trade involves complete systems, components, manufacturing equipment, and technology . . . North Korea is not a member of the MTCR and is not expected to join . . .
>
> Pyongyang's policy of supplying rogue states with ballistic missiles and related technology remains a factor in the advancement of several Middle Eastern production programs. As the North develops even longer range missiles and improves its chemical warfare capabilities, the potential exists for additional North Korea exports.

As is clear from the earlier discussion of the scope of Chinese technical assistance to Iran and Pakistan, any assumption that the MTCR can be counted upon to prevent, or significantly limit, ballistic missile proliferation is flawed on its face. Serious circumvention of the MTCR is the norm, not the exception.

Trend #4: The United States must be concerned that a country with an ICBM might sell a complete system, or complete stages of that system

In 1993, then-National Intelligence Officer for Strategic Programs, Larry Gershwin, has stated: "We also remain concerned that hostile nations will try to purchase from other states ballistic missiles capable of striking the United States."[23]

Similarly, then-DCI Studeman stated in his 1993 responses to Congress:

> We also remain concerned that hostile nations will try to purchase from other states ballistic missiles capable of striking the United States. Libya, for example, has in the past publicly stated a desire for weapons of mass destruction that could be delivered by ballistic missile to the United States. A shortcut approach—prohibited by the Missile Technology Control Regime and Nuclear Nonproliferation Treaty—would be to buy ICBMs or major components covertly, together with suitable warheads or controlled materials. The acquisition of key production technologies would also greatly speed ICBM development.[24]

Finally, the Gates Panel rightly pointed out that:

> "The United States cannot rule out the possibility of a strategic change of direction or policy in Russia or China—or in other countries—over a fifteen year span of time that might lead to a sale of a long-range missile system to a Third World country."

The concerns expressed by these officials derive from the fact that countries already have aggressively marketed medium-range missiles and some may already have tried to sell ICBMs. China's sale of CSS–2's to Saudi Arabia has been well publicized. Less attention was given, however, to China's reported marketing in 1984 of the DF–5 ICBM (with a 12,000 kilometer range) for use in the Brazilian and Argentinean "space" programs.[25] While China was turned down for a lack of hard currency, Brazil does seem to have concluded an agreement with China to develop a four-stage, solid-propellant space launch vehicle that may be marketed for

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[23] Speech to the American Defense Preparedness Association, May 18, 1993.

[24] Letter to Senator Glenn, August 27, 1993.

[25] Burrows, William and Robert Windrem, *Critical Mass* (Simon & Schuster: New York, 1994), p. 396.

export as a ballistic missile.[26] Numerous press reports also indicate that Russia has sought to market variants of nearly every one of its ICBMs for space launch purposes.[27]

Under these circumstances, it would be imprudent to assume that countries hostile to the United States would be unable to acquire a complete missile system, particularly in the event of widespread economic and political turmoil in Russia. While the possibility of the transfer of a complete missile remains remote, it cannot be discounted.

Trend #5: Countries can rapidly reconfigure their space launch vehicles to serve as ICBMs; moreover space launch vehicle programs in general can enable countries to significantly accelerate ICBM development

Several countries, including Japan, Ukraine, Brazil, Israel, and India, possess space launch vehicles (SLVs) which could rapidly be reconfigured to serve as ICBMs. While it is difficult to gauge the likelihood of this happening, the United States must recognize that unforeseen political circumstances might prompt such a development. India, for example, may determine that ICBMs are necessary for any number of reasons—perhaps as a means of deterring third party intervention in any future Indo-Pakistani conflict. The circumstances under which Ukraine, Japan, or Taiwan might find an ICBM-capability advantageous also should be examined. At a minimum, an SLV program is an incipient ICBM program.

With regard to India, Admiral Studeman noted on August 27, 1993, that:

> India could convert its space launch vehicles into IRBMs or ICBMs quite easily. India has already demonstrated the ability to build guidance sets and warheads, the two key ingredients needed to convert an SLV into a ballistic missile.
>
> . . . An ICBM based on the Polar Satellite Launch Vehicle (PSLV) would be technically feasible for the Indians. A warhead capable of handling ICBM reentry conditions and designed for the PSLV would need to be developed. A new IRBM or ICBM based on the propulsion and guidance technology employed by the PSLV would be possible.

With respect to Brazil, then-DCI Studeman noted:

> Brasilia has stated repeatedly that the SLV program is devoted exclusively to peaceful purposes. Moreover, there is widespread public support for the program because it is viewed as making Brazil a competitor in the international space launch market. Nevertheless, Brazilian officials admit that if Brazil completed development of an SLV, it would have the capability to build ballistic missiles.

India and Brazil are but two of a number of countries who either possess or are developing SLVs capable of being converted into ICBMs. The list grows if one considers those countries that have the technological "know-how" to develop an SLV.

As General William Odom, former Director of the National Security Agency and chairman of the SDIO Proliferation Study Team put it in a February 1993 report:

> The conclusion that the probability is quite low for the emergence of new ballistic missile threats to the United States during this decade or early in the next decade can be sustained only if plausible but unpredictable developments, such as the transfer and conversion of SLVs, are dismissed or considered of negligible consequence.[28]

As far as the linkages between SLV and ICBM technologies, during testimony before the Senate Committee on Governmental Affairs on February 24, 1993, by then-Director of Central Intelligence, R. James Woolsey:

> The space launch vehicle technology is very similar to and is clearly applicable toward developing ballistic missiles. It was the reason why Sputnik led to concerns for the security of the United States back at the end of the 1950s. . . . it is unfortunately the case that the technologies for ICBMs and space launch vehicles are very close and in some cases virtually identical.

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[26] Nolan, Janne, *Trappings of Power: Ballistic Missiles in the Third World,* p. 19.

[27] Anna Bakina, "Strategic Missile Under Conversion Into Space Booster," ITAR-TASS, 17 July 1995; "RSA To Turn Swords Into Plowshares," *Kommersant Daily,* 7 July 1995, p. 9; "SS–19s To Be Converted Into Rokot Space Carrier Rockets," *FBIS Report: Arms Control and Proliferation,* FBIS–TAC–95-014–L, 4 August 1995, p. 97; Vitaly Chukseyev, "Russia to Supply Boosters for U.S. Missiles," ITAR-TASS, 13 October 1995.

[28] *The Emerging Ballistic Missile Threat to the United States,* February 1993, p. 1.

According to the Arms Control and Disarmament Agency, "the only major difference between the space and missile variants is that the final boost stage of the ICBM is terminated earlier, before the payload has achieved enough velocity to enter orbit, resulting in its return to earth."[29] Indeed, of the eight essential components for an ICBM, all but one (the warhead) are used in modified form on a space launch vehicle.

Both the United States and the Soviet Union used ICBMs as boosters in their space programs. The Atlas, Titan, SS–5, and SS–6 rockets were all of military origin. Similarly, systems or stages of systems under development in India and Brazil can be used as ballistic missiles. Indeed, perhaps with the exception of Japan, no country has ever embarked upon an SLV program for purely nonmilitary reasons.

On August 27, 1993, Admiral William Studeman, acting Director of Central Intelligence, wrote to Senator Glenn stating that:

> Applying space launch vehicle (SLV) components or technology to a ballistic missile program is a relatively straightforward task. SLV and ballistic missile technologies, components, and operations are very similar and often identical, thus no "safeguards" exist which could prevent conversion of SLV components or technologies for use in ballistic missiles.
>
> For example, India's first space launch vehicle, the SLV–3, was based on the U.S. Scout launch vehicle. Its first stage also serves as the first stage of the Agni medium-range ballistic missile. This interchangeability easily allows diversion of SLV technology into missile programs.
>
> Any country which receives technology to manufacture SLVs also receives the necessary technology to manufacture ballistic missiles. By providing SLV manufacturing technology, an inherent ballistic missile manufacturing capability is transferred as well. For countries with little indigenous missile technology, transfer of SLV production technology could reduce their missile development time frame by several years.

A 1992 report by The System Planning Corporation found SLV conversion to be "fairly straightforward."[30] Another 1992 study by Science Applications International Corporation found that "The increasing availability of space launch vehicles and space launch services could result in the ability of certain Third World countries to threaten the continental U.S. with ICBMs carrying nuclear, chemical, or biological payloads in the mid- to late-1990s."[31]

First, it is analytical folly to overlook the fact that several countries today have the capacity to threaten the U.S. with an ICBM, though not necessarily the *intent.* Second, the increasing availability of dual-use technologies—particularly through SLV programs—will enhance the ability of countries to produce ballistic missiles, and may prompt other countries to pursue their own, indigenous development. The proliferation of sensitive technologies via space programs will enable more effective integration of ballistic missile components, will extend the range and payload capabilities of various missiles under development, and reduce the circular error probable (CEP), increasing accuracy.

Even as all of this is occurring, the Intelligence Community is finding difficult the monitoring of SLV programs to ensure that they do not contribute to a ballistic missile program. Intent is hard to assess, and since there is no practical capability to distinguish between SLV and ICBM development, the U.S. may be denied timely warning of an emerging missile threat based on SLV technology. In some cases, the threat could emerge "over night" as a country simply transforms a commercial system to a military role.

Trend #6: A country need not engage in a lengthy flight test program prior to deployment of an ICBM. This means reduced warning time

Under the Clinton Administration the intelligence community assumed that a flight test program lasting about 5 years is essential to the development of an ICBM.[32] Richard Cooper specifically noted that "a flight test is a sure, detectable sign of a ballistic missile program. Normally the first flight test would provide at least five years warning before deployment." He added that "Moreover, we would almost certainly obtain other earlier indicators of an ICBM program."[33]

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[29] Arms Control and Disarmament Agency, *World Military Expenditures and Arms Transfers, 1987* (ACDA: Washington, D.C., 1988), p. 26.

[30] *Ballistic Missile Proliferation: An Emerging Threat,* 1992, pp. 26–28.

[31] Sidney Graybeal and Patricia McFate, "GPALS and Foreign Space Launch Vehicle Capabilities," SAIC, February 1992, p. 18.

[32] GAO/NSIAD–96–225, *Foreign Missile Threats,* p. 7.

[33] Cooper testimony, House National Security Committee, February 28, 1996, p. 3.

The high degree of certainty with which NIE 95–19 judges that indicators of an ICBM program would be detected prior to the missile's flight testing would seem questionable in light of the Intelligence Community's reported intelligence gaps with regard to both the Iraqi and North Korean missile programs.

For example, according to one intelligence analyst, it was only *after* Iraq's test launch of a modified Scud B (the al-Hossein) on August 3, 1987, that the United States, "suddenly realized we had a missile problem in Iraq."[34] According to many, the al-Hossein test was the first indicator that Iraq had another ballistic missile program besides the Condor II project. While the Scud-upgrade program (Project 1728), was the least technologically demanding of Iraq's missile programs, it ranged in scope from the cannibalization of existing Soviet Scuds to Iraqi manufacture of major components such as missile cases. Moreover, Project 1728 entailed a massive foreign acquisition program which obtained rocket nozzles, virtually a complete testing plant for missile propulsion systems, a liquid rocket fuel plant (which also could make UDMH), turbo pumps for missile fuel systems, and gyroscopes.[35] It therefore clearly had observable features. Yet it went undetected (according to credible public accounts).

On February 29, 1988—just seven months after its first and only flight test of the modified Scud B—Iraq began launching ballistic missiles at Iranian cities. Yet the U.S. Intelligence Community reportedly was at a loss to identify the type of missile being used by Iraq. According to Kenneth Timmerman, Iranian broadcast video of unexploded missile components had the Intelligence Community "tied in knots."[36] Although the componentry was positively identified as belonging to Soviet-built Scud Bs, the distance to the target in Iran was well beyond the range of even the Scud C (which Iraq had not received). It was only after the Iran-Iraq war that it became clear that Iraq had cut up and rewelded Scud B fuel tanks to create longer fuel tanks that could hold five, rather than four, tons of fuel.[37] Iraq had additionally reduced the size of the missile warhead and had moved air tanks from the missile's tail to the nose.[38]

The U.S. experience with monitoring the Iraqi missile program would seem, at a minimum, to call into question the bold assertion that the U.S. would "almost certainly" detect a ballistic missile program prior to a flight test. It would also seem to indicate that a country might, under certain conditions, find a way to "cut corners" in the ballistic missile development process.

The U.S. experience with North Korea's *Taepo Dong 1* missile is no less telling. On August 31, 1998, North Korea stunned the United States by firing a *Taepo Dong 1* which had a third stage. "The existence of the third stage concerned us," according to Bob Walpole, the National Intelligence officer for Strategic and Nuclear Programs.[39] "First, we had not included it in our earlier projections; neither had outside experts looking at our intelligence. Second, it and potentially larger third stages have significant implications for the Taepo Dong–2."[40]

The launch of the *Taepo Dong 1* by North Korea demonstrated significant and unexpected progress in stage separation technology. With only one flight test, North Korea proved that it possessed the ability—in the words of NIO Walpole—"to deliver small payloads to ICBM ranges . . ."[41] In other words, North Korea has developed an ICBM capable of attacking the United States with a small biological or chemical payload. It did so—not with a five year flight program—but with only one flight test. As the North Korean example proves, in the absence of concrete indicators regarding a Third World country's ICBM program, a flight test may be the first and only indication we may have of an emerging ICBM threat.

Any assumption that the U.S. will have advance warning of an ICBM deployment since any ICBM flight test program would last at least five years reflects a serious analytical shortcoming: the "mirror imaging" of Western ICBM developmental programs.

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[34] Kenneth R. Timmerman, *The Death Lobby: How the West Armed Iraq,* (Boulder: Houghton Mifflin Co., 1991), p. 268.

[35] Ibid., p. 253–255. UDMH, unsymmetric dimethylhydrazine, is a rocket fuel additive which boosts propulsion. The ability to manufacture or obtain rocket fuel additives, particularly for solid fuels, may be important to the indigenous development of an ICBM propulsion system.

[36] Ibid., p. 288.

[37] Ibid.

[38] Seth Carus and Joseph Bermudez, "Iraq's al-Hossein Missile Program," *Jane's Soviet Intelligence Review,* May 1990.

[39] "North Korea's Taepo Dong Launch and Some Implications on the Ballistic Missile Threat to the United States," Robert Walpole, 8 December 1998, p. 2.

[40] Ibid.

[41] Ibid.

Historically, the United States has engaged in six different types of tests: (1) technology/componentry tests; (2) research and development tests; (3) initial operational tests; (4) demonstration and shakedown tests; (5) follow-on tests; and (6) aging and surveillance tests.[42] The first three types are those tests normally conducted prior to deployment of a fully operational U.S. ICBM.

Depending upon circumstances, it may be technically feasible for a country to significantly shorten the time spent on various test stages. For instance, the purpose of technology and componentry testing is to validate the effectiveness of advanced components or sub-assemblies that incorporate *unproven, high-risk technology.* If a Third World country acquires components that have already been validated in other ballistic missile programs—such as with Iran's reported acquisition of SS–4 liquid-fuel technology—the need for this type of test would be diminished, or perhaps even eliminated altogether. In fact, a Third World country which has acquired only a handful of inertial navigation systems or gyroscopes may be loathe to sacrifice any of its scarce resources in such a test.

Research and developmental tests are conducted to validate successive stages in an ICBM design process. If, however, a country were to rely upon proven designs, fewer such tests would be necessary. The French missile program demonstrates how an incremental development process which recycles proven technology may reduce the number of developmental tests required. Relying upon components and sub-systems proven in other systems, France was able to deploy the 2,750 kilometer range S–2 missile in six years with only 12 test launches.[43]

North Korea seems to be following this pattern of development using recycled technology. According to an April 1996 report by the Office of the Secretary of Defense, the *Taepo Dong 2* missile is thought to be a new combination of existing missile components—presumably derived from the *Nodong* program. The same is believed to be true for the *Taepo Dong 1* system. If the *Taepo Dong 1* and *2* are indeed but extensions of the *Nodong* program, this would explain why their rapid development may have taken the Intelligence Community by surprise.[44] The *Taepo Dong* series' linkages to the *Nodong* program explains why North Korea did not feel compelled to flight test the *Taepo Dong 1* until last summer, since the basic concept was validated in the May 1993 *Nodong* flight test. Moreover, given the relative success of the *Taepo Dong 1*'s flight test, North Korea may not feel compelled to flight test the follow-on system at all prior to use. At a minimum, North Korea may conduct only a handful of operational flight tests. Under such circumstances, the *Taepo Dong 2* could easily be deployed without 5 years of rigorous testing. Further, operational similarities between the *Taepo Dong 2* and its *Nodong* progenitor might foreshorten training requirements for missile crews.

There is an additional concern here as well. In June, 1994, *The Washington Times* reported that the United States has confirmed that Iranian officials have been present at a number of missile tests in North Korea, which were described as "sales demonstrations." We may, therefore, presume that Iran also has validated the *Nodong's* design, having witnessed successful tests.[45] Accordingly, if the *Shahab–3* and *Shahab–4* are simply further improvements of the *Nodong* system, Iran also may engage in fewer flight tests of its intermediate systems.[46]

If Iran is using *Nodong* technology for its medium-range program, then it may use it for its longer-range, follow-on missiles. Were Iran to stack two *Nodong* stages to-

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[42] Wilkes, Owen et al., *Chasing Gravity's Rainbow: Kwajalein and US Ballistic Missile Testing* (Strategic and Defence Studies Centre, The Australian National University: Canberra, 1991), pp. 75–80.

[43] Villain, J., *La Force de Dissuassion: Genese et Evolution* (Editions Lariviere: Paris, 1987), p. 61.

[44] Barbara Starr, *Jane's Defense Weekly,* 25 June 1994, p. 10.

[45] This raises an interesting point. Press articles from 1994 reported that North Korea may test the *Nodong* missile in Iran because "[testing facilities] don't exist for a full-range test in North Korea." Obviously, were this to occur, it would shorten Iran's own missile testing timetable. It also raises the troubling prospect that the Intelligence Community might be uncertain, in the future, as to how many countries are deriving technical benefit from a ballistic missile test.

[46] Certainly there is ample evidence to suggest that Iran's medium-range systems utilize *Nodong* technology. Iranian interest in the *Nodong* missile has been widely publicized. In his 1994 posture statement, Director of Naval Intelligence Admiral Edward Shaefer's reportedly stated that "Iranian acquisition of the No-dong system from North Korea is possible in the future." (*Arms Control Today,* July 1994, p. 23; see also, Barbara Starr, *Jane's Defence Weekly,* August 6, 1994, pp. 4–6.)

Assistant Secretary of State Robert Pelletreau testified on June 14, 1994, that "We're concerned about press reports and other intelligence that they might, at some point, sell the No-Dong missile—with a much longer range than the Scud-B and -C." (*The Washington Times,* June 16, 1994, p. A 13; see also, James Bruce, *Jane's Defence Weekly,* July 30, 1994, pp. 23–33.)

gether, flight testing of the basic conceptual design may be viewed as unnecessary. (We will assess the feasibility of "stacking" stages later in the assessment.)

Finally, as the United States found in testing the MX ICBM, successful developmental tests also could foreshorten the test series. The U.S. conducted its first operational trial test of the MX less than four years after it had initiated the flight test program (June 1983–March 1987).[47] Moreover, a significant number of the tests from October 1984 to August 1986 were devoted to integration of the MX's re-entry vehicle. (These types of tests may not be germane to a Third World ICBM program, particularly if a biological warhead is to be employed). Operational testing of the MX missile was concluded in March 1990. In other words, the United States moved from testing componentry to certifying operational capability of its most sophisticated ICBM—it had a longer range and higher CEP than earlier systems—in roughly seven years.

In judging that any flight test program would last at least five years, the intelligence community previously seemed to assume that a would-be ICBM developer in the Third World will have nearly the same demanding requirements for payload, range, and accuracy as did the United States at the height of the Cold War. Instead, it now seems more likely that Third World countries will pursue intercontinental-range missiles for their deterrent value—as a means to threaten counter-value targets, such as cities. Under such circumstances, a far less rigorous test program would be required. A CEP of 800 meters matters little if the target is New York City or Honolulu. Further, given the high cost of flight testing, the temptation to make do with fewer tests may also foreshorten the timetable. Finally, if the country has been able to develop a nuclear, chemical, or biological warhead for the missile, the need to test for accuracy is further reduced.

The basic rule of thumb for the U.S. missile program, stipulated by the Joint Chiefs of Staff, was that the number of missiles tested must be sufficient to provide the U.S. with a 90 percent confidence that the ICBM's reliability is not less than ten points below the success rate of the series.[48] This is a very rigorous standard. The United States should contemplate the possibility that a Third World test program might not be designed to prove with such a high degree of confidence that every deployed system *will* work. Rather, testing may be designed to confirm the mechanical integrity of a system—to prove that it *can* work. One cannot dismiss the political pressures and other imponderables which might prompt a country to deploy a missile with little or no testing, or to foreshorten legs of the testing program.

On this point, while the Gates Panel agreed with NIE 95–19 that a country developing an ICBM would almost certainly test it, it nevertheless concluded that "most important among the deficiencies of NIE 95–19" was the Estimate's "failure to adequately address the motives and objectives of the governments developing missile programs, and how they affect technology needs." According to the panel:

> With the ballistic missile programs we are seeing now, however, motive matters a great deal, and can significantly affect technology. What is required technically for a crude terror weapon is very different than what is required for a weapon that is militarily useful.

History is replete with examples of how motives and objectives—as opposed to technical interests—dictated developmental and testing timetables. For example, the pressures of the Sino-Soviet conflict prompted China's decision to deploy the DF–5 for operational training only two months after its first two full-range test flights into the Pacific.[49]

Most significantly, in the midst of the Cold War race to send a man to the moon, the United States developed the Saturn–S rocket *with no flight testing at all.* The rocket flew successfully for first time on November 8, 1967 as part of the Apollo-4 mission.[50]

In July 1993, the CIA explicitly recognized the likelihood—not possibility—that a country might foreshorten an ICBM testing timetable:

> Because of the limited capabilities and likely motivations for attacking CONUS with ICBMs—such as international coercion, deterring US attacks, and regional influence building—it is highly likely that any country making the decision would pursue a high-risk development program with no (or

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[47] Wilkes, Owen et al., *Chasing Gravity's Rainbow: Kwajalein and US Ballistic Missile Testing*, p. 81.

[48] Ibid., p. 77.

[49] Lewis, John Wilson, and Hua Di, "China's Ballistic Missile Programs," *International Security* (Fall 1992), p. 18.

[50] Bilstein, R.E., *Stages to Saturn: A Technological History of the Apollo Saturn Launch Vehicles* (NASA: Washington, D.C., 1980), pp. 349–351.

limited) testing in order to shorten schedules and reduce the visibility of the program.[51]

This assessment underscores the fact that the United States cannot rely upon observation of flight tests for warning that an ICBM threat is emerging.

Trend #7: Development of short and medium-range missiles will enable countries to significantly accelerate ICBM development

There are numerous linkages between short- and medium-range missile development and ICBM development. Shifting from a short or medium range missile to a long range ICBM is a viable technological option. Such a shift can be accomplished via two alternatives that are widely discussed in the literature on missile proliferation: vertical stacking and horizontal clustering of shorter or medium-range missiles.

Several assessments have taken seriously the potential for horizontal clustering of medium-range missile components. A 1993 CIA report found that "clustering lower performance engines is an option available for increasing the missile's range or payload capacity."[52] Similarly, a 1992 report by the Space Systems Division of Rockwell International determined that 13 SCUD missiles could be clustered together—nine in the first stage, three in the second, and one in the third—to produce an ICBM with a range of 7000 kilometers.[53] Indeed, the report goes on to examine other potential combinations of available rocket boosters and finds that clustering could result in an ICBM with a range of 14,000 km or more.

The United States can ill-afford to dismiss horizontal clustering as a technical option given the history of both U.S. and Soviet long-range rocket designs. In the 1950s both countries progressed rapidly from single-stage, intermediate range missiles (such as the SS–4, SS–5, Jupiter, and Thor missiles) to the development of ICBMs (SS–6 and Atlas) which were essentially single-stage rockets surrounded by strap-on engines. NASA, for example, engineered the Saturn–1 and Saturn–1B space launch vehicles out of eight Redstone boosters. Subsequently the Saturn–S also made use of clustering.[54] As has already been noted, the Saturn–S was launched "full up" and successfully without any prior flight testing.

Significantly, Libya, Iraq, and North Korea all have experimented with the concept. Iraq, for example, designed the "al Abed," which integrated seven boosters (at least six of which were Scuds). Although there has been speculation that the second and third stages were dummies, U.S. officials nevertheless took the technological implications of the clustering design seriously. It was calculated at the time that the al Abed could ultimately be configured to deliver payloads over an intercontinental distance.[55] Half a year later, then-Secretary of Defense Cheney stated: "The booster looked as if it were made up of five short-range rockets. Together the rockets could give the booster a range of 1000 kilometers."[56]

The other technical option that would enable a country to develop an ICBM using shorter range missiles would be to "stack" the boosters. A 1981 study for the Arms Control and Disarmament Agency examines the feasibility of this approach at length. That report concludes that long-range ballistic missiles could be created by combining two or three single-stage boosters into a single, multiple-stage rocket. The report concluded that "a two-stage system is relatively easy to construct from the available components . . ."[57] In fact, the report concludes that virtually all solid propellant rockets can be adapted to two-stage ballistic missile system.

The 1981 ACDA-commissioned report also concludes that, "while technically difficult, it may be possible to stack three identical stages together to increase the range of these rockets."[58] This is the approach taken by Brazil in its Sonda series

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[51] Attachment to Moskowitz letter to Dellums et al., November 17, 1993.

[52] Attachment to Moskowitz letter to Dellums et al., November 17, 1993.

[53] Howe, J.R., *Emerging Long-Range Threat to CONUS* (Rockwell International, Space Systems Division: Washington, D.C., Dec. 1992).

[54] Bilstein, R.E., *Stages to Saturn: A Technological History of the Apollo/Saturn Launch Vehicles* (National Aeronautics and Space Administration: Washington, DC, 1980) pp. 176–83, 323–45.

[55] "U.S. Confirms Iraq has Launched Rocket That Can Carry Satellites," *The New York Times,* 8 December 1989.

[56] U.S. Department of Defense Press Release, No. 294–90, 11 June 1990, p. 5.

[57] Balaschak, M. et al., *Assessing the Comparability of Dual-Use Technologies for Ballistic Missile Development,* pp. 45–49.

[58] Ibid., p. 54.

of sounding rockets, which according to the Defense Intelligence Agency has evolved from a single-stage to the four stage Sonda–IV.[59]

The study provides a number of examples, including a hypothetical missile comprised of two commercially-marketed French *Mammoth* boosters (which use rocket engines similar to those licensed by the French government for manufacture in both India and Pakistan) which could deliver a 250 kg payload to a distance of over 1,200 kilometers. Similarly, by stacking two commercial *Ariane* strap-on boosters, a country could develop a missile with a range of nearly 3,000 kilometers.[60] As a practical matter, India's two-stage *Agni* system (with an intended range of over 2,000 km) is a two stage missile which reportedly combines India's solid-fueled SLV–3 booster with a liquid-fueled second stage apparently adapted from the Prithvi.[61] It also has been speculated that Iraq's 2000 km-range *Tammuz* prototype was comprised of an *al-Hossein* booster and modified SA–2 surface to air missile.[62]

Further, press accounts indicate that North Korea's *Taepo Dong 2* may be a two-stage missile incorporating the *Taepo Dong 1* stacked on a 16.2 meter booster.[63] Certainly, the stacking of the third stage on the *Taepo Dong 1* provided an increased range to that system, and also has caused the intelligence community to rethink its assumptions about the range and payload capacity of the *Taepo Dong 2.*

Trend #8: Countries are today able to deploy a ship-launched, short or medium-range ballistic missile capable of threatening the United States

According to the Gates Panel:

> The Panel also believes that the possibility of a sea-based ballistic missile of less than intercontinental range warrants more attention than given in the Estimate [NIE 95–19]. The Estimate's assessment of the ballistic missile threat to North America concentrates almost exclusively on ballistic missiles with intercontinental range. Consideration of scenarios involving crude sea-launched ballistic missiles (e.g., Scud-derived missiles launched from mobile launchers driven aboard transport ships) is limited. Since developing missiles with sufficient range was identified as one of the most difficult technical obstacles which would have to be overcome before North America would face an ICBM threat, the lack of serious attention to possible SLBM threats is all the more noteworthy.

The idea of launching short-range, ballistic missiles from sea is not new. For example, the Soviet Union deployed, beginning in 1958, the R–11FM and R–13 ballistic missiles on its submarines. The two types of short-range ballistic missiles (both were launched from the vessel's sail) had a range of 150 km and 600 km respectively.[64]

Obviously, future programs may not be as complex as the Soviet submarine system. A country just as easily could roll a mobile transporter/erector/launcher (TEL) onto a barge or merchant ship, or could outfit a vessel's cargo hold with a launch system. In and of itself, this would pose minor technical challenges to most Third World countries. One of the most critical obstacles to be overcome would be hardening the platform against humidity and vibration.

A country might find it more difficult were it to pursue integration of the missile's guidance system with some form of inertial guidance on the ship (in order to correct for the unsteady sea state). Left uncorrected, even minimal rolling or pitching by the naval vessel could produce large missile inaccuracies down-range. Of course, for a country intending to deliver a Scud missile tipped with a biological or chemical warhead against a U.S. city, no guidance system correction is necessary. Even "getting close" would suffice to cause immense devastation.

In short, the requisite technology to threaten the U.S. with short-range ballistic missile attack from the sea already exists and is readily adaptable.

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[59] Pumphrey, Joe D., *Status of Third World Ballistic Missile Technology* (Defense Intelligence Agency: Washington, 1986), p. 2.

[60] Ibid., pp. 53–61.

[61] Nolan, Janne, *Trappings of Power: Ballistic Missiles in the Third World,* p. 45.

[62] Navias, Martin, *Going Ballistic: The Build-up of Missiles in the Middle East* (Brassey's: London, 1993), pp. 106–107.

[63] "U.S. Reportedly Within New North Missile Range," FBIS–EAS-95-175 (September 11, 1995), p. 3.

[64] Boris Rodionov, "First Ballistic Missiles for the Submarine Fleet," *Military Parade* (January/February, 1996), pp. 58–61.

Trend #9: The possibility of unauthorized or accidental launch from existing nuclear arsenals is increasing

On February 28, 1996, the Chairman of the National Intelligence Council, Richard Cooper, testified before the House National Security Committee that:

> In our recent NIE, the Intelligence Community reaffirmed earlier assessments that the current threat to North America from unauthorized or accidental launch of Russian or Chinese strategic missiles remains remote and has not changed significantly from that of the past decade.

Such an assumption is at odds with the Intelligence Community's concerns over the potential for turbulence in the former Soviet Union. A classified CIA report issued in September 1996, entitled "Prospects for Unsanctioned Use of Russian Nuclear Weapons," seems to have been excerpted in published media accounts.[65] Reportedly, it concluded that:

> The Russian nuclear command and control system is being subjected to stresses it was not designed to withstand as a result of wrenching social change, economic hardship, and malaise within the armed forces . . .
> . . . despite official assurances, high-level Moscow officials are concerned about the security of their nuclear inventory.

In evaluating several worst-case scenarios, the CIA report also reportedly concluded that "a severe political crisis, however, could exacerbate existing dissension and factionalization in the military, possibly heightening tensions between Russian political and military leaders and even splitting the general staff or nuclear commands." Yet another troubling finding of the report is that the command posts of the Russian Strategic Rocket Forces "have the technical capability to launch without authorization of political leaders or the general staff." Given time, the report states, "all technical [security] measures can be circumvented—probably within weeks or days depending upon the weapon involved." Moreover, the political leadership probably could not "prevent the general staff (or perhaps some other national level command post) from launching on its own." Additionally, the report warns that nuclear armed units may be conspiring to commit nuclear blackmail and that some submarine crews "probably have an autonomous launch capability and might have the ability to employ SLAMS as well."

There are at least two additional incidents which heighten concern about the danger of accidental or unauthorized launch from Russia. During the August 1991 coup attempt in Moscow, a secret order from Russian Defense Minister Yazov led to unauthorized alert status for Russian armed forces, including strategic nuclear forces.[66] While the August 1991 coup attempt was an incident of previously-unforseen political turmoil in Russia, it is clear that Russia's political future could see similar events in the future. The second troubling event was the January 1995 Russian nuclear alert in overreaction to the launch of a Norwegian meteorological rocket.[67] This event reportedly led to the Russian strategic nuclear force control terminals—the nuclear "footballs"—being switched to alert mode for several minutes.[68]

While the possibility of a large-scale nuclear exchange between Russia and the United States may be at an all-time low, the risk of mishap—accidental or otherwise—has not decreased proportionately to reductions in the Russian nuclear arsenal. In fact, media accounts which have not been challenged for accuracy raise the troubling possibility that Russian control of strategic nuclear forces is not as secure as it was during the Cold War. The possibility of accidental or unauthorized launch may be "low," but—like the possibility of a nuclear exchange during the Cold War—it is clearly a possibility with severe consequences.

In the words of the Gates Panel:

> With major forces of change still at play in Russia, the Panel believes the Estimate's discussion of unauthorized launch is superficial and may be overly sanguine. All agree that a launch unauthorized by the Russian polit-

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[65] "Russian Renegades Pose Nuke Danger: CIA Says Arsenal Lacks Tight Controls," *The Washington Times,* October 22, 1996, p. A1.

[66] See "Yazov Mobilization Order," FBIS–SOV–91–166 (August 27, 1991), p. 59 and "Deputy Procurator General Interviewed on Putsch," FBIS–SOV–92–021 (January 31, 1992), pp. 37–41.

[67] See "Norwegian Science Rocket Puts Russian Defense on Alert," *The Washington Times* (January 29, 1995), p. A16; "Russian Radars Alert Moscow After Detecting Missile Launch," *Agence France Presse* (January 25, 1996); and "Yeltsin Leaves Chechnya Behind in Lipetsk, But Takes the 'Black Attache Case' With Him," *Izvestiya* (January 27, 1995) p. 1.

[68] See also the article by Nikolay Devyanin, designer of the Russian nuclear force control terminals: "All That Has Happened, Alas, Had to Happen," *Moskovskiye Novosti,* January 29-February 5, 1995, pp. 1, 12.

ical leadership is a remote possibility. But it would appear to be technically possible.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 12, 1999.

MEMORANDUM

To: Republican Members, Committee on Foreign Relations
Through: James W. Nance
From: Marshall Billingslea, Sherry Grandjean, and Andrew Anderson
Subject: Hearing on the ABM Treaty and the Need For Ballistic Missile Defenses

The Committee will hold a hearing on the ballistic missile threat to the United States and the need for a national missile defense on Thursday, May 13, at 10:00 AM in SD–562. The witnesses will be the Honorable Stephen Hadley, former Assistant Secretary of Defense under President Bush; (2) the Honorable Robert G. Joseph, former Ambassador to the ABM Treaty's Standing Consultative Commission; and (3) the Honorable David Smith, former Chief U.S. Negotiator to the Defense and Space Talks. Senator Hagel will preside.

Attachment.

BALLISTIC MISSILE DEFENSE: TECHNOLOGICAL ISSUES

Basic Architecture Planned for a National Missile Defense

The Ballistic Missile Defense Organization (BMDO) of the Department of Defense has developed a national missile defense (NMD) program which will, if ever deployed, establish a ground-based missile defense designed to protect the United States against limited ballistic missile threats. The NMD plan is intended to be layered, over time, to achieve three successive levels of capability (called "C1", "C2", and "C3").

The first, most basic missile defense, C1, is meant to provide a very "thin" protection against a few, technologically-simple incoming warheads. As such, it is oriented against the North Korean threat. As will be discussed, C1 would not be effective against the Chinese arsenal of two dozen warheads, and certainly would not be capable of stopping an attack by Russia. It will not be suitable for dealing with the emerging Iranian ICBM threat due to the planned location of the single interceptor site in Alaska. It also will be incapable of defending against short-range ship-launched ICBMs. However, the current intention is to deploy C2, and C1 is an intermediate step along the way.

The second- and third-generation of defenses, C2 and C3, are meant to provide capability against a few incoming, sophisticated warheads, and defense against a larger number of sophisticated warheads, respectively.

ELEMENTS OF THE NATIONAL MISSILE DEFENSE SYSTEM

There are six major technological components to the Administration's planned NMD system:

- GROUND BASED INTERCEPTOR (GBI) ("MISSILES")

The GBI and its associated components are the "weapon" of the NMD system. Its mission is to strike and destroy by force of impact high speed ballistic missile warheads in the midcourse or exo-atmospheric phase of their trajectories. The GBI consists of three components:

—The missile payload, or exo-atmospheric kill vehicle (EKV). The EKV has its own sensors, propulsion, communications, guidance, and computing functions which will work together to complete the intercept.

—A booster that will propel the EKV toward the approximate intercept location so the EKV can perform the final maneuvers to impact and destroy the incoming warhead.

—Ground command and launch equipment needed to launch the interceptor. This includes software and hardware to interface with the BM/C3 system, human-in-control interfaces (consoles), and interceptor storage sites (silos) for daily maintenance and readiness functions and to launch the interceptor.

As of March, 1999, the administration plans for 20 interceptor missiles in central Alaska, if a decision to deploy C1 is taken. This is being done because technical assessments indicate that national coverage cannot be accomplished from North Dakota alone. For C2, the plan calls for 80 more weapons in Alaska. C3 adds a further 25 interceptors to the Alaskan site, bringing the total to 125, and calls for a second missile defense site of 125 interceptors at Grand Forks, North Dakota.

• FORWARD DEPLOYED AND/OR U.S.-BASED X-BAND RADARS (XBR)

The XBRs are forward deployed, ground-based, taskable, multi-function radars. In the NMD role, they perform acquisition, tracking, discrimination, and kill assessment of incoming warheads. XBRs use high frequency and advanced radar signal processing technology to improve target resolution, which permits the radar to perform more effectively against closely-spaced warheads and debris.

For C1, the initial XBR capability would consist of the single radar at Shemya, Alaska. C2 would add three more X-Band Radars at Clear, Alaska; Thule, Greenland; and Fylingdales, England. These radars sites already exist, possessing early warning, surveillance capabilities. C3 would add a further XBR in South Korea.

• UPGRADED EARLY WARNING RADARS (UEWR)

U.S. early warning radars are large, fixed, phased-array surveillance radars used to detect and track ballistic missiles directed into the United States. Upgrades to the existing network will provide the capability to support the NMD surveillance function. Prior to deployment of the SBIRS (Low) satellites, the UEWRs will be used to detect and track objects during their midcourse phase, primarily to cue the more precise X-Band Radars. There are cases, however, where the XBR will not possess sufficient range to conduct intercepts; in those cases the UEWR will provide the only tracking data. However, this would not be compliant with the ABM Treaty.

C1 will utilize a network of five existing radars. C2 would not add any additional UEWR, but C3 would add a radar in South Korea.

• BATTLE MANAGEMENT/COMMAND, CONTROL, AND COMMUNICATION (BM/C3)

BM/C3 is the "brains" of the NMD system. In the event of a launch against the United States, the Commander-in-Chief of North American Aerospace Defense Command (NORAD) will control and operate the NMD system through the BM/C3. The BM/C3 element supports the Commander-in-Chief with extensive decision support systems, battle management displays, and situation awareness information. In this way, it supplies the means to plan, select, and adjust missions and courses of action; and it disseminates defense engagement authorization (DEA) and other Command decisions to the NMD system elements. The In-Flight Interceptor Communications System (IFICS) is the BM/C3 communications link to the interceptors during flyout.

Cheyenne Mountain, Colorado, mistakenly believed by many Americans to house already a robust national missile defense, will be the BM/C3 site for the planned NMD system.

• SPACE BASED INFRARED SYSTEM (SBIRS)

SBIRS is an additional element that future NMD systems will utilize. SBIRS (High) is being developed by the Air Force as part of the Early Warning System upgrade which will replace the Defense Support Program (DSP) satellites. SBIRS (Low) is being developed primarily to support both national- and theater-missile defense systems. In its NMD mission, SBIRS (High) will detect missiles in their boost phase and the SBIRS (Low) constellation of sensor satellites will acquire and track ballistic missiles throughout their trajectory. This information will provide the earliest possible trajectory estimate to the BM/C3 element. By providing this "over-the-horizon" precision tracking data to the NMD system, the effective NMD battle space is expanded to permit interceptors to be launched before the threats come within range of the XBRs or UEWRs. Indeed, with SBIRS (Low), no ground-based radars are needed, though this, too, would be an ABM Treaty issue. SBIRS (Low) not only will extend the defensive "footprint" of the NMD several fold, but will be able to supplant the ground-based radars. This is critical for effective National Missile Defense.

C1 will draw upon SBIRS (High) satellites. C2 will add SBIRS (Low). C3 will utilize the existing C2 architecture.

• IN-FLIGHT INTERCEPTOR COMMUNICATIONS SYSTEM (IFICS)

IFICS is the communication link which will pass target data from the NMD sensors to the interceptor missile. C1 will utilize communications nodes in central Alaska, Caribou, Maine, and Shemya, Alaska. C2 will add a further IFICS site in Munising, Michigan. C3 adds a fifth site in Hawaii.

All elements of the NMD system will work together to respond to a ballistic missile directed against the United States. The U.S. Early Warning System, consisting of Defense Support Program (DSP) satellites, and its follow-on capability the Space Based Infrared System (SBIRS) satellites, will detect the launch of enemy missiles and will subsequently track these missiles and reentry vehicles (RV). After confirmation, this information will be sent to the Battle Management/Command, Control, and Communications (BM/C3) system. Subsequently, ground-based radars, Upgraded Early Warning Radars (UEWR) and X-Band Radars (XBR), will acquire and track the enemy missile and will compute an intercept point. After receiving defense engagement authority, BM/C3 will order the launch of one or more Ground-Based Interceptors (GBI) to the intercept point. Nearing this point, the interceptor will use on-board sensors to acquire the threat, select the target warhead, and guide itself to a direct, high-speed collision. During and after the engagement, radars will continue to collect data, observe impact results to provide "kill assessment" information to evaluate the interceptor's success or failure.

TECHNOLOGICAL ISSUES ASSOCIATED WITH A NATIONAL MISSILE DEFENSE

(This section draws heavily upon an April 1997, publication by the Institute for Foreign Policy Analysis, *Exploring U.S. Missile Defense Requirements in 2010: What Are the Policy and Technology Challenges?)*

Countermeasures

A number of countries—chief among them Russia, China, and India—have anticipated the eventual development of strategic ballistic missile defenses. These countries are working to ensure that they will be able to penetrate future defenses. The following types of actions could serve as means of degrading the effectiveness of missile defenses:

- *Stealth:* Nearly every nation is exploring the use of radar-absorbing or radar-reflectant paints and materials, as well as non-reflecting angular designs, to reduce the observability of their missiles and re-entry vehicles (RVs).
- *Decoys:* Russia and the United Kingdom are two nations that already have developed decoys which resemble RVs and which are intended to provide defenses with more targets to intercept. Decoys also might be used for radar jamming.
- *Coning/Corkscrewing:* By introducing a "wobble" into an RV as it re-enters the atmosphere, a nation can create a 10–15 G spiraling turn (e.g. a corkscrew of 30–40 meters in diameter). Interceptors would need on-board computational capability and/or larger warheads to intercept this maneuver.
- *MIRVs and Submunitions:* Multiple warheads/submunitions are intended to overwhelm defenses. (NOTE: The ABM Treaty precludes placing multiple intercept capabilities on a single "defensive" missile, making MIRVs attractive as an option). A variation on this theme would be salvo launches designed to saturate missile defenses.
- *Reduction in Infrared Signature:* Several techniques could be used to reduce heat signatures of missiles. For example, a country could double-shroud an RV. This would allow it to shed heat by jettisoning the outer shroud after the boost-phase. Another technique would be the use of infrared-altering paints on the warhead skin. These techniques are designed to make it more difficult for an infrared seeker on a missile to find its target.
- *Radar Jamming:* Both RVs and decoys can be equipped with small microwave antennas to receive, amplify, and rebroadcast radar signals (thereby masking the position of the warhead). Simple clouds of metallic chaff or balloons also can be used to scatter radar signals, although they would be stripped away from the heavier RV upon re-entry.
- *Salvage Fusing or Deliberate EMP Attack:* Advanced warhead designs may include backup fuses which detonate the warhead if the RV is struck by an interceptor. This will create thermal and radiation effects (including an electro-magnetic pulse) which will destroy or degrade non-hardened electronic circuits and hardware. Moreover, this will result in increased "noise" from persistent radiation which will reduce the effectiveness of surviving space-sensor systems. The same effect can be achieved by the deliberate detonation of a warhead in the exoatmosphere.
- *Simple Masking:* The infrared signature of an RV can be hard to distinguish when in proximity to the larger, hotter missile body. This becomes even more difficult when missiles "tumble" or break apart upon re-entry.

While all of these countermeasures are feasible they should not deter the United States from deploying defenses. Rather, they make clear that offensive and defensive capabilities are, and will continue to be, in a cycle of competition. Any defensive

system deployed by the United States should be quickly upgradable, at reasonable cost, to take advantage of new technologies to counter an adversary's counter-measures. Given the nature of emerging counter-measure technologies, the United States also should pursue a layered defense with a variety of defensive attack methods to counter incoming RVs. However, this, too, would be prohibited by the ABM Treaty.

Basic Constraints on the Feasibility of Countermeasures

Three basic environmental factors will assist the U.S. national missile defense in dealing with countermeasures.

- *Throwweight:* Ballistic missiles can only carry so much. Countermeasures, together with the re-entry vehicles and guidance system, must fit within the throwweight limits of the given ballistic missile.
- *Exoatmospheric Flight:* All ICBMs must pass through the vacuum of the exoatmosphere. During this phase of flight, maneuverability is severely limited and requires enormous amounts of fuel since maneuvering thrusters will have no air against which to push. As a result, maneuver efforts will be limited to turns of only 2–3 Gs (as opposed to 10–15 Gs in the lower atmosphere).
- *Endoatmposheric Flight:* All but the most sophisticated of penetration aids will be stripped away from the RV, generally between 90–100 kilometers of altitude. Further, re-entering objects are subjected to extreme heating, making their infrared signatures much harder to conceal. Likewise, some penetration aids, such as radar jammers, will suffer a decease in transmitting capability during re-entry. Finally, the drag induced on re-entry vehicles will slow the RV, allowing for more intercept possibilities. Basic RVs have a low "beta" rating, meaning that their initial re-entry speed of 6–7 km/s will slow rapidly at 25–55 kilometers altitude, resulting in an impact velocity of less than 1 km/s. (However, as RVs become more sophisticated, impact speeds may be greater (perhaps 3.4–4 km/s) and deceleration may not occur until 12 kilometers in altitude.)

Counter-Countermeasures

Just as various countries are exploring countermeasures, the United States has identified numerous techniques to counter such systems.

- *Laser Radars:* Laser radars will enable defenses to see past debris and clutter induced by penetration aids. Such systems, when given the ability to measure angle, range, and range rate, will be able to track maneuvering, coning, and tumbling RVs. Laser radars cannot conduct wide area searches, however, and will be vulnerable to some kinds of countermeasures such as smoke and EMP detonations.
- *Multicolored Infrared Sensors:* Two-color infrared seekers will enable interceptors and satellites to track targets regardless of whether the background is the earth ("hot") or space ("cold"). As infrared capabilities continue to evolve, even further target tracking and discrimination advances will be made. The Atmospheric Interceptor Technology Program (AIT) will utilize a two-color infrared seeker.
- *Optical Signal Processing:* Radar jamming is only possible as long as radars use linear frequency modulation. The generation of arbitrary/random wave forms of radar systems will be nearly impossible to jam or spoof.
- *Spectral Band Processing:* The splitting of spectral bands can provide the ability for remote identification of objects. Many experts are optimistic that band slices, when combined with powerful processing techniques, will enable future defense systems to develop a composite real-time "picture" of penetration aids, RVs, and decoys, and also will enable the United States to neutralize stealth advancements.
- *On-Board Sensing and Processing:* Currently, cost considerations limit the incorporation of on-board sensors and processors, driving defense planners to rely upon communication links to external sensors to guide the interceptor. As miniaturization of these electronic components becomes feasible, and more affordable, interceptors can increasingly be made "smart" in their own right. For example, the miniaturization of both laser and infrared radars, and their emplacement in the seeker of an interceptor, will greatly increase the discrimination and hit capabilities of the defensive missile. The Discrimination Interceptor Technology Program (DITP) is an example of a U.S. program seeking to capitalize upon this technology.
- *Improved Sensor Integration:* Advances in the ability to merge and process information from a variety of sources (microwave radar, laser radar, and both wide- and narrow-area infrared search senors) will enable the United States to discriminate better between penaids and RVs and to identify stealthy targets.

In short, stealth is more easily achieved in one dimension; the concealment of an RV across all frequencies, however, is far more difficult. The Advanced Sensor Technology Program (ASTP) is an example of this type of endeavor.

- *Multiple Kinetic Kill Munitions:* Just as offensive missiles can be equipped with numerous RVs and decoys, so too can defensive interceptors (if it were not for the ABM Treaty's prohibition). One example of a multiple kinetic kill munition is the *Swarm* program, which involves autonomously-guided munitions (using a single photo detector and processor chip) that maneuver through the use of small explosive charges on the outer ring of the munition. This program can be used for both endo- and exoatmospheric intercepts.
- *Directed Energy Weapons:* As both microwave and laser technologies continue to advance, the prospect grows for use of lasers and microwave systems to kill both re-entry vehicles, as well as missiles at all stages of flight. The advantages over kinetic "hit-to-kill" interceptors are readily apparent. Several programs are under development in this area.

As can be seen, while numerous countries will pursue a variety of countermeasures, the technology associated with counter-countermeasures is evolving rapidly as well. This has prompted senior U.S. defense planners to assert that the U.S. NMD system will able to defeat such penetration aids.

Basic ABM Treaty Technical Limits on Ballistic Missile Defenses

The most serious threat to the effectiveness of a U.S. national ballistic missile defense is not enemy countermeasures. It is the Administration's continued adherence to the ABM Treaty and the resultant limitations imposed on the planned C1, C2, and C3 architectures. Aside from the basic prohibitions against having an NMD that are contained in Article I and Article III of the treaty, the treaty also contains a number of specific technological limitations:

- *Limits on Sites and Number of Interceptors:* The ABM Treaty would limit the United States to no more than 100 interceptors at only one site. This makes defense of the territory of the United States (also prohibited as a concept by Article I of the treaty) impossible. Even C1 violates this provision.
- *Limit on Interceptor Capability:* The ABM Treaty precludes interceptors from carrying more than a single warhead/kill vehicle. This makes missile defense less cost-effective. While the EKV being tested for the missile defense only carries a single warhead, one of the reasons that multiple kill vehicles have not been utilized is due to the ABM Treaty. A number of promising programs suggest that C2, and certainly C3, could capitalize upon multiple intercept vehicles on a single missile. The ABM Treaty, however, would preclude this.
- *Limits on Radars:* In essence, any ABM radar handling an intercept must be within 150 kilometers of the single allowed site. With an expected range of no more 4,000 kilometers, the radar will be unable to provide intercept coverage for vast portions of the United States, regardless of where the site (and thus the radar) ultimately is deployed. While early-warning radars can be deployed along the periphery of the U.S., only the single XBR may handle intercepts (according to the treaty). C1 will not be compliant in this respect. Neither C2 nor C3 will be, either.
- *Technical Limits on External Cuing:* Use of space, air, or land-based external sensors to provide early tracking information would make it possible to launch interceptors without the associated, local radar ever tracking the target. This, in turn, would substantially enhance a system's coverage potential against longer-range missile threats. However, the ABM Treaty prohibits the conduct of an intercept using only data from sensors other than co-located radars (e.g. conduct of an intercept without the XBR). If this continues to be the case, the defensive system under consideration by the U.S.: (1) will have a much smaller defensive "footprint" than it could; (2) fewer intercept opportunities for the system; and (3) greater vulnerability to penetration aids, particularly in the exoatmosphere where space-based terminal cuing could be used.

The current defense plan for "C1" relies upon five UEWR's to alert the U.S. Space Command of an incoming missile threat. It also relies upon one X-band microwave radar system to detect the RV, identify it as such, and to discriminate between the RV and other objects such as counter-measures. While the NMD system will be able to track up to 1000 objects at a time, the reliance upon the one XBR will make the system vulnerable to a variety of masking counter-measures. As a result, the "C1" architecture will not be as effective against technologically-sophisticated adversaries, such as Russia.

Once SBIRS (High) is included in the "C1" architecture and SBIRS (Low) in the "C2" architecture, a number of space-based infrared sensors will be available to as-

sist the XBR in identifying RVs and tracking them. This will add a basic infrared detection capability to the XBR's microwave radar, making several types of countermeasures less effective in hiding RVs. Once satellites are placed in both high and low orbits, the resolution of the infrared imagery will be greatly improved. Moreover, a number of counter-stealth technologies (e.g., laser radars and multi-colored infrared sensors) can only be capitalized upon via the use of space-based platforms. However, due to budget constraints, it does not appear that SBIRS (High) will be available until 2006 or later.

Both SBIRS systems will provide sufficiently accurate tracking data to allow the conduct of an intercept without the XBR being in the loop. The current DSP constellation cannot do this. However, none of the Administration's plans—"C1", "C2", or "C3"—calls for the use of SBIRS in this fashion. This is due to ABM Treaty compliance considerations.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 24, 1999.

MEMORANDUM

To: Republican Members, Committee on Foreign Relations
Through: Steve Biegun
From: Marshall Billingslea and Sherry Grandjean
Subject: The Legal Status of the ABM Treaty

The Committee will hold a hearing on the legal status of the ABM Treaty on Tuesday, May 25, at 2:15 PM in SD–562. The witnesses will be Mr. Douglas J. Feith, former Deputy Assistant Secretary of Defense for Negotiations Policy; to be accompanied by Mr. George Miron of Feith and Zell, P.C., Mr. David B. Rivkin, Jr.; to be accompanied by Mr. Lee A. Casey of Hunton and Williams, and Dr. Michael Glennon, Professor of Law at The University of California, Davis. Senator Ashcroft will preside.

Attachment.

Background

I. THE SENATE'S ROLE IN DETERMINATION OF THE ABM TREATY'S STATUS

The legal status of the 1972 Anti-Ballistic Missile Treaty is unresolved today. Indeed, the treaty remains in legal "limbo" until Senate advice and consent is obtained by the executive branch to a document establishing new treaty partners. While the President asserted on numerous occasions the right to determine the status of the treaty without the Senate's approval, he nevertheless agreed on May 14, 1997 to submit to the Senate for advice and consent "any international agreement that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term 'national territory' as used in Article VI and Article IX of the ABM Treaty."

This commitment was made by the President in the form of a legally-binding certification. The President's pledge in this form was required pursuant to Condition (9) of the resolution of ratification to the CFE Flank Agreement. In making this commitment, the President agreed that the legal status of the ABM Treaty, including resolution of the question of treaty-successorship, could only be determined with the Senate's advice and consent.

II. INCONSISTENCIES IN THE PRESIDENT'S VIEW OF THE CURRENT LEGAL STATUS OF THE ABM TREATY

Condition (9) is worded broadly, and captures any conceivable international agreement to determine membership in the ABM Treaty. It is not possible to establish any party or group of parties to the ABM Treaty without triggering the provisions of Condition (9), and thus triggering the requirement for submittal of the agreement in question to the Senate. It is impossible for the United States to possess legally-binding treaty obligations under the ABM Treaty unless it has a partner to whom it is obligated. Because the ABM Treaty cannot be said to be in legal force until the United States has determined its treaty partner(s), the requirement under Condition (9) holds the ABM Treaty in abeyance until advice and consent is obtained.

However, the Clinton Administration has provided numerous and conflicting arguments regarding the treaty's legal status. On May 21, 1998, and again on December 17, 1998, the President wrote to the Chairman of the Foreign Relations Committee asserting that, despite Condition (9), Russia is today a Party to the ABM Treaty.

This argument is politically-motivated. The Administration has become increasingly nervous that Senate defeat of any specific succession document (or Senate refusal to consider such a document) on the grounds that it would reconstitute the ABM Treaty might signify formal termination of the treaty. Certainly the Senate possesses the Constitutional authority to reject treaties and could attach in its rejection message to the President a formal directive giving notice of the ABM Treaty's termination. Alternatively, the Senate could simply indicate the intent to reject any succession arrangement to the ABM Treaty, regardless of its composition of states, thereby indicating the intent to hold the treaty in abeyance indefinitely.

By arguing that Russia is today an ABM Treaty partner, the President is seeking to avoid such an impasse. His argument is designed to allow the Administration to continue viewing the ABM Treaty as in force, and to justify continuing U.S. treatment of Russia as a treaty partner. It is an assertion, however, flatly inconsistent with historical fact, the Administration's past representations regarding the successorship issue, and the Memorandum of Understanding (MOU) on succession itself.

What is most troubling, however, is that the President's claim that Russia is a Party seems designed to circumvent his pledge to the Senate, made in a treaty-related certification on May 14, 1997, that the advice and consent of the Senate would be obtained for any agreement adding parties to the ABM Treaty, or changing its geographic scope.

If the Administration persists in the assertions made in the letter of May 21, 1998, the validity of the ratification of the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe of November 19, 1990, also known as the CFE Flank Agreement, may be called into question. Certainly the assertion that Russia is a Party directly contravenes the certification of May 14, 1997, raising the possibility that the instrument of ratification for the CFE Flank Agreement deposited on behalf of the United States is defective under U.S. constitutional law.

In a November 21, 1997, letter to Representative Gilman, and in accompanying briefings by Administration lawyers, the Clinton Administration stated that ABM Treaty succession arrangements were "unsettled" and would remain so in the absence of a new agreement. Moreover, this letter takes note of no distinction between the legal status of Russia and that of the other states proposed as ABM Treaty parties. Indeed, the President stated in that letter:

> Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972.

However, in the May 21, 1998, letter, and again on December 17, 1998, the President reversed course by asserting that "the United States and Russia clearly are parties to the Treaty." Russia's desire to become a party, its participation in the treaty's activities, and the presence of "ABM-Treaty related facilities"—a newly-invented term found nowhere in the ABM Treaty—on its territory are cited as reasons for this conclusion. The President also declined to identify Belarus, Kazakhstan and Ukraine as parties, although he asserted that "a strong case can be made that even without the MOU, these three states are Parties to the Treaty," citing substantially the same factors that supposedly make Russia a party.

There is no basis for any distinction between the legal status of Russia and that of the other states. In a briefing to congressional staff on January 30, 1998, Administration lawyers were asked directly whether Russia was the only other clear party to the Treaty. They stated definitively that this was not the case. Numerous Administration representations and public statements, including the State Department's publication of "Treaties in Force," have been consistent in making no legal distinction among the former Soviet states who are potential successors to the ABM Treaty. Article VIII of the MOU itself notes that regulations of the Standing Consultative Commission "shall reflect the equal legal status of the Parties." Further, the record of negotiation on the succession issue is replete with expressions by the United States of the view that the potential successors to the Soviet Union all have the same legal status. In short, the assertions made in the May 21, 1998, letter have no basis in historical fact.

Moreover, the May 21, 1998, assertion that "a strong case could be made" that four countries could today be parties to the treaty is directly contradicted by Article I of the MOU, which states that the United States, Belarus, Kazakhstan, Ukraine, and Russia "upon entry into force of this Memorandum, shall constitute the Parties to the Treaty." Very clearly, the entry-into-force of the MOU is the triggering event—and one that has not yet occurred—by which these states may become parties to the ABM Treaty. In short, none of the potential successors were identified as parties to the ABM Treaty during the period of negotiation, nor at any time preceding the President's certification pursuant to Condition (9). Nothing has transpired since that time that would constitute formal recognition of any state as a party to the ABM Treaty. Certainly no document has been submitted pursuant to Condition (9), and no document has received Senate approval.

How the President asserts, then, that Russia is a Party to the ABM Treaty, and that the three other states might be, is a mystery. These claims imply that the issue of the ABM treaty's status is fundamentally settled. Yet the matter cannot truly be settled unless and until the Senate approves the MOU, or a similar agreement, through the exercise of the advice and consent powers assigned to it by the Constitution.

III. THE LEGAL STATUS OF THE ABM TREATY: IS THE TREATY EXTINCT?

The Committee will hear testimony from authors of two legal studies on the legal status of the ABM Treaty. The first memorandum was done by George Miron and Douglas J. Feith of Feith & Zell, P.C. The second memorandum was prepared for The Heritage Foundation by David B. Rivkin, Jr. and Lee A. Casey of Hunton and Williams.

The Miron/Feith Memo draws the simple conclusion that when a State ceases to exist (becomes "extinct"), that State's treaties lapse automatically by operation of law and do not require action by any other treaty party.

The Rivkin/Casey Memo takes the position that the ABM Treaty could have survived the Soviet Union's dissolution only if one or more states survived that both continued the Soviet Union's sovereignty, its international legal personality, and were capable of fulfilling the terms and conditions of the original treaty "unimpaired." No such state survived the Soviet Union.

It is important to note that both studies draw the conclusion that the President cannot bring a new treaty into force between the United States and a successor to the extinct State without Senate advice and consent.

A more detailed summary of each legal memorandum follows.

1. Did the ABM Treaty of 1972 remain in force after the USSR ceased to exist in December 1991 and did it become a treaty between the United States and the Russian Federation? by George Miron and Doug Feith

Following the USSR's extinction, the Anti-Ballistic Missile Treaty of 1972 did not become a treaty between the United States and the Russian Federation. Rather the treaty lapsed when the USSR ceased to exist.

In December 1991, new States that emerged on what had been USSR territory declared independence, announced the formation of the "Commonwealth of Independent States" and proclaimed that the USSR "as a subject of international law and a geopolitical reality no longer exists." Soon thereafter, the United States acknowledged that the USSR "is no more."

The United States has officially expressed its view that upon the extinction of a State, its bilateral political treaties automatically lapse, and has acted in accordance with that view in connection with the extinction of the Kingdom of Hawaii in 1898, the dissolution of the Austro-Hungarian Empire at the end of World War I, and the dissolution of Yugoslavia in 1992. The U.S. view is consistent with the opinion of international legal scholars who have addressed that issue. With consistency over more than two hundred years, scholarly writings state that when a State ceases to exist (becomes "extinct"), that State's treaties lapse. The lapsing occurs by operation of law—that is, automatically upon the State's extinction. It does not require action by any other treaty party. (A possible exception to this rule relates to "dispositive" treaties—that is, treaties that irrevocably fix a right to particular territory, e.g., delineate borders between States. The ABM Treaty, which is terminable by either party upon six months' notice, is not "dispositive.")

President William Clinton has taken the view that the ABM Treaty of 1972 remains "in force." In November 1997, he wrote that the "succession" issue is "unsettled," adding: "Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS [newly independent states] as full ABM suc-

cessors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972." In May 1998, President Clinton stated that the ABM Treaty is in force between the United States and the Russian Federation. He did not state the principle of law on which he based this conclusion. Nor did he explain how this conclusion can be squared with his aforementioned November 1997 statement.

The pertinent sources of international law support the conclusion that, upon the USSR's extinction, the ABM Treaty lapsed, so it no longer has the force of international law. The United States has never before considered itself bound by international law to accept as its treaty partner the successor to an extinct State.

Were the President to use the recognition function to make a treaty that would not otherwise exist, he would put the United States under a legal obligation to other States without Senate advice and consent. The President's recognition authority cannot be exercised in a manner that would nullify the U.S. Senate's authority to advise and consent on the making of a treaty.

If a foreign State ceases to exist under international law and, consequently, a bilateral treaty between the extinct State and the United States lapses, the President cannot bring a new treaty into force between the United States and a successor to the extinct State without Senate advice and consent. In other words, the President cannot, without Senate approval, bring a lapsed treaty back to life by declaring that a given foreign State is the successor or continuation of an extinct State. Principles of international law govern the issue of the extinction of States.

In sum, the ABM Treaty was a bilateral, non-dispositive treaty. In accordance with longstanding principles of international law, expounded with remarkable consistency by numerous officials and scholars from various countries over hundreds of years, when the USSR became extinct, its bilateral, non-dispositive treaties lapsed. Hence, the ABM Treaty lapsed by operation of law—that is, automatically—when the USSR dissolved in 1991. It did not become a treaty between the United States and the Russian Federation.

2. The collapse of the Soviet Union and the end of the 1972 Anti-Ballistic Missile Treaty: A Memorandum of Law by David Rivkin and Lee Casey

The ABM Treaty became extinct when the Soviet Union dissolved. Treaties are a species of contract that may be rendered impossible, and discharged as a matter of law, by the disappearance of a treaty partner. Under the applicable rules of international and constitutional law, the ABM Treaty could have survived the Soviet Union's dissolution only if one or more states survived that both continued the Soviet Union's sovereignty, its international legal personality, and were capable of fulfilling the terms and conditions of the original treaty "unimpaired." No such state survived the Soviet Union.

"The President's assertion that Russia is an ABM Treaty party is incorrect. The Russian Federation is not merely a continuation of the Soviet Union under a different name and system of government, as the Soviet Union was a continuation of the Romanov Empire. When the Soviet Union dissolved in 1991, both that empire, and the Russian state around which it was built, collapsed. Boris Yeltsin's Russia is *sui generis.*

Moreover, even if today's Russia could be considered to be a continuation of the Soviet Union, it could not itself carry out the Soviet Union's obligations under the ABM Treaty. That agreement was based upon a number of fundamental assumptions about the parties and their place in the world order during the Cold War. These assumptions now are obsolete. Moreover, the ABM Treaty had a critical geographical component, which at bottom guaranteed the United States and the Soviet Union unrestricted access for their ICBMs to the entire territory of the other party. The Russian Federation controls only a part of the Soviet Union's territory, and has lost control over many of the Soviet Union's most important population centers. Any treaty with Russia alone would not preserve the bargain the United States originally agreed to in 1972.

The conclusion that the ABM Treaty automatically was discharged in 1991 also is supported by application of either of the prevailing methods of analysis governing questions of state succession to treaties—the "continuity" analysis and the "clean slate" analysis. Under the continuity analysis, even if one or more former Soviet Republics was considered to continue the U.S.S.R.'s international legal personality, the ABM Treaty could not have survived because it was a bilateral treaty "personal" to the Soviet Union. Such treaties are automatically discharged when one treaty partner disappears. Under the clean slate analysis, one or more of the former Soviet Republics would have to agree to undertake the Soviet Union's ABM Treaty obligations, and the United States would have to accept this new state as a treaty part-

ner. This acceptance would constitute the creation of a new treaty, and could only be effected with the advice and consent of the Senate.

Today, the ABM Treaty can be revived only with the participation of the United States Senate. The substitution of one or more former Soviet Republics for the Soviet Union would fundamentally change the ABM Treaty's original bargain, to which the Senate consented. The President cannot, on his own authority, change the ABM Treaty in so fundamental a manner without obtaining the Senate's advice and consent again.

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
May 25, 1999.

MEMORANDUM

To: Republican Members, Committee on Foreign Relations
Through: Stephen E. Biegun
From: Marshall Billingslea and Sherry Grandjean
Subject: Cornerstone of Our Security?: Should the Senate Reject a Protocol to Reconstitute the ABM Treaty with Four New Partners?

The Committee will hold a hearing on the ballistic missile threat to the United States, the need for a national missile defense, and the ABM Treaty on Wednesday, May 26, at 10:15 AM in SD–562. The witness will be the Honorable Henry A. Kissinger, former Secretary of State. Senator Helms will preside.

Attachment.

Basic Aspects of the Changed Security Environment

A number of trends have profoundly altered the global security environment in the post-Cold War era, calling into question traditional assumptions about the relationship between offensive and defensive systems, the wisdom of a U.S. strategy of mutually-assured destruction ("MAD"), and the 1972 Anti-Ballistic Missile Treaty. The following represent the most fundamental changes with relevance to the Committee's ongoing review of the ABM Treaty.

- The technology associated with a national missile defense has matured. The Committee has heard testimony from expert witnesses who believe that a national missile defense is technically feasible. An effective national missile defense, therefore, is an achievable objective today, whereas, in 1972, it was only a theoretical concept.
- The relationship with Russia is vastly different from that with the Soviet Union. Not only is the relationship far less adversarial, despite flare-ups over issues such as Kosovo, but Russia is no longer willing, nor able, to devote enormous sums of money to the development and maintenance of an overwhelming ICBM force.
- The United States increasingly is less concerned with the possibility of intentional missile attack by Russia, and is more concerned with the intentions of a plethora of other nations which either possess, or are on the verge of acquiring, ICBM capabilities.
- Extensive foreign assistance relating to ballistic missile design, development, and deployment is now available, and is accelerating missile programs. Not only has the past decade seen extraordinary improvements in the indigenous production capabilities of various countries, and the spread of commercial launch programs, but it also has witnessed a dramatic increase in the availability of outside help to countries seeking ballistic missiles. As the Rumsfeld Commission noted: "Foreign assistance is not a wild card. It is a fact." This means that the missile threat to the U.S. is growing and evolving in ways that the U.S. intelligence community cannot always predict.
- The possibility of unauthorized or accidental launch from Russia's existing nuclear arsenals is increasing. As the prospects for domestic turmoil grow in Russia, the security of the mobile transporter-erector-launchers carrying nuclear ICBMs has become an increasing concern for the United States.

The Revolution in Military Affairs and the Post Cold War World

At this point it is appropriate to make three general observations about the ongoing revolution in military affairs. United States defense planners are now challenged to conceptualize future conflict in an environment undergoing dramatic transformations. A "revolution in military affairs" (RMA) offers the U.S. the oppor-

tunity to capitalize upon emerging technologies to compensate for force structure reduction and to maximize platform capabilities. Naturally the identification of those technologies becomes critical; failure in this respect threatens a military with obsolescence. Similarly, this revolution offers other countries the opportunity to offset numerical and qualitative inferiorities vis-a-vis the U.S. military with innovation, and—in the case of ICBMs carrying nuclear, chemical, or biological warheads—possibly to neutralize the conventional Armed Forces of the United States entirely.

First, military revolutions depend not only on the emergence of new technologies, but upon the adaptation of operations and organizations to maximize the employment of cutting-edge capabilities. For example, German integration of aircraft and radios following the First World War enabled them to defeat the French and British in six-weeks in a combined arms offensive. Today's global positioning receiver, with its utility in both ballistic and cruise missiles (as well as UAVs), holds for the future battlefield what the radio posed for the Western Front in 1940.

Second, the comparative advantage conferred upon a military by a given technology tends to be short-lived. Moreover, the initial advantage by no means suggests continued dominance, or even competitiveness. In this environment, the balance between offensive and defensive capabilities, and the ascendancy of one over the other, is in a continual state of flux. Defensive technologies have now matured, making both theater- and national-missile defenses an effective and affordable capability.

Third, national objectives and strategic cultures prove critical variables determining the manner in which countries capitalize upon revolutions in military affairs. Perhaps the greatest challenge in the next century will be posed by a regional aggressor (such as China, North Korea, or Iran) that decides not to take the United States "head on" in a conventional confrontation, but rather elects to use tactics more common to low-intensity conflicts in order to secure its objectives. It will be incumbent upon those who would challenge the United States to devise strategies which take into account the changing dimensions of the operational environment—future warfare will be waged across a variety of fronts and in the public domain. Since the United States has a decided, and apparent, advantage in high-intensity conventional warfare, future aggressors may adopt strategies which are fundamentally political in nature. If conventional military action alone does not offer prospects for success, it will be relegated to a secondary role. Operations will be characterized by terrorism, subversion, and efforts at blackmail using WMD and ICBM capabilities. An ICBM pointed at a U.S. city is, after all, a political instrument of threatened terror—not a military weapon per se.

In other words, a future aggressor is likely to employ strategies that tend towards the indirect and unconventional, emphasizing non-military approaches, or at least non-traditional efforts, to deter U.S. and/or coalition opposition and to deny opposition critical nodes from which to operate. Those who would engage the U.S. will follow several imperatives:

- The dominance of political thinking over military interests.
- The necessity to integrate various elements of power into a cohesive strategy.
- The importance of adaptability and flexibility, the likelihood of protracted conflict.

Such a state could be expected to prove willing to assume a disproportionate share of casualties, collateral damage, and environmental destruction in an effort to exploit the inevitable social tensions arising in the United States from protracted conflict. Accordingly the most important aspects of the country's order of battle will not be the number of main battle tanks, armored fighting vehicles, and artillery that it fields, but the number of nuclear, chemical, and biological munitions, types of delivery systems (with particular emphasis on long-range ballistic missiles), and access to commercial satellite communications networks it possesses, and the way its seeks to shield these capabilities—presumably with non-belligerents—from the deep-strike capabilities of the U.S. Nor can we be sure that simple notions of overwhelming and devastating nuclear retaliation will be sufficient to deter a nation that is prepared to absorb immense casualties and "ride out the storm."

An environment in which Third World powers field WMD mounted on ballistic or cruise missiles will circumscribe the United States' crisis response capability. The use of forward-based tactical platforms will become more difficult with the increased likelihood that U.S. forces will be detected and engaged at their points of entry into the theater. Indeed, the fact that a number of regional powers are actively seeking ballistic missiles with WMD warheads ultimately will preclude the U.S. military from forward deployments unprotected by theater ballistic missile defenses. It is in this vein that Andrew Marshall, Director of the Defense Department's Office of Net Assessment, has warned against the creation of "large, juicy targets." Future regional aggressors will be well aware that U.S. casualties are of greater political sig-

nificance than military consequence. Moreover, as the ability to inflict devastation via ICBMs grows ever more available, the United States homeland itself will become an inviting target. Thus U.S. forward deployments also might be circumscribed unless a national missile defense can neutralize a threat to U.S. citizens.

Deterrence during the Cold War was based upon assumptions of rationality which allowed the United States and Russia to predict each others reactions with a fair degree of success. Moreover, communication and the centralization of command control allowed for mutual familiarity between the United States and the Soviet Union over one another's plans for reaction in crisis situations. The potential for an action-reaction spiral was controlled by a strategic parity of sorts at the top of the escalatory ladder. The post-Cold War era has none of the predictability or parity of its balanced, bipolar predecessor. Indeed, the role of the conventional/nuclear balance seems to have reversed completely. Whereas strategic forces were previously essential to the U.S. as a means of countering the conventional superiority of the Warsaw Pact, now the commitment of conventional forces may prove critical to countering or reversing the proliferation of nuclear weapons in the Third World. In parallel, the acquisition of WMD may be accelerated by desires to counter conventional imbalances. This shift was poignantly enunciated by Les Aspin in 1992, when he recognized that while nuclear weapons may still serve as "great equalizers," it is now the United States that is the potential "equalizee."

From Cold War Theories of Deterrence to Modern Notions of Compellance/Warfighting Use

China is a case study in how countries increasingly are thinking about the warfighting utility of ballistic missiles vis-a-vis the United States. The People's Liberation Army (PLA) views advanced ballistic and cruise missile capability as an essential element of its future warfare plans. Indeed, the PLA seems to regard missile development as more important than the acquisition of any other single capability, including air or naval forces. This preeminence certainly is reflected in China's developing strategy and doctrine. PLA doctrine, as it concerns the role of missiles, has migrated conceptually from Cold War notions of deterrence (e.g., the use of nuclear missiles to deter other nuclear powers) to an approach that foresees a wide range of active/compellant uses, both tactical and strategic, for ballistic and cruise missiles. In other words, China has increasingly begun to think of the *operational* utility of nuclear-armed missiles (as well as non-nuclear armed systems).

An advanced ballistic and cruise missile capability is important to the PRC for several reasons:

First, this capability is meant to avert United States intervention in Asia in an effort to thwart Chinese regional ambitions. By developing a variety of nuclear and nonnuclear missiles, the PLA hopes to compel the United States to refrain from supporting Taiwan or projecting power in Asia. Continuing U.S. adherence to the 1972 Anti-Ballistic Missile Treaty, and the resultant policy of deliberate vulnerability to nuclear missile attack, have only played into the hands of this strategy, and reinforced the determination of the PRC to emphasize the aggressive role of ballistic missiles to offset U.S. conventional superiority.

A clear indication of Chinese thought on this matter was given during a 1995–1996 winter visit to China by former Pentagon official Charles Freeman (during which a Chinese official asserted that the United States would not challenge China militarily over Taiwan because American leaders "care more about Los Angeles than they do about Taiwan"). In other words, the PLA may believe that China's strategic deterrent would give it the ability to act against Taiwan with impunity. At a minimum, the ability to place U.S. cities at risk during a crisis would—in the view of the PRC—prompt the U.S. to think twice about intervening.

In other words, the primary motivation for acquiring such systems, in this case, is not military in nature, but political. Nor is China the only country that has drawn such conclusions about the utility of missile systems. Iranian defense planners, for example, have oriented their country's military towards a posture presumably designed to deter the United States from engaging in military activities in the Gulf. Iranian analysts have openly claimed that missile systems represent a critical deterrent to outside attack, arguing that Iran should "build up its own short, medium and long-range surface-to-surface was well as surface-to-air missiles." [1]

Second, missiles allow the PLA to exploit the vulnerabilities of the military forces of the United States and other Asian adversaries, none of whom have effective defenses against theater or tactical ballistic or cruise missiles. Modernization of missile

[1] "Preparing for Protection of our National Interests," *Resalat,* December 3, 1990.

capabilities, coupled with weapons of mass destruction (WMD), provides China the ability to threaten the United States' center of gravity.

Presumably the PRC has recognized, as a result of the Gulf War, the need to deny the United States access to forward-based facilities, and to hold U.S. naval power projection capabilities (i.e., the aircraft carriers) at risk. Advanced missile capabilities not only accomplish this objective, but also provide China with the means to strike targets in Taiwan, U.S. military facilities in Korea and Japan, and to hold locations throughout the region at risk.

China recognizes that, if properly used, its ballistic and cruise missile delivery systems may circumscribe the United States' crisis response capability. Indeed, the prospect of devastating attack on a U.S. city might, if communicated properly, deter the U.S. from responding at all. As Sun Tzu put it, the objective is "to defeat the enemy without fighting."

China's possession of a full spectrum of missile capabilities also makes the use of forward-based tactical platforms more difficult, since U.S. forces can be attacked at their points of entry into the Asian theater. Aircraft carriers will be forced to operate further at sea, and certainly would be precluded from entering the Strait of Taiwan.

Indeed, the fact that China is actively seeking a robust nuclear missile capability suggests a desire to preclude the U.S. military from forward deployments at all. The PRC is well aware that U.S. casualties are likely to be of greater political significance than military consequence. For this reason, China views its growing missile capability as an instrument of intimidation and blackmail, in addition to a valuable military weapon.

China's emphasis on missiles also is eminently practical, from a military standpoint. China cannot today field a modern air force or navy, but they certainly *can* build a variety of ultra-modern missiles. Faced with a Taiwanese air force comprised of the most sophisticated combat aircraft on the world market, China has little choice in overcoming Taiwan's tactical air superiority but to rely on waves of short-range ballistic and cruise missiles.

For this reason China has been examining the use of combined GPS/Inertial and Terrain-Contour Matching (TERCOM) guidance systems to give high accuracy to its cruise missiles and is interested in building cluster munitions for ballistic or cruise missile to disable runways.

Finally, missiles are a critical element of a strategy for modern information warfare. China recognizes the importance of information dominance in a future conflict. Thus improvements in China's space launch and ballistic missile program (actually two sides of the same coin) will translate into an increased ability to launch more sophisticated reconnaissance and communication satellites. Further, China may also intend to use missiles to attack satellites in an effort to disrupt command, control, communications, and intelligence (C3I) systems. The PLA understands the U.S. military's dependence on reconnaissance and communications satellites, and realizes that, in absence of nuclear testing, the United States has ceased to "harden" these systems. PLA literature on future warfare is replete with discussions of the need for a range of systems to deny the enemy's use of space.

THE EVOLUTION OF CHINA'S LIMITED DETERRENCE CONCEPT, AND THE CORRESPONDING RISK TO THE UNITED STATES OF BALLISTIC MISSILE ATTACK

As has been noted, warfighting requirements factor heavily in China's military and deterrence strategy. The concept, which began to evolve in the late 1980s, has been termed by Chinese strategists as "limited deterrence" (you xian wei she). At its core, this notion of deterrence stresses the role of sufficient counterforce and countervalue tactical, theater, and strategic nuclear forces to deter the escalation of conventional or nuclear war.

In other words, the PRC seems to place less stock than either the United States or Russia did in the notion that a nuclear deterrent, and the prospect of mutually-assured destruction, will avert any major conflict. Accordingly, Chinese doctrine stresses the operational role of nuclear weapons to deter further escalation once a conflict begins, and—in the event that such fails—to "strive to fight and win a nuclear war" (li zheng da ying he zhanzheng).

The war-fighting orientation of "limited deterrence" is apparent in various publications which suggest acceptable types of targets for China's missile forces. The consensus seems to be that China's limited deterrent ought to be able to perform the following operational missions:

- to strike enemy strategic missile bases and weapons stockpiles, major naval and air bases, heavy troop concentrations, and strategic reserve forces, and thus destroy the enemy's strategic attack capabilities;

- to strike the enemy's strategic warning and defense systems;
- to strike the enemy's rail hubs, bridges, and other important targets in its transportation networks;
- to strike basic industrial and military industrial targets;
- to strike selectively at several political and economic centers so as to create social chaos; and
- to launch warning strikes in order to undermine the enemy's will to launch nuclear strikes, and thereby contain nuclear escalation.

As such, it is clear that China thinks quite differently about the utility of nuclear ICBMs than did the Soviet Union. Moreover, the matter of Taiwan—viewed by China as an internal matter—is unique to the U.S.-Chinese relationship. For these reasons, and doubtless many others not mentioned here, it would be ill-advised for the United States to assume that Cold War formulations such as MAD (mutually-assured destruction) will introduce strategic stability into the U.S.-Chinese relationship. Indeed, because of the emphasis in Chinese doctrine on compulsion, rather than deterrence, the United States' vulnerability under the ABM Treaty is actually a destabilizing factor (encouraging China in its pursuit of advanced ballistic missile capabilities).

U.S. SENATE,
COMMITTEE ON FOREIGN RELATIONS,
September 13, 1999.

MEMORANDUM

To: Republican Members, Committee on Foreign Relations
Through: Stephen E. Biegun
From: Sherry Grandjean and Marshall Billingslea
Subject: National Intelligence Estimate: "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015"

The Committee will hold a hearing on the recent National Intelligence Estimate entitled "Foreign Missile Developments and the Ballistic Missile Threat to the United States Through 2015" on Thursday, September 16, 1999, at 2:30 PM in SD–419. The witness will be Mr. Bob Walpole, the National Intelligence Officer for Strategic and Nuclear Programs at the Central Intelligence Agency. Senator Helms will preside.

Attachment.

SIGNIFICANT CONCLUSIONS FROM THE NATIONAL INTELLIGENCE ESTIMATE: "FOREIGN MISSILE DEVELOPMENTS AND THE BALLISTIC MISSILE THREAT TO THE UNITED STATES THROUGH 2015"

Key Judgement

"We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq. The Russian threat, although significantly reduced, will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that potentially posed by other nations, whose missiles are likely to be fewer in number—probably a few to tens, constrained to smaller payloads, and less reliable and accurate than their Russian and Chinese counterparts."

Case-by-Case Analysis

NORTH KOREA

- "North Korea *could convert* its Taepo Dong–1 space launch vehicle (SLV) into an ICBM that could deliver a light payload (sufficient for a biological or chemical weapon) to the United States, albeit with inaccuracies that would make hitting large urban targets improbable."
- "North Korea is *more likely to weaponize* the larger Taepo Dong–2 as an ICBM that could deliver a several-hundred kilogram payload (sufficient for early generation nuclear weapons) to the United States. Most analysts believe it could be tested at any time, probably initially as an SLV, unless it is delayed for political reasons."

IRAN

- "Iran *could test* an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the last half of the next decade using Russian technology and assistance."
- "Most analysts believe it could test an ICBM capable of delivering a lighter payload to the United States in the next few years following the North Korean pattern. Analysts differ on the likely timing of Iran's first test of an ICBM that could threaten the United States—assessments range from *likely before 2010 and very likely before 2015* (although an SLV with ICBM capability probably will be tested in the next few years) to *less than an even chance* of an ICBM test by 2015."

IRAQ

- "Iraq *could test* a North Korean-type ICBM that could deliver a several-hundred kilogram payload to the United States in the last half of the next decade depending on the level of foreign assistance."
- "Although less likely, most analysts believe it *could test* an ICBM that could deliver a lighter payload to the United States in a few years based on its failed SLV or the Taepo Dong–1, if it began development now. Analysts differ on the likely timing of Iraq's first test of an ICBM that could threaten the United States—assessments range from *likely before 2015, possibly before 2010* (foreign assistance would affect capability and timing) *to unlikely before 2015."*

RUSSIA

- "Its strategic force will remain formidable through and beyond 2015, but the size of this force will decrease dramatically—well below arms control limits—primarily because of budget constraints."
- "By 2015, Russia will maintain as many nuclear weapons on ballistic missiles as its economy will allow but well short of START I or II limitations."

CHINA

- "By 2015, China is likely to have tens of missiles capable of targeting the United States, including a few tens of more survivable, land- and sea-based mobile missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage."
- "China tested its first mobile ICBM in August 1999."

FORWARD-BASED THREATS

- "A short- or medium-range ballistic missile could be launched at the United States from a forward-based sea platform positioned within a few hundred kilometers of U.S. territory. If the attacking country were willing to accept significantly reduced accuracy for the missile, forward-basing on a sea-based platform would not be a major technical hurdle. The reduced accuracy in such a case, however, would probably be better than that of some early ICBMs."
- "A commercial surface vessel, covertly equipped to launch cruise missiles, would be a plausible alternative for a forward-based launch platform. This method would provide a large and potentially inconspicuous platform to launch a cruise missile while providing at least some cover for launch deniability."

APPENDIX 2

FOREIGN MISSILE DEVELOPMENTS AND THE BALLISTIC MISSILE THREAT TO THE UNITED STATES THROUGH 2015—SEPTEMBER 1999

PREFACE

Congress has requested that the Intelligence Community produce annual reports on ballistic missile developments. We produced the first report in March 1998 and an update memorandum in October 1998 on the August North Korean launch of its Taepo Dong–1 space launch vehicle (SLV). Our 1999 report is a classified National Intelligence Estimate, which we have summarized in unclassified form in this paper.[1]

This year we examined future capabilities for several countries that have or have had ballistic missiles or SLV programs or intentions to pursue such programs. Using intelligence information and expertise from inside and outside the Intelligence Community, we examined scenarios by which a country *could* acquire an ICBM by 2015, including by purchase, and assessed the *likelihood* of various scenarios. (Some analysts believe that the. prominence given to missiles countries "could" develop gives more credence than is warranted to developments that may prove implausible.) We did not attempt to address all of the potential political, economic, and social changes that could occur. Rather, we analyzed the level of success and the pace countries have experienced in their development efforts, international technology transfers, political motives, military incentives, and economic resources. From that basis, we projected *possible* and *likely* missile developments by 2015 independent of significant political and economic changes. Subsequent annual reports will be able to account for such changes.

Our projections for future ICBM developments are based on limited information and engineering judgment. Adding to our uncertainty is that many countries surround their ballistic missile programs with secrecy, and some employ deception. Although some key milestones are difficult to hide, we may miss others. For example, we may not know all aspects of a missile system's configuration until flight testing; we did not know until the launch last August that North Korea had acquired a third stage for its Taepo Dong–1.

We took into account recommendations made in July 1998 by the Commission to Assess the Ballistic Missile Threat to the United States and incorporated the results of several academic and contractor efforts, including politico-economic experts to help examine future environments that might foster ICBM sales and missile contractors to help postulate potential ICBM configurations that rogue states could pursue.

KEY POINTS

We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq. The Russian threat, although significantly reduced, will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that potentially posed by other nations, whose missiles are likely to be fewer in number—probably a few to tens, constrained to smaller payloads, and less reliable and accurate than their Russian and Chinese couterparts.

We judge that North Korea, Iran, and Iraq would view their ICBMs more as strategic weapons of deterrence and coercive diplomacy than as weapons of war. We assess that:

- North Korea *could convert* its Taepo Dong–1 space launch vehicle (SLV) into an ICBM that could deliver a light payload (sufficient for a biological or chemical weapon) to the United States, albeit with inaccuracies that would make hitting large urban targets improbable. North Korea is *more likely to weaponize* the larger Taepo Dong–2 as an ICBM that could deliver a several-hundred kilogram payload (sufficient for early generation nuclear weapons) to the United States. Most analysts believe it could be tested at any time, probably initially as an SLV, unless it is delayed for political reasons.
- Iran *could test* an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the last half of the next decade using Russian technology and assistance. Most analysts believe it could test an ICBM

[1] This paper has been prepared under the auspices of the National Intelligence Officers for Strategic and Nuclear Programs, Bob Walpole. Prepared, September 1999.

capable of delivering a lighter payload to the United States in the next few years following the North Korean pattern.

—Analysts differ on the likely timing of Iran's first test of an ICBM that could threaten the United States—assessments range from *likely before 2010 and very likely before 2015* (although an SLV with ICBM capability probably will be tested in the next few years) to *less than an even chance* of an ICBM test by 2015.

- Iraq *could test* a North Korean-type ICBM that could deliver a several-hundred kilogram payload to the United States in the last half of the next decade depending on the level of foreign assistance. Although less likely, most analysts believe it *could test* an ICBM that could deliver a lighter payload to the United States in a few years based on its failed SLV or the Taepo Dong–1, if it began development now.

—Analysts differ on the likely timing of Iraq's first test of an ICBM that could threaten the United States—assessments range from *likely before 2015, possibly before 2010* (foreign assistance would affect capability and timing) *to unlikely before 2015.*

- By 2015, Russia will maintain as many nuclear weapons on ballistic missiles as its economy will allow but well short of START I or II limitations.
- By 2015, China is likely to have tens of missiles capable of targeting the United States, including a few tens of more survivabe, land- and sea-based mobile missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage. China tested its first mobile ICBM in August 1999.

Sales of ICBMs or SLVs, which have inherent ICBM capabilities and could be converted relatively quickly with little or no warning, could increase the number of countries able to threaten the United States. North Korea continues to demonstrate a willingness to sell its missiles. Although we judge that Russia or China are unlikely to sell an ICBM or SLV in the next fifteen years, the consequences of even one sale would be extremely serious.

Several other means to deliver weapons of mass destruction to the United States have probably been devised, some more reliable than ICBMs that have not completed rigorous testing programs. For example. biological or chemical weapons could be prepared in the United States and used in large population centers, or short-range missiles could be deployed on surface ships. However, these means do not provide a nation the same prestige and degree of deterrence or coercive diplomacy associated with ICBMs.

The proliferation of medium-range ballistic missiles (MRBMs)—driven primarily by North Korean No Dong sales—has created an immediate, serious, and growing threat to U.S. forces, interests, and allies, and has significantly altered the strategic balances in the Middle East and Asia. We judge that countries developing missiles view their regional concerns as one of the primary factors in tailoring their programs. They see their short- and medium-range missiles not only as deterrents but also as force-multiplying weapons of war, primarily with conventional weapons, but with options for delivering biological, chemical, and eventually nuclear weapons. South Asia provides one of the most telling examples of regional ballistic missile and nuclear proliferation:

- Pakistan has Chinese-supplied M–11 short-range ballistic missiles (SRBMs) and Ghauri MRBMs from North Korea.
- India has Prithvi I SRBMs and recently began testing the Agni II MRBM.
- We assess these missiles may have nuclear roles.

Foreign assistance continues to have demonstrable effects on missile advances around the world, particularly from Russia and North Korea. Moreover, some countries that have traditionally been recipients of foreign missile technology are now sharing more amongst themselves and are pursuing cooperative missile ventures.

We assess that countries developing missiles also will respond to U.S. theater and national missile defenses by deploying larger forces, penetration aids, and countermeasures. Russia and China each have developed numerous countermeasures and probably will sell some related technologies.

DISCUSSION

INTRODUCTION

The worldwide ballistic missile proliferation problem has continued to evolve during the past year. The proliferation of technology and components continues. The capabilities of the missiles in the countries seeking to acquire them are growing, a fact underscored by North Korea's launch of the Taepo Dong–1 in August 1998. The

number of missiles in these countries is also increasing. Medium- and short-range ballistic missile systems, particularly if armed with weapons of mass destruction (WMD) warheads, already pose a significant threat to U.S. interests, military forces, and allies overseas. We have seen increased trade and cooperation among countries that have been recipients of missile technologies from others. Finally, some countries continue to work toward longer-range systems, including ICBMs.

We expect the threat to the United States and its interests to increase over the next 15 years. However, projecting political and economic developments that could alter the nature of the missile threat many years into the future is virtually impossible. The threat facing the United States in the year 2015 will depend on our changing relations with foreign countries, the political situation within those countries, economic factors, and numerous other factors that we cannot predict with confidence.

- For example, 15 years ago the United States and the Soviet Union were superpower adversaries in the midst of the Cold War, with military forces facing off in central Europe and competing for global power. Today, by contrast, the differences that separated the two countries during that period have been replaced by differences expected between modern nation states.
- Iraq is another example: 15 years ago it shared common interests with the United States. Since Iraq's invasion of Kuwait in 1990. Washington and Baghdad have been in numerous military and diplomatic conflicts.
- Finally, we do not know whether some of the countries of concern will exist in 15 years in their current state or as suppliers of missiles and technology.

Recognizing these uncertainties, we have projected foreign ballistic missile capabilities into the future largely based on technical capabilities and with a general premise that relations with the United States will not change significantly enough to alter the intentions of those states pursuing ballistic missile capabilities. Future annual reports will be able to take account of any contemporary information that alters our projections.

The Evolving Missile Threat in the Current Proliferation Environment

The new missile threats confronting the United States are far different from the Cold War threat during the last three decades. During that period, the ballistic missile threat to the United States involved relatively accurate, survivable, and reliable missiles deployed in large numbers. Soviet—and to a much lesser extent Chinese—strategic forces threatened, as they still do, the potential for catastrophic, nation-killing damage. By contrast, the new missile threats involve states with considerably fewer missiles with less accuracy, yield, survivability, reliability, and range-payload capability than the hostile strategic forces we have faced for 30 years. Even so, the new systems are threatening, but in different ways.

First, although the majority of systems being developed and produced today are short- or medium-range ballistic missiles, North Korea's three-stage Taepo Dong–1 SLV demonstrated Pyongyang's potential to cross the 5,500-km ICBM threshold if it develops a survivable weapon for the system. Other potentially hostile nations could cross that threshold during the next 15 years. While it remains extremely unlikely that any potential adversary could inflict damage to the United States or its forces comparable to the damage that Russian or Chinese forces could inflict, emerging systems potentially can kill tens of thousands, or even millions of Americans, depending on the type of warhead, the accuracy, and the intended target.

Classification of Ballistic Missiles by Range:

Short-range ballistic missile (SRBM)	Under 1,000 km
Medium-range ballistic missile (MRBM)	1,000 to 3,000 km
Intermediate-range ballistic missile (IRBM)	3,000 to 5,500 km
Intercontinental-range ballistic missile (ICBM)	Over 5,500 km

Second, many of the countries that are developing longer-range missiles probably assess that the *threat* of their use would complicate American decision-making during crises. Over the last decade, the world has observed that missiles less capable than the ICBMs the United States and others have deployed can affect another nation's decision-making process. Though U.S. potential adversaries recognize American military superiority, they are likely to assess that their growing missile capabilities would enable them to increase the cost of a U.S. victory and potentially deter Washington from pursuing certain objectives. Moreover, some countries, including some without hostile intent towards the United States, probably view missiles as a means of providing an independent deterrent and war-fighting capabilities.

Third, the probability that a WMD-armed missile will be used against U.S. forces or interests is higher today than during most of the Cold War. Ballistic missiles,

for example, were used against U.S. forces during the Gulf war. More nations now have longer-range missiles and WMD warheads. Missiles have been used in several conflicts over the past two decades, although not with WMD warheads. Nevertheless, some of the regimes controlling these missiles have exhibited a willingness to use WMD.

Thus, acquiring long-range ballistic missiles armed with WMD will enable weaker countries to do three things that they otherwise might not be able to do: deter, constrain, and harm the United States. To achieve these objectives, these WMD-armed weapons need not be deployed in large numbers; with even a few such weapons, these countries would judge that they had the capability to threaten at least politically significant damage to the United States or its allies. They need not be highly accurate; the ability to target a large urban area is sufficient. They need not be highly reliable, because their strategic value is derived primarily from the threat (implicit or explicit) of their use, not the near certain outcome of such use. Some of these systems may be intended for their political impact as potential terror weapons, while others may be built to perform more specific military missions, facing the United States with a broad spectrum of motivations, development, timelines, and resulting hostile capabilities. In many ways, such weapons are not envisioned at the outset as operational weapons of war, but primarily as strategic weapons of deterrence and coercive diplomacy.

The progress of countries in Asia and the Middle East toward acquiring longer-range ballistic missiles has been dramatically demonstrated over the past 18 months:

- Most notably, North Korea's three-stage Taepo Dong–1 SLV has inherent, albeit limited, capabilities to deliver small payloads to ICBM ranges. Although the Taepo Dong–1 satellite attempt in August 1998 failed, North Korea demonstrated several of the key technologies required for an ICBM, including staging. As a space launch vehicle, however, it did not demonstrate a payload capable of surviving atmospheric reentry at ICBM ranges. We judge that North Korea would be unlikely to pursue weaponizing a three-stage Taepo Dong–1 as an ICBM, preferring instead to pursue the much more capable Taepo Dong–2, which we expect will be flight tested this year, unless it is delayed for political reasons.
- Pakistan flight-tested its 1,300 km range Ghauri missile, which it produced with North Korean assistance. (Pakistan also flight-tested the Shaheen I SRBM.)
- Iran flight-tested its 1,300 km range Shahab–3—a version of North Korea's No Dong, which Iran has produced with Russian assistance.
- India flight-tested its Agni II MRBM, which we estimate will have a range of about 2,000 km.
- China conducted the first flight test of its DF–31 mobile ICBM in August 1999: it will have a range of about 8,000 km.

Many of these countries probably have considered ballistic missile defense countermeasures. Historically, the development and deployment of missile defense systems have been accompanied by the development of countermeasures and penetration aids by potential adversaries, either in reaction to the threat or in anticipation of it. The Russians and Chinese have had countermeasure programs for decades and are probably willing to transfer some related technology to others. We expect that during the next 15 years, countries other than Russia and China will develop countermeasures to Theater and National Missile Defenses.

Threat Availability Before "Deployment"

Emerging long-range missile powers do not appear to rely on robust test programs to ensure a missile's accuracy and reliability—as the United States and the Soviet Union did during the Cold War. Similarly, deploying a large number of long-range missiles to dedicated, long-term sites—as the United States and the Soviet Union did—is not necessarily the path emerging long-range missile powers will choose. In many cases, a nation may decide that the ability to threaten with one or two long-range missiles is sufficient for its doctrinal or propaganda needs. China, for example, has only about 20 ICBMs; its doctrine requires only that it be able to hold a significant portion of an aggressor's population at risk.

With shorter flight test programs—perhaps only one test—and potentially simple deployment schemes, the time between the initial flight test and the availability of a missile for military use is likely to be shortened. Once a missile has performed successfully through its critical flight functions, it would be available for the country to use as a threat or in a military role. Thus, we project the year for a first flight test rather than the projected date for a missile's "deployment" as the initial indication of an emerging threat. Moreover, using the date of the first projected flight test

as the initial indicator of the threat recognizes that emerging long-range missile powers may not choose to deploy a large number of missiles and that an adversary armed with even a single missile capable of delivering a WMD-payload may consider it threatening. Using the first flight test results in threat projections a few years earlier than those based on traditional definitions of deployment, which may not apply as well to the emerging threats.

Potential ICBM Threats to the United States

We project that during the next 15 years the United States most likely will face ICBM threats from Russia, China, and North Korea, probably from Iran, and possibly from Iraq, although the threats will consist of dramatically fewer weapons than today because of significant reductions we expect in Russian strategic forces.

- The Russian threat will continue to be the most robust and lethal, considerably more so than that posed by China, and orders of magnitude more than that posed by the other three.
- Initial North Korean, Iranian, and Iraqi ICBMs would probably be fewer in number—a few to tens rather than hundreds or thousands, constrained to smaller payload capabilities, and less reliable and accurate than their Russian and Chinese counterparts.
- Countries with emerging ICBM capabilities are likely to view their relatively few ICBMs more as weapons of deterrence and coercive diplomacy than as weapons of war, recognizing that their use could bring devastating consequences. Thus, the emerging threats posed to the United States by these countries will be very different than the Cold War threat.

North Korea. After Russia and China, North Korea is the most likely to develop ICBMs capable of threatening the United States during the next 15 years.

- North Korea attempted to orbit a small satellite using the Taepo Dong–1 SLV in August 1998, but the third stage failed during powered flight; other aspects of the flight, including stage separation, appear to have been successful.
- If it had an *operable* third stage and a reentry vehicle capable of surviving ICBM flight, a converted Taepo Dong–1 SLV *could* deliver a light payload to the United States. In these cases, about two-thirds of the payload mass would be required for the reentry vehicle structure. The remaining mass is probably too light for an early generation nuclear weapon but could deliver biological or chemical (BW/CW) warfare agent.
- Most analysts believe that North Korea *probably will test* a Taepo Dong–2 this year, unless delayed for political reasons. A two-stage Taepo Dong–2 could deliver a several-hundred kilogram payload to Alaska and Hawaii, and a lighter payload to the western half of the United States. A three-stage Taepo Dong–2 could deliver a several-hundred kilogram payload anywhere in the United States.
- North Korea is much *more likely* to weaponize the more capable Taepo Dong–2 than the three-stage Taepo Dong–1 as an ICBM.

Iran. Iran is the next hostile country most capable of testing an ICBM capable of delivering a weapon to the United States during the next 15 years.

- Iran *could test* an ICBM that could deliver a several-hundred kilogram payload to many parts of the United States in the latter half of the next decade, using Russian technology and assistance.
- Iran *could pursue* a Taepo Dong-type ICBM. Most analysts believe it could test a three-stage ICBM patterned after the Taepo Dong–1 SLV or a three-stage Taepo Dong–2-type ICBM, possibly with North Korean assistance, in the next few years.
- Iran is *likely to test* an SLV by 2010 that—once developed—could be converted into an ICBM capable of delivering a several-hundred kilogram payload to the United States.
- Analysts differ on the likely timing of Iran's first flight test of an ICBM that could threaten the United States. Assessments include:

  —*likely* before 2010 and *very likely* before 2015 (noting that an SLV with ICBM capabilities will probably be tested within the next few years);

  —no more than an *even chance* by 2010 and a *better than even* chance by 2015;

  —and *less than an even chance* by 2015.

Iraq. Although the Gulf war and subsequent United Nations activities destroyed much of Iraq's missile infrastructure, Iraq could test an ICBM capable of reaching the United States during the next 15 years.

- After observing North Korean activities, Iraq *most likely would pursue* a three-stage Taepo Dong–2 approach to an ICBM (or SLV), which could deliver a several-hundred kilogram payload to parts of the United States. If Iraq could buy a Taepo Dong–2 from North Korea, it *could have a launch capability* within months of the purchase: if it bought Taepo Dong engines, it *could test* an ICBM by the middle of the next decade. Iraq probably would take until the end of the next decade to develop the system domestically.
- Although much less likely, most analysts believe that if Iraq were to begin development today, it *could test* a much less capable ICBM in a few years using Scud components and based on its prior SLV experience or on the Taepo Dong–1.
- If it could acquire No Dongs from North Korea, Iraq *could test* a more capable ICBM along the same lines within a few years of the No Dong acquisition.
- Analysts differ on the likely timing of Iraq's first flight test of an ICBM that could threaten the United States. Assessments include *unlikely* before 2015; and *likely* before 2015, possibly before 2010—foreign assistance would affect the capability and timing.

Russia. Russia's strategic offensive forces are experiencing serious budget constraints but will remain the cornerstone of its military power. Russia expects its forces to deter both nuclear and conventional military threats and is prepared to conduct limited nuclear strikes to warn off an enemy or alter the course of a battle.

- Russia currently has about 1,000 strategic ballistic missiles with 4,500 warheads.
- Its strategic force will remain formidable through and beyond 2015, but the size of this—force will decrease dramatically—well below arms control limits—primarily because of budget constraints.
- Russia will maintain as many strategic missiles and associated nuclear warheads as it believes it can afford, but well short of START I or II limitations.
  —If Russia ratifies START II, with its ban on multiple warheads on ICBMs, it would probably be able to maintain only about half of the weapons it could maintain without the ban.
- We judge that an unauthorized or accidental launch of a Russian strategic missile is highly unlikely so long as current technical and procedural safeguards are in place.

China. Chinese strategic nuclear doctrine calls for a survivable long-range missile force that can hold a significant portion of the U.S. population at risk in a retaliatory strike.

- China's current force of about 20 CSS–4 ICBMs can reach targets in all of the United States.
- Beijing also is developing two new road-mobile, solid propellant ICBMs.
  —It conducted the first flight test of the mobile DF–31 ICBM in August 1999; we judge it will have a range of about 8,000 km and will be targeted primarily against Russia and Asia.
  —We expect a test of a longer range mobile ICBM within the next several years; it will be targeted primarily against the United States.
- China is developing the JL–2 SLBM, which we expect to be tested within the next decade. The JL–2 probably will be able to target the United States from launch areas near China.
- By 2015, China will likely have tens of missiles targeted against the United States, having added a few tens of more survivable land- and sea-based mobile missiles with smaller nuclear warheads—in part influenced by U.S. technology gained through espionage.
- China has had the technical capability to develop multiple RV payloads for 20 years. If China needed a multiple-RV (MRV) capability in the near term, Beijing could use a DF–31-type RV to develop and deploy a simple MRV or multiple independently targetable reentry vehicle (MIRV)[2] for the CSS–4 in a few years. MIRVing a future mobile missile would be many years off.
- China is also significantly improving its theater missile capabilities and is increasing the size of its SRBM force deployed opposite Taiwan.
- We assess that an unauthorized launch of a Chinese strategic missile is highly unlikely.

[2] An MRV system releases multiple RVs along the missile's linear flight path, often at a single target; a MIRV system can maneuver to several different release points to provide targeting flexibility.

Foreign Assistance

Foreign assistance continues to have demonstrable effects on missile advances around the world. Moreover, some countries that have traditionally been recipients of foreign missile technology are now sharing more amongst themselves and are pursuing cooperative missile ventures.

- Russian missile assistance continues to be significant.
- China continues to contribute to missile programs in some countries.
- North Korea may expand sales.

Moreover, changes in the regional and international security environment—in particular, Iran's Shahab–3 missile test and the Indian and Pakistani missile and nuclear tests—probably will fuel missile and WMD interests in the region.

Sales of ICBMs or SLVs, which have inherent ICBM capabilities, could further increase the number of countries that will be able to threaten the United States with a missile strike. North Korea continues to demonstrate a willingness to sell its missiles and related technologies and will probably continue doing so, perhaps under the guise of selling SLVs. In the past, we judged that political conditions made the sale of a Russian or Chinese ICBM unlikely and that the geopolitical situation would not change enough for either to decide that the sale of an ICBM would be in its national interest. We have not detected the transfer of a complete ICBM by Russia or China, nor do we have any information to indicate either plans to transfer one. Projecting the likelihood of such a transfer 15 years into the future is very uncertain, driven in part by unpredictable future economic conditions, how Moscow will perceive its position vis-a-vis the West, and future Russian and Chinese perceptions of U.S. ballistic missile defenses. As we attempt to project the politico-military-economic environment for that period, we continue to judge it unlikely that Moscow or Beijing would decide that the financial and perhaps strategic inducements to sell a complete ICBM, SLV, or the technologies tantamount to a complete ICBM, would outweigh the perceived political and economic risks of doing so.[3]

Warning Times and Our Ability to Forecast Missile Development and Acquisition

In our 1998 annual report. we stated we had high confidence that we could provide warning five years *before deployment* that a potentially hostile country was trying to *develop and deploy* an ICBM. Because countries of concern could threaten to use ballistic missiles following limited flight-testing and before a missile is *deployed* in the traditional sense, we broadened our warning in the 1998 update memorandum to encompass the first successful flight test as the beginning of an "initial threat availability."

Our ability to provide warning for a particular country depends highly on our collection capabilities. For some countries, we have relatively large bodies of evidence on which to base our assessments; for others, our knowledge of the programs being pursued is limited. Our monitoring and warning about North Korea's efforts to achieve an ICBM capability constitute an important case study on warning. In 1994, we were able to give five years warning of North Korea's efforts to acquire an ICBM capability. At that time, the Intelligence Community judged that:

- The Taepo Dong–1 was a two-stage, medium-range missile that could be tested in 1994 and deployed as early as 1996.
- The Taepo Dong–2 was a larger two-stage missile that would provide P'yongyang and other countries the potential to deliver nuclear weapons to parts of the United States, and biological and chemical weapons further. The Community judged that the Taepo Dong–2 flight test program would begin within a few years of 1994 with initial deployment in 2000 or later.

Thus, the Intelligence Community warned that North Korea was pursuing an ICBM capability and would flight test an ICBM (the Taepo Dong–2) in the mid- to late 1990s. When North Korea did not flight test either Taepo Dong missile until 1998, and then used the Taepo Dong–1 as a space launch vehicle, it became clear that the Intelligence Community had:

- Overestimated that North Korea would begin flight testing the Taepo Dong–1 and Taepo Dong–2 missiles years earlier than turned out to be the case.
- Projected correctly the timing of a North Korean missile with the potential to deliver payloads to the ICBM range of 5,500-km.
- Underestimated the capabilities of the Taepo Dong–1 by failing to anticipate the use of the third stage.

North Korea demonstrated intercontinental-range booster capabilities roughly on the timetable projected in 1994, but with a completely unanticipated vehicle configu-

[3] The sale of an ICBM is prohibited by the START Treaty.

ration. The Intelligence Community had expected North Korea to achieve an ICBM-range capability initially with the two-stage Taepo Dong–2, not the Taepo Dong–1 with an unguided third stage. North Korea's use of the Taepo Dong–1 with a third stage as a space launch vehicle was completely unexpected. Until the flight test, the Intelligence Community was unaware of the third stage and the intended use of the Taepo Dong–1 as a space launch vehicle.

Detecting or suspecting a missile development program and projecting the timing of the emerging threat, although difficult, are easier than forecasting the vehicle's configuration or performance with accuracy. Thus, we have more confidence in our ability to warn of efforts by countries to develop ICBMs than we have in our ability to describe accurately the missile configurations that will comprise that threat, especially years prior to flight testing. Furthermore, countries practice denial and deception to hide or mask their intentions—for example, testing an ICBM as a space launch vehicle.

We continue to judge that we may not be able to provide much warning if a country purchased an ICBM or if a country already had an SLV capability. Nevertheless, the initiation of an SLV program is an indicator of a potential ICBM program. North Korea and other countries, such as Iran and an unconstrained Iraq, could develop an SLV booster, then flight-test it as an ICBM with a reentry vehicle (RV) with little or no warning. Thus, we consider space launch vehicles, especially in the hands of countries hostile to the United States, to have significant ballistic missile potential.

We also judge that we may not be able to provide much, if any, warning of a forward-based ballistic missile or land-attack cruise missile (LACM) threat to the United States. Moreover, LACM development can draw upon dual-use technologies. We expect to see acquisition of LACMs by many countries to meet regional military requirements.

Space Launch Vehicle (SLV) Conversion. Nations with SLVs could convert them into ICBMs relatively quickly with little or no chance of detection before the first flight test. Such a conversion would include the development of a reentry vehicle (RV). A nation could try to buy an SLV with the intent to convert it into an ICBM; detection of the sale should provide a few years of warning before a flight test, although we are not confident that we could detect a covert sale. Finally, many SLVs would be cumbersome as converted military systems and could not be made readily survivable, a task that in many cases would be technologically and economically formidable.

Countries might mask their ICBM developments as SLV programs. They could test the complete booster and in most cases the guidance system, which would have to be reprogrammed to fly a ballistic missile trajectory. They could not mask a warhead reentry under the guise of a space launch. Nevertheless, they could develop RVs and maintain them untested for future use, albeit with significantly reduced confidence in their reliability.

- If the country had Russian or Chinese assistance in a covert development effort, it could have relatively high confidence that the RV would survive and function properly.
- If a country developed an untested RV without foreign assistance, its confidence would diminish, but we could not be confident it would fail. Significant amounts of information about reentry vehicles are available in open sources. A low performing RV with high flight stability would be a logical choice for developing an ICBM RV with minimal, or no, testing. The developing country could have some confidence that the system would survive reentry, although confidence in its proper delivery of the weapon would be lower without testing.

Alternative Threats to the United States

Several other means to deliver WMD to the United States have probably been devised, some more reliable than ICBMs that have not completed rigorous testing and validation programs. The goal of an adversary would be to move the weapon within striking distance without a long-range ICBM. Most of these means, however, do not provide the same prestige and degree of deterrence or coercive diplomacy associated with long-range missiles, but they might be the means of choice for terrorists.

Forward-Based Threats. Several countries are technically capable of developing a missile-launch mechanism to use from forward-based ships or other platforms to launch SRBMs and MRBMs, or land-attack cruise missiles against the United States. Some countries may develop and deploy a forward-based system during the period of the next 15 years.

A short- or medium-range ballistic missile could be launched at the United States from a forward-based sea platform positioned within a few hundred kilometers of U.S. territory. If the attacking country were willing to accept significantly reduced

accuracy for the missile, forward-basing on a sea-based platform would not be a major technical hurdle. The reduced accuracy in such a case, however, would probably be better than that of some early ICBMs. The simplest method for launching a ship-borne ballistic missile would be to place a secured TEL onboard the ship and launch the missile from its TEL. If accuracy were a major concern, the missile and launcher would be placed on a stabilization platform to compensate for wave movement of the ocean, or the country would need to add satellite-aided navigation to the missile.

A concept similar to a sea-based ballistic missile launch system would be to launch cruise missiles from forward-based platforms. This method would enable a country to use cruise missiles acquired for regional purposes to attack targets in the United States.

- A country could launch cruise missiles from fighter, bomber, or commercial transport aircraft outside U.S. airspace. U.S. capability to detect planes approaching the coast, and the limited range of fighter and bomber aircraft of most countries, probably would preclude the choice of military aircraft for the attack. Using a commercial aircraft, however, would be feasible for staging a covert cruise missile attack, but it still would be difficult.
- A commercial surface vessel, covertly equipped to launch cruise missiles, would be a plausible alternative for a forward-based launch platform. This method would provide a large and potentially inconspicuous platform to launch a cruise missile while providing at least some cover for launch deniability.
- A submarine would have the advantage of being relatively covert. The technical sophistication required to launch a cruise missile from a submarine torpedo or missile tube most likely would require detailed assistance from the defense industry of a major naval power.

Non-Missile WMD Threats to the United States. Although non-missile means of delivering WMD do not provide the same prestige or degree of deterrence and coercive diplomacy associated with an ICBM, such options are of significant concern. Countries or non-state actors could pursue non-missile delivery options, most of which:

- Are less expensive than developing and producing ICBMs.
- Can be covertly developed and employed; the source of the weapon could be masked in an attempt to evade retaliation.
- Probably would be more reliable than ICBMs that have not completed rigorous testing and validation programs.
- Probably would be more accurate than emerging ICBMs over the next 15 years.
- Probably would be more effective for disseminating biological warfare agent than a ballistic missile.
- Would avoid missile defenses.

The requirements for missile delivery of WMD impose additional, stringent design requirements on the already difficult technical problem of designing such weapons. For example, initial indigenous nuclear weapon designs are likely to be too large and heavy for a modest-sized ballistic missile but still suitable for delivery by ship, truck, or even airplane. Furthermore, a country (or non-state actor) is likely to have only a few nuclear weapons, at least during the next 15 years. Reliability of delivery would be a critical factor; covert delivery methods could offer reliability advantages over a missile. Not only would a country want the warhead to reach its target, it would want to avoid an accident with a WMD warhead at the missile-launch area. On the other hand, a ship sailing into a port could provide secure delivery to limited locations, and a nuclear detonation, either in the ship or on the dock, could achieve the intended purpose. An airplane, either manned or unmanned, could also deliver a nuclear weapon before any local inspection, and perhaps before landing. Finally, a nuclear weapon might also be smuggled across a border or brought ashore covertly.

Foreign non-state actors, including some terrorist or extremist groups, have used, possessed, or are interested in weapons of mass destruction or the materials to build them. Most of these groups have threatened the United States or its interests. We cannot count on obtaining warning of all planned terrorist attacks despite the high priority we assign to this goal.

Recent trends suggest the likelihood is increasing that a foreign group or individual will conduct a terrorist attack against U.S. interests using chemical agents or toxic industrial chemicals in an attempt to produce a significant number of casualties, damage infrastructure, or create fear among a population. Past terrorist events, such as the World Trade Center bombing and the Aum Shinrikyo chemical attack on the Tokyo subway system, demonstrated the feasibility and willingness to undertake an attack capable of producing massive casualties.

Immediate Theater Missile Threats to U.S. Interests and Allies

The proliferation of MRBMs—driven primarily by North Korean No Dong sales—has created an immediate, serious, and growing threat to U.S. forces, interests, and allies in the Middle East and Asia, and has significantly altered the strategic balances in the regions.

- Iran's flight test of its Shahab–3, which is based on the No Dong, and Indian and Pakistani missile and nuclear tests may fuel additional interest in MRBMs.
- Pakistan has M–11 SRBMs from China and Ghauri MRBMs from North Korea; we assess both may have a nuclear role.
- India has Prithvi I SRBMs and recently began testing the Agni II MRBM; we assess both may have a nuclear role.

We judge that countries developing missiles view their regional concerns as one of the primary factors in tailoring their programs.

They see their short- and medium-range missiles not only as deterrents but also as force-multiplying weapons of war, primarily with conventional weapons but with options for delivering biological, chemical, and eventually nuclear weapons.

Penetration Aids and Countermeasures

We assess that countries developing ballistic missiles would also develop various responses to U.S. theater and national defenses. Russia and China each have developed numerous countermeasures and probably are willing to sell the requisite technologies.

- Many countries, such as North Korea, Iran, and Iraq probably would rely initially on readily available technology—including separating RVs, spin-stabilized RVs, RV reorientation, radar absorbing material (RAM), booster fragmentation, low-power jammers, chaff, and simple (balloon) decoys—to develop penetration aids and countermeasures.
- These countries could develop countermeasures based on these technologies by the time they flight test their missiles.

Foreign espionage and other collection efforts are likely to increase. China, for example, has been able to obtain significant nuclear weapons information from espionage, contact with scientists from the United States and other countries, publications and conferences, unauthorized media disclosures, and declassified U.S. weapons information. We assess that China, Iran, and others are targeting U.S. missile information as well.

[Attachment.]

UNCLASSIFIED REPORT TO CONGRESS ON THE ACQUISITION OF TECHNOLOGY RELATING TO WEAPONS OF MASS DESTRUCTION AND ADVANCED CONVENTIONAL MUNITIONS, 1 JANUARY THROUGH 30 JUNE 1999

The Director of Central Intelligence (DCI) hereby submits this report in response to a Congressionally directed action in Section 721 of the FY 97 Intelligence Authorization Act, which requires:

> "(a) Not later than 6 months after the date of the enactment of this Act, and every 6 months thereafter, the Director of Central Intelligence shall submit to Congress a report on
>
> (1) the acquisition by foreign countries during the preceding 6 months of dual-use and other technology useful for the development or production of weapons of mass destruction (including nuclear weapons, chemical weapons, and biological weapons) and advanced conventional munitions; and
>
> (2) trends in the acquisition of such technology by such countries."

At the DCI'S request, the DCI Nonproliferation Center (NPC) drafted this report and coordinated it throughout the Intelligence Community. As directed by Section 721, subsection (b) of the Act, it is unclassified. As such, the report does not present the details of the Intelligence Community's assessments of weapons of mass destruction and advanced conventional munitions programs that are available in other classified reports and briefings for the Congress.

ACQUISITION BY COUNTRY

As required by Section 721 of the FY 97 Intelligence Authorization Act, the following are summaries by country of acquisition activities (solicitations, negotiations, contracts, and deliveries) related to weapons of mass destruction (WMD) and advanced conventional weapons (ACW) that occurred from 1 Januaiy through 30 June 1999. We excluded countries that already have substantial WMD programs, such as

China and Russia, as well as countries that demonstrated little WMD acquisition activity of concern.

Iran

Iran remains one of the most active countries seeking to acquire WMD and ACW technology from abroad. In doing so, Tehran is attempting to develop an indigenous capability to produce various types of weapons—nuclear, chemical, and biological—and their delivery systems. During the reporting period, Iran focused its efforts to acquire WMD- and ACW-related equipment, materials, and technology primarily on entities in Russia, China, North Korea and Western Europe.

For the first half of 1999, entities in Russia and China continued to supply a considerable amount and a wide variety of ballistic missile-related goods and technology to Iran. Tehran is using these goods and technologies to support current production programs and to achieve its goal of becoming self-sufficient in the production of ballistic missiles. Iran already is producing Scud short-range ballistic missiles (SRBMs) and has built and publicly displayed prototypes for the Shahab–3 medium-range ballistic missile (MRBM), which had its initial flight test in July 1998 and probably has achieved "emergency operational capability"—i.e., Tehran could deploy a limited number of the Shahab–3 prototype missiles in an operational mode during a perceived crisis situation. In addition, Iran's Defense Minister last year publicly acknowledged the development of the Shahab–4, originally calling it a more capable ballistic missile than the Shahab–3, but later categorizing it as solely a space launch vehicle with no military applications. Iran's Defense Minister also has publicly mentioned plans for a "Shahab 5."

For the reporting period, Tehran continued to seek considerable dual-use biotechnical equipment from entities in Russia and Western Europe, ostensibly for civilian uses. Iran began a biological warfare (BW) program during the Iran-Iraq war, and it may have some limited capability for BW deployment. Outside assistance is both important and difficult to prevent, given the dual-use nature of the materials, the equipment being sought, and the many legitimate end uses for these items.

Iran, a Chemical Weapons Convention (CWC) party, already has manufactured and stockpiled chemical weapons, including blister, blood, and choking agents and the bombs and artillery shells for delivering them. During the first half of 1999, Tehran continued to seek production technology, expertise, and chemicals that could be used as precursor agents in its chemical warfare (CW) program from entities in Russia and China. It also acquired or attempted to acquire indirectly through intermediaries in other countries equipment and material that could be used to create a more advanced and self-sufficient CW infrastructure.

Iran sought nuclear-related equipment, material, and technical expertise from a variety of sources, especially in Russia, during the first half of 1999. Work continues on the construction of a 1,000-megawatt nuclear power reactor in Bushehr, Iran, that will be subject to International Atomic Energy Agency (IAEA) safeguards. In addition, Russian entities continued to interact with Iranian research centers on various activities. These projects will help Iran augment its nuclear technology infrastructure, which in turn would be useful in supporting nuclear weapons research and development. The expertise and technology gained, along with the commercial channels and contacts established—even from cooperation that appears strictly civilian in nature—could be used to advance Iran's nuclear weapons research and developmental, program.

Russia has committed to observe certain limits on its nuclear cooperation with Iran. For example, President Yel'tsin has stated publicly that Russia will not provide militarily useful nuclear technology to Iran. Beginning in January 1998, the Russian Government took a number of steps to increase its oversight of entities involved in dealings with Iran and other states of proliferation concern. In 1999, it pushed a new export control law through the Duma. Russian firms, however, faced economic pressures to circumvent these controls and did so in some cases. The Russian Government, moreover, failed in some cases regarding Iran to enforce its export controls. Following repeated warnings, the U.S. Government in January 1999 imposed administrative measures against Russian entities that had engaged in nuclear- and missile-related cooperation with Iran. The measures imposed on these and other Russian entities (which were identified in 1998) remain in effect.

China pledged in October 1997 not to engage in any new nuclear cooperation with Iran but said it would complete cooperation on two ongoing nuclear projects, a small research reactor and a zirconium production facility at Esfahan that Iran will use to produce cladding for reactor fuel. The pledge appears to be holding. As a party to the Nuclear Nonproliferation Treaty (NPT), Iran is required to apply IAEA safeguards to nuclear fuel, but safeguards are not required for the zirconium plant or its products.

Iran is attempting to establish a complete nuclear fuel cycle for its civilian energy program. In that guise, it seeks to obtain whole facilities, such as a uranium conversion facility, that, in fact, could be used in any number of ways in support of efforts to produce fissile material needed for a nuclear weapon. Despite international efforts to curtail the flow of critical technologies and equipment, Tehran continues to seek fissile material and technology for weapons development and has set up an elaborate system of military and civilian organizations to support its effort.

Iraq

Since Operation Desert Fox in December 1998, Baghdad has refused to allow United Nations inspectors into Iraq as required by Security Council Resolution 687. As a result, there have been no UN inspections during this reporting period, and the automated video monitoring system installed by the UN at known and suspect WMD facilities in Iraq has been dismantled by the Iraqis. Having lost this on-the-ground access, it is difficult for the UN or the U.S. to accurately assess the current state of Iraq's WMD programs.

Since the Gulf war, Iraq has rebuilt key portions of its chemical production infrastructure for industrial and commercial use, as well as its missile production facilities. It has attempted to purchase numerous dual-use items for, or under the guise of, legitimate civilian use. This equipment—in principle subject to UN scrutiny—also could be diverted for WMD purposes. Following Desert Fox, Baghdad again instituted a reconstruction effort on those facilities destroyed by the U.S. bombing, to include several critical missile production complexes and former dual-use CW production facilities. In addition, it appears to be installing or repairing dual-use equipment at CW-related facilities. Some of these facilities could be converted fairly quickly for production of CW agents.

The United Nations Special Commission on Iraq (UNSCOM) reported to the Security Council in December 1998 that Iraq continued to withhold information related to its CW and BW programs. For example, Baghdad seized from UNSCOM inspectors an Air Force document discovered by UNSCOM that indicated that Iraq had not consumed as many CW munitions during the Iran-Iraq War in the 1980s as declared by Baghdad. This discrepancy indicates that Iraq may have an additional 6,000 CW munitions hidden. This intransigence on the part of Baghdad ultimately led to the Desert Fox bombing by the U.S.

We do not have any direct evidence that Iraq has used the period since Desert Fox to reconstitute its WMD programs, although given its past behavior, this type of activity must be regarded as likely. The United Nations assesses that Baghdad has the capability to reinitiate both its CW and BW programs within a few weeks to months, but without an inspection monitoring program, it is difficult to determine if Iraq has done so.

Iraq has continued to work on the two SRBM systems authorized by the United Nations: the liquid-propellant Al-Samoud, and the solid-propellant Ababil–100. The Al-Samoud is essentially a scaled-down Scud, and the program allows Baghdad to develop technological improvements that could be applied to a longer range missile program. We believe that the Al-Samoud missile, as designed, is capable of exceeding the UN-permitted 150-km-range restriction with a potential operational range of about 180 kilometers. Personnel previously involved with the Condor II/Badr–2000 missile—which was largely destroyed during the Gulf war and eliminated by UNSCOM—are working on the Ababil–100 program. Once economic sanctions against Iraq are lifted, Baghdad probably will begin converting these efforts into longer range missile systems, unless restricted by future UN monitoring.

North Korea

P'yongyang continues to acquire raw materials from out-of-country entities to produce WMD and ballistic missiles. During the reporting period, North Korea obtained raw materials for its ballistic missile programs from various foreign sources, especially from firms in China. North Korea produces and is capable of using a wide variety of chemical and possibly biological agents, as well as their delivery means.

During the first half of 1999, P'yongyang sought to procure technology worldwide that could have applications in its nuclear program, but we do not know of any procurement directly linked to the nuclear weapons program. We assess that North Korea has produced enough plutonium for at least one, and possibly two, nuclear weapons. The United States and North Korea are nearing completion on the joint project of canning spent fuel from the Yongbyon complex for long-term storage and ultimate shipment out of the North in accordance with the 1994 Agreed Framework. That reactor fuel contains enough plutonium for several more weapons.

During this reporting period, P'yongyang also attempted to obtain advanced conventional weapons and related technologies such as aircraft electronics and spare parts from several countries, including Kazakhstan.

Libya

Despite UN sanctions, which were still in effect for the first half of 1999, Libya continued to obtain ballistic missile-related equipment, materials, technology, and expertise from foreign sources. Outside assistance is critical to keeping its ballistic missile development programs from becoming moribund.

Libya remains heavily dependent on foreign suppliers for precursor chemicals and other key CW-related equipment. UN sanctions continued to severely limit that support during the first half of 1999. Still, Tripoli has not given up its goal of establishing its own offensive CW capability and continues to pursue an indigenous production capability for the weapons.

In the past, Libya has sought to obtain major weapon systems, spare parts, and other support for its military forces from traditional sources in the former Soviet Union (FSU) and Eastern Europe, as well as from Iran. However, it appears Tripoli sought to procure only a limited amount of advanced conventional technology during the first half of 1999.

Syria

Syria sought CW-related precursors and expertise from foreign sources during the reporting period. Damascus already has a stockpile of the nerve agent sarin and apparently is trying to develop more toxic and persistent nerve agents. Syria remains dependent on foreign sources for key elements of its CW program, including precursor chemicals and key production equipment.

During the first half of 1999, Damascus continued work on establishing a solid-propellant rocket motor development and production capability with help from outside countries such as Iran. Foreign equipment and assistance to its liquid-propellant missile program, primarily from Russian entities, but also from firms in China and North Korea, also have been and will continue to be essential for Syria's effort. Damascus also continued its efforts to assemble—probably with considerable North Korean assistance—liquid-fueled Scud C missiles.

In addition, sales of ACW to Syria continued, albeit at a lesser pace, during this reporting period. The vast majority of it's arsenal consists of weapons from the FSU. Russia in particular wants to keep its predominant position as the key supplier of arms to Damascus.

Sudan

During the reporting period, Sudan sought to acquire a variety of military equipment from various sources. The shopping list included helicopters and parts, unmanned aerial vehicles, tanks, antitank guided missiles, and numerous types of ammunition. Khartoum is seeking older, less expensive weapons that nonetheless are advanced compared with the capabilities of the weapons possessed by its opponents and their supporters in neighboring countries in the long-running civil war.

In the WMD arena, Sudan has been developing the capability to produce chemical weapons for many years. In this pursuit, it has obtained help from entities in other countries, principally Iraq. Given its history in developing CW and its close relationship with Iraq, Sudan may be interested in a BW program as well.

India

While striving to achieve independence from foreign suppliers, India's ballistic missile programs still benefited from the acquisition of foreign equipment and technology. India sought items for these programs during the reporting period primarily from Russia: New Delhi successfully flight-tested its newest MRBM, the Agni 2, in April 1999 after months of preparations.

India continues to pursue the development of nuclear weapons, and its underground nuclear tests in May 1998 were a significant milestone. (The U.S. imposed sanctions against India as a result of these tests.) The acquisition of foreign equipment could benefit New Delhi in its efforts to develop and produce more sophisticated nuclear weapons. India obtained some foreign nuclear-related assistance during the first half of 1999 from a variety of sources worldwide, including in Russia and Western Europe.

Pakistan

Pakistan acquired a considerable amount of nuclear-related and dual-use equipment and materials from various sources—principally in the FSU and Western Europe—during the first half of 1999. Islamabad has a well-developed nuclear weapons

program, as evidenced by its first nuclear weapons tests in late May 1998. (The U.S. imposed sanctions against Pakistan as a result of these tests.) Acquisition of nuclear-related goods from foreign sources will be important if Pakistan chooses to develop more advanced nuclear weapons. China, which has provided extensive support in the past to Islamabad's WMD programs, in May 1996 promised to stop assistance to unsafeguarded nuclear facilities—but we cannot rule out ongoing contacts.

Chinese and North Korean entities continued to provide assistance to Pakistan's ballistic missile program during the first half of 1999. Such assistance is critical for Islamabad's efforts to produce ballistic missiles. In April 1998, Pakistan flight-tested the Ghauri MRBM, which is based on North Korea's No Dong missile. Also in April 1998, the U.S. imposed sanctions against Pakistani and North Korean entities for their role in transferring Missile Technology Control Regime Category I ballistic missile-related technology. In April 1999, Islamabad flight-tested another Ghauri MRBM and the Shaheen–1 SRBM.

Egypt

Egypt continues its effort to develop and produce ballistic missiles with the assistance of North Korea. This activity is part of a long-running program of ballistic missile cooperation between these two countries.

KEY SUPPLIERS

China

China joined the Zangger Committee—which clarifies certain export obligations under the NPT—in October 1997 and participated in the Zangger Conversion Technology Holders meeting in February 1999. This was China's first opportunity to participate in a discussion of this type.

China pledged in late 1997 not to engage in any new nuclear cooperation with Iran but said it would complete work associated with two remaining nuclear projects—a small research reactor and a zirconium production facility—in a relatively short period of time. The Intelligence Community will continue to monitor carefully Chinese nuclear cooperation with Iran.

During the reporting period, firms in China provided missile-related items, raw materials, and/or assistance to several countries of proliferation concern—such as Iran. China also was a supplier of ACW to Iran through the first half of 1999.

Prior to the reporting period, Chinese firms had supplied CW-related production equipment and technology to Iran. The U.S. sanctions imposed in May 1997 on seven Chinese entities for knowingly and materially contributing to Iran's CW program remain in effect. In June 1998, China announced that it had expanded its chemical export controls to include 10 of the 20 Australia Group chemicals not listed on the CWC schedules.

China has provided extensive support in the past to Pakistan's WMD and ballistic missile programs, and some ballistic missile assistance continues. In May 1996, Beijing promised to stop assistance to unsafeguarded nuclear facilities, but we cannot preclude ongoing contacts. China's involvement with Pakistan will continue to be monitored closely.

Russia

Russian entities during the reporting period continued to supply a variety of ballistic missile-related goods and technical know-how to Iran and were expanding missile-related assistance to Syria and India. For example, Iran's earlier success in gaining technology and materials from Russian companies accelerated Iranian development of the Shahab–3 MRBM, which was first flight-tested in July 1998. Russian entities during the first six months of 1999 have provided substantial missile-related technology, training, and expertise to Iran that almost certainly will continue to accelerate Iranian efforts to build new indigenous ballistic missile systems.

During the first half of 1999, Russia also remained a key supplier for civilian nuclear programs in Iran. With respect to Iran's nuclear infrastructure, Russian assistance enhances Iran's ability to support a nuclear weapons development effort. By its very nature, even the transfer of civilian technology may be of use in Iran's nuclear weapons program. In addition, Russia supplied India with material for its civilian nuclear program during this reporting period.

Russian entities remain a significant source of biotechnology and chemicals for Iran. Russia's world-leading expertise in biological and chemical weapons would make it an attractive target for Iranians seeking technical information and training on BW and CW agent production processes.

Russia also was an important source of conventional weapons and spare parts for Iran, which is seeking to upgrade and replace its existing conventional weapons inventories.

Following intense and continuing engagement with the U.S., Russian officials took some positive steps to enhance oversight of Russian entities and their interaction with countries of concern. Russia has reiterated previous commitments to observe certain limits on its nuclear cooperation with Iran, such as not providing militarily useful nuclear technology, although—as indicated above—Russia continues to provide Iran with nuclear technology that could be applied to Iran's weapons program. President Yel'tsin in July 1999 signed a federal export control law, which formally makes WMD-related transfers a violation of law and codifies several existing decrees—including catch-all controls—yet may lessen punishment for violators.

Despite these decrees, the government's commitment, willingness, and ability to curb proliferation-related transfers remain uncertain. Moreover, economic conditions in Russia continued to deteriorate, putting more pressure on Russian entities to circumvent export controls. Despite some examples of restraint, Russian businesses continue to be major suppliers of WMD equipment, materials, and technology to Iran. Monitoring Russian proliferation behavior, therefore, will remain a very high priority.

North Korea

Throughout the first half of 1999, North Korea continued to export ballistic missile-related equipment and missile components, materials and technical expertise to countries in the Middle East and Africa. P'yongyang attaches a high priority to the development and sale of ballistic missiles, equipment, and related technology. Exports of ballistic missiles and related technology are one of the North's major sources of hard currency.

Western Nations

As was the case in 1998, entities in Western nations in early 1999 were not as important sources for WMD-related goods and materials as in past years. Increasingly rigorous and effective export controls and cooperation among supplier countries have led foreign WMD programs to look elsewhere for many controlled dual-use goods. Machine tools, spare parts for dual-use equipment, and widely available materials and scientific equipment and specialty metals were the most common items sought.

TRENDS

As in previous reports, countries determined to maintain WMD programs over the long term have been placing significant emphasis on insulating their programs against interdiction and disruption, trying to reduce their dependence on imports by developing indigenous production capabilities. Although these capabilities may not always be a good substitute for foreign imports—particularly for more advanced technologies—in many cases they may prove to be adequate.

APPENDIX 3

TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS

Signed at Moscow May 26, 1972
Ratification advised by U.S. Senate August 3, 1972
Ratified by U.S. President September 30, 1972
Proclaimed by U.S. President October 3, 1972
Instruments of ratification exchanged October 3, 1972
Entered into force October 3, 1972

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the premise that nuclear war would have devastating consequences for all mankind,

Considering that effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons,

Proceeding from the premise that the limitation of anti-ballistic missile systems, as well as certain agreed measures with respect to the limitation of strategic offensive arms, would contribute to the creation of more favorable conditions for further negotiations on limiting strategic arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament,

Desiring to contribute to the relaxation of international tension and the strengthening of trust between States,

Have agreed as follows:

ARTICLE I

1. Each Party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures in accordance with the provisions of this Treaty.

2. Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.

ARTICLE II

1. For the purpose of this Treaty an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory, currently consisting of:

(a) ABM interceptor missiles, which are interceptor missiles constructed and deployed for an ABM role, or of a type tested in an ABM mode;

(b) ABM launchers, which are launchers constructed and deployed for launching ABM interceptor missiles; and

(c) ABM radars, which are radars constructed and deployed for an ABM role, or of a type tested in an ABM mode.

2. The ABM system components listed in paragraph 1 of this Article include those which are:

(a) operational;

(b) under construction;

(c) undergoing testing;

(d) undergoing overhaul, repair or conversion; or

(e) mothballed.

ARTICLE III

Each Party undertakes not to deploy ABM systems or their components except that:

(a) within one ABM system deployment area having a radius of one hundred and fifty kilometers and centered on the Partys national capital, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, and (2) ABM radars within no more than six ABM radar complexes, the area of each complex being circular and having a diameter of no more than three kilometers; and

(b) within one ABM system deployment area having a radius of one hundred and fifty kilometers and containing ICBM silo launchers, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, (2) two large phased-array ABM radars comparable in potential to corresponding ABM radars operational or under construction on the date of signature of the Treaty in an ABM system deployment area containing ICBM silo launchers, and (3) no more than eighteen ABM radars each having a potential less than the potential of the smaller of the above-mentioned two large phased-array ABM radars.

ARTICLE IV

The limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges. Each Party may have no more than a total of fifteen ABM launchers at test ranges.

ARTICLE V

1. Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.

2. Each Party undertakes not to develop, test or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, not to modify deployed launchers to provide them with such a capacity, not to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload of ABM launchers.

ARTICLE VI

To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by the Treaty, each Party undertakes:

(a) not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode; and

(b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

ARTICLE VII

Subject to the provisions of this Treaty, modernization and replacement of ABM systems or their components may be carried out.

ARTICLE VIII

ABM systems or their components in excess of the numbers or outside the areas specified in this Treaty, as well as ABM systems or their components prohibited by this Treaty, shall be destroyed or dismantled under agreed procedures within the shortest possible agreed period of time.

ARTICLE IX

To assure the viability and effectiveness of this Treaty, each Party undertakes not to transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

ARTICLE X

Each Party undertakes not to assume any international obligations which would conflict with this Treaty.

ARTICLE XI

The Parties undertake to continue active negotiations for limitations on strategic offensive arms.

ARTICLE XII

1. For the purpose of providing assurance or compliance with the provisions of this Treaty, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.

2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.

3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Treaty. This obligation shall not require changes in current construction, assembly, conversion, or overhaul practices.

ARTICLE XIII

1. To promote the objectives and implementation of the provisions of this Treaty, the Parties shall establish promptly a Standing Consultative Commission, within the framework of which they will:

(a) consider questions concerning compliance with the obligations assumed and related situations which may be considered ambiguous;

(b) provide on a voluntary basis such information as either Party considers necessary to assure confidence in compliance with the obligations assumed;

(c) consider questions involving unintended interference with national technical means of verification;

(d) consider possible changes in the strategic situation which have a bearing on the provisions of this Treaty;

(e) agree upon procedures and dates for destruction or dismantling of ABM systems or their components in cases provided for by the provisions of this Treaty;

(f) consider, as appropriate, possible proposals for further increasing the viability of this Treaty; including proposals for amendments in accordance with the provisions of this Treaty;

(g) consider, as appropriate, proposals for further measures aimed at limiting strategic arms.

2. The Parties through consultation shall establish, and may amend as appropriate, Regulations for the Standing Consultative Commission governing procedures, composition and other relevant matters.

ARTICLE XIV

1. Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty.

2. Five years after entry into force of this Treaty, and at five-year intervals thereafter, the Parties shall together conduct a review of this Treaty.

ARTICLE XV

1. This Treaty shall be of unlimited duration.

2. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from the Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

ARTICLE XVI

1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. The Treaty shall enter into force on the day of the exchange of instruments of ratification.

2. This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
RICHARD NIXON
President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:
L. I. BREZHNEV
General Secretary of the Central Committee of the CPSU

AGREED STATEMENTS, COMMON UNDERSTANDINGS, AND UNILATERAL STATEMENTS REGARDING TILE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILES

1. Agreed Statements

The document set forth below was agreed upon and initialed by the Heads of the Delegations on May 26, 1972 (letter designations added):

Agreed Statements Regarding the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems

[A]

The Parties understand that, in addition to the ABM radars which may be deployed in accordance with subparagraph (a) of Article III of the Treaty, those non-phased-array ABM radars operational on the date of signature of the Treaty within the ABM system deployment area for defense of the national capital may be retained.

[B]

The Parties understand that the potential (the product of mean emitted power in watts and antenna area in square meters) of the smaller of the two large phased-array ABM radars referred to in subparagraph (b) of Article III of the Treaty is considered for purposes of the Treaty to be three million.

[C]

The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers.

[D]

In order to insure fulfillment of the obligation not to deploy ABM systems and their components except as provided in Article III of the Treaty, the Parties agree that in the event ABM systems based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radars are created in the future, specific limitations on such systems and their components would be subject to discussion in accordance with Article XIII and agreement in accordance with Article XIV of the Treaty.

[E]

The Parties understand that Article V of the Treaty includes obligations not to develop, test or deploy ABM interceptor missiles for the delivery by each ABM interceptor missile of more than one independently guided warhead.

[F]

The Parties agree not to deploy phased-array radars having a potential (the product of mean emitted power in watts and antenna area in square meters) exceeding three million, except as provided for in Articles III, IV, and VI of the Treaty, or except

for the purposes of tracking objects in outer space or for use as national technical means of verification.

[G]

The Parties understand that Article IX of the Treaty includes the obligation of the United States and the USSR not to provide to other States technical descriptions or blueprints specially worked out for the construction of ABM systems and their components limited by the Treaty.

2. COMMON UNDERSTANDINGS

Common understanding of the Parties on the following matters was reached during the negotiations:

A. Location of ICBM Defenses

The U.S. Delegation made the following statement on May 26, 1972:

Article III of the ABM Treaty provides for each side one ABM system deployment area centered on its national capital and one ABM system deployment area containing ICBM silo launchers. The two sides have registered agreement on the following statement: "The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers." In this connection, the U.S. side notes that its ABM system deployment area for defense of ICBM silo launchers, located west of the Mississippi River, will be centered in the Grand Forks ICBM silo launcher deployment area. (See Agreed Statement [C].)

B. ABM Test Ranges

The U.S. Delegation made the following statement on April 26, 1972:

Article IV of the ABM Treaty provides that "the limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges." We believe it would be useful to assure that there is no misunderstanding as to current ABM test ranges. It is our understanding that ABM test ranges encompass the area within which ABM components are located for test purposes. The current U.S. ABM test ranges are at White Sands, New Mexico, and at Kwajalein Atoll, and the current Soviet ABM test range is near Sary Shagan in Kazakhstan. We consider that non-phased array radars of types used for range safety or instrumentation purposes may be located outside of ABM test ranges. We interpret the reference in Article IV to "additionally agreed test ranges" to mean that ABM components will not be located at any other test ranges without prior agreement between our Governments that there will be such additional ABM test ranges.

On May 5, 1972, the Soviet Delegation stated that there was a common understanding on what ABM test ranges were, that the use of the types of non-ABM radars for range safety or instrumentation was not limited under the Treaty, that the reference in Article IV to "additionally agreed" test ranges was sufficiently clear, and that national means permitted identifying current test ranges.

C. Mobile ABM Systems

On January 29, 1972, the U.S. Delegation made the following statement:

Article V(1) of the Joint Draft Text of the ABM Treaty includes an undertaking not to develop, test, or deploy mobile land-based ABM systems and their components. On May 5, 1971, the U.S. side indicated that, in its view, a prohibition on development of mobile ABM systems and components would rule out the deployment of ABM launchers and radars which were not permanent fixed types. At that time, we asked for the Soviet view of this interpretation. Does the Soviet side agree with the U.S. sides interpretation put forward on May 5, 1971?

On April 13, 1972, the Soviet Delegation said there is a general common understanding on this matter.

D. Standing Consultative Commission

Ambassador Smith made the following statement on May 22, 1972:

The United States proposes that the sides agree that, with regard to initial implementation of the ABM Treatys Article XIII on the Standing Consultative Commis-

sion (SCC) and of the consultation Articles to the Interim Agreement on offensive arms and the Accidents Agreement,[1] agreement establishing the SCC will be worked out early in the follow-on SALT negotiations; until that is completed, the following arrangements will prevail: when SALT is in session, any consultation desired by either side under these Articles can be carried out by the two SALT Delegations; when SALT is not in session, *ad hoc* arrangements for any desired consultations under these Articles may be made through diplomatic channels.

Minister Semenov replied that, on an *ad referendum* basis, he could agree that the U.S. statement corresponded to the Soviet understanding.

E. Standstill

On May 6, 1972, Minister Semenov made the following statement:

In an effort to accommodate the wishes of the U.S. side, the Soviet Delegation is prepared to proceed on the basis that the two sides will in fact observe the obligations of both the Interim Agreement and the ABM Treaty beginning from the date of signature of these two documents.

In reply, the U.S. Delegation made the following statement on May 20, 1972:

The United States agrees in principle with the Soviet statement made on May 6 concerning observance of obligations beginning from date of signature but we would like to make clear our understanding that this means that, pending ratification and acceptance, neither side would take any action prohibited by the agreements after they had entered into force. This understanding would continue to apply in the absence of notification by either signatory of its intention not to proceed with ratification or approval.

The Soviet Delegation indicated agreement with the U.S. statement.

3. Unilateral Statements

The following noteworthy unilateral statements were made during the negotiations by the United States Delegation:

A. Withdrawal from the ABM Treaty

On May 9, 1972, Ambassador Smith made the following statement:

The U.S. Delegation has stressed the importance the U.S. Government attaches to achieving agreement on more complete limitations on strategic offensive arms, following agreement on an ABM Treaty and on an Interim Agreement on certain measures with respect to the limitation of strategic offensive arms. The U.S. Delegation believes that an objective of the follow-on negotiations should be to constrain and reduce on a long-term basis threats to the survivability of our respective strategic retaliatory forces. The USSR Delegation has also indicated that the objectives of SALT would remain unfulfilled without the achievement of an agreement providing for more complete limitations on strategic offensive arms. Both sides recognize that the initial agreements would be steps toward the achievement of complete limitations on strategic arms. If an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty. The United States does not wish to see such a situation occur, nor do we believe that the USSR does. It is because we wish to prevent such a situation that we emphasize the importance the U.S. Government attaches to achievement of more complete limitations on strategic offensive arms. The U.S. Executive will inform the Congress, in connection with Congressional consideration of the ABM Treaty and the Interim Agreement, of this statement of the U.S. position.

B. Tested in an ABM Mode

On April 7, 1972, the U.S. Delegation made the following statement:

Article II of the Joint Text Draft uses the term "tested in an ABM mode," in defining ABM components, and Article VI includes certain obligations concerning such testing. We believe that the sides should have a common understanding of this phrase. First, we would note that the testing provisions of the ABM Treaty are intended to apply to testing which occurs after the date of signature of the Treaty,

[1] See Article 7 of Agreement to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics, signed September 30, 1971.

and not to any testing which may have occurred in the past. Next, we would amplify the remarks we have made on this subject during the previous Helsinki phase by setting forth the objectives which govern the U.S. view on the subject, namely, while prohibiting testing of non-ABM components for ABM purposes: not to prevent testing of ABM components, and not to prevent testing of non-ABM components for non-ABM purposes. To clarify our interpretation of "tested in an ABM mode," we note that we would consider a launcher, missile or radar to be "tested in an ABM mode" if, for example, any of the following events occur: (1) a launcher is used to launch an ABM interceptor missile, (2) an interceptor missile is flight tested against a target vehicle which has a flight trajectory with characteristics of a strategic ballistic missile flight trajectory, or is flight tested in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range, or is flight tested to an altitude inconsistent with interception of targets against which air defenses are deployed, (3) a radar makes measurements on a cooperative target vehicle of the kind referred to in item (2) above during the reentry portion of its trajectory or makes measurements in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range. Radars used for purposes such as range safety or instrumentation would be exempt from application of these criteria.

C. No-Transfer Article of ABM Treaty

On April 18, 1972, the U.S. Delegation made the following statement:

In regard to this Article [IX], I have a brief and I believe self-explanatory statement to make. The U.S. side wishes to make clear that the provisions of this Article do not set a precedent for whatever provision may be considered for a Treaty on Limiting Strategic Offensive Arms. The question of transfer of strategic offensive arms is a far more complex issue, which may require a different solution.

D. No Increase in Defense of Early Warning Radars

On July 28, 1970, the U.S. Delegation made the following statement:

Since Hen House radars [Soviet ballistic missile early warning radars] can detect and track ballistic missile warheads at great distances, they have a significant ABM potential. Accordingly, the United States would regard any increase in the defenses of such radars by surface-to-air missiles as inconsistent with an agreement.

MEMORANDUM OF UNDERSTANDING BETWEEN THE GOVERNMENT OF THE UNITED STATES OF AMERICA AND THE GOVERNMENT OF THE UNION OF SOVIET SOCIALIST REPUBLICS REGARDING THE ESTABLISHMENT OF A STANDING CONSULTATIVE COMMISSION

I.

The Government of the United States of America and the Government of the Union of Soviet Socialist Republics hereby establish a Standing Consultative Commission.

II.

The Standing Consultative Commission shall promote the objectives and implementation of the provisions of the Treaty between the USA and the USSR on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, the Interim Agreement between the USA and the USSR on Certain Measures with Respect to the Limitation of Strategic Offensive Arms of May 26, 1972, and the Agreement on Measures to Reduce the Risk of Outbreak of Nuclear War between the USA and the USSR of September 30, 1971, and shall exercise its competence in accordance with the provisions of Article XIII of said Treaty, Article VI of said Interim Agreement, and Article 7 of said Agreement on Measures.

III.

Each Government shall be represented on the Standing Consultative Commission by a Commissioner and a Deputy Commissioner, assisted by such staff as it deems necessary.

IV.

The Standing Consultative Commission shall hold periodic sessions on dates mutually agreed by the Commissioners but no less than two times per year. Ses-

sions shall also be convened as soon as possible, following reasonable notice, at the request of either Commissioner.

V.

The Standing Consultative Commission shall establish and approve Regulations governing procedures and other relevant matters and may amend them as it deems appropriate.

VI.

The Standing Consultative Commission will meet in Geneva. It may also meet at such other places as may be agreed.

Done in Geneva, on December 21, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

For the Government of the United States of America	For the Government of the Union of the Soviet Socialist Republics

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PROTOCOL TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS

Signed at Moscow July 3, 1974
Ratification advised by U.S. Senate November 10, 1975
Ratified by U.S. President March 19, 1976
Instruments of ratification exchanged May 24, 1976
Proclaimed by U.S. President July 6, 1976
Entered into force May 24, 1976

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the Basic Principles of Relations between the United States of America and the Union of Soviet Socialist Republics signed on May 29, 1972,

Desiring to further the objectives of the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems signed on May 26, 1972, hereinafter referred to as the Treaty,

Reaffirming their conviction that the adoption of further measures for the limitation of strategic arms would contribute to strengthening international peace and security,

Proceeding from the premise that further limitation of anti-ballistic missile systems will create more favorable conditions for the completion of work on a permanent agreement on more complete measures for the limitation of strategic offensive arms,

Have agreed as follows:

ARTICLE I

1. Each Party shall be limited at any one time to a single area of the two provided in Article III of the Treaty for deployment of anti-ballistic missile (ABM) systems or their components and accordingly shall not exercise its right to deploy an ABM system or its components in the second of the two ABM system deployment areas permitted by Article III of the Treaty, except as an exchange of one permitted area for the other in accordance with Article II of this Protocol.

2. Accordingly, except as permitted by Article II of this Protocol: the United States of America shall not deploy an ABM system or its components in the area centered on its capital, as permitted by Article III(a) of the Treaty, and the Soviet Union shall not deploy an ABM system or its components in the deployment area of intercontinental ballistic missile (ICBM) silo launchers as permitted by Article 111(b) of the Treaty.

ARTICLE II

1. Each Party shall have the right to dismantle or destroy its ABM system and the components thereof in the area where they are presently deployed and to deploy an ABM system or its components in the alternative area permitted by Article III of the Treaty, provided that prior to initiation of construction, notification is given in accord with the procedure agreed to in the Standing Consultative Commission,

during the year beginning October 3, 1977, and ending October 2, 1978, or during any year which commences at five year intervals thereafter, those being the years of periodic review of the Treaty, as provided in Article XIV of the Treaty. This right may be exercised only once.

2. Accordingly, in the event of such notice, the United States would have the right to dismantle or destroy the ABM system and its components in the deployment area of ICBM silo launchers and to deploy an ABM system or its components in an area centered on its capital, as permitted by Article III(a) of the Treaty, and the Soviet Union would have the right to dismantle or destroy the ABM system and its components in the area centered on its capital and to deploy an ABM system or its components in an area containing ICBM silo launchers, as permitted by Article III(b) of the Treaty.

3. Dismantling or destruction and deployment of ABM systems or their components and the notification thereof shall be carried out in accordance with Article VIII of the ABM Treaty and procedures agreed to in the Standing Consultative Commission.

ARTICLE III

The rights and obligations established by the Treaty remain in force and shall be complied with by the Parties except to the extent modified by this Protocol. In particular, the deployment of an ABM system or its components within the area selected shall remain limited by the levels and other requirements established by the Treaty.

ARTICLE IV

This Protocol shall be subject to ratification in accordance with the constitutional procedures of each Party. It shall enter into force on the day of the exchange of instruments of ratification and shall thereafter be considered an integral part of the Treaty.

DONE at Moscow on July 3, 1974, in duplicate, in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
RICHARD NIXON
President of the United States of America

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:
L.I. BREZHNEV
General Secretary of the Central Committee of the CPSU

PROTOCOL ON PROCEDURES GOVERNING REPLACEMENT, DISMANTLING OR DESTRUCTION, AND NOTIFICATION THEREOF, FOR ABM SYSTEMS AND THEIR COMPONENTS

Pursuant to the provisions and in implementation of the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, and the Agreed Statements regarding that Treaty, the Parties thereto have within the framework of the Standing Consultative Commission agreed upon procedures governing replacement, dismantling or destruction, and notification thereof, for ABM systems and their components limited by that Treaty, as formulated in the Attachment hereto which constitutes an integral part of this Protocol.

The Parties have also agreed on the following general guidelines:

1. The attached Procedures shall apply only to systems or their components to be replaced and dismantled or destroyed pursuant to the provisions of the Treaty;

2. Any replacement of ABM systems or their components shall be on the basis of Article VII of the Treaty and applicable Agreed Statements; dismantling or destruction of ABM systems or their components in excess of the numbers or outside the areas specified by the Treaty shall be on the basis of Article VIII of the Treaty and applicable Agreed Statements;

3. Dismantling or destruction procedures for ABM systems or their components, related to implementation of the provisions of Article VII regarding replacement of those systems or their components and Article VIII of the Treaty, shall ensure that those systems or their components and facilities associated

with those components, except for facilities at test ranges, would be put in a condition that precludes the possibility of their use for ABM purposes; shall ensure that reactivation of units dismantled or destroyed would be detectable by national technical means; shall be such that reactivation time of those units would not be substantially less than the time required for new construction; and shall preclude unreasonable delays in dismantling or destruction;

4. Replacement and dismantling or destruction procedures shall be formulated separately for above-ground and silo ABM launchers and for ABM radars;

5. Replacement and dismantling or destruction procedures shall ensure that adequate verification can be accomplished by national technical means in accordance with Article XII of the Treaty;

6. After dismantling or destruction in accordance with the attached Procedures, facilities remaining at ABM launch or ABM radar sites may, at the discretion of the Parties, be used for purposes not inconsistent with the provisions of the Treaty and applicable Agreed Statements; and

7. Through timely and appropriate procedures, the Parties shall notify each other of the number and type (above-ground or silo) of ABM launchers and of the number of ABM radars on which dismantling or destruction has been completed and is in process, and of the number of ABM launchers and ABM radars used for replacement.

This Protocol and the attached Procedures shall enter into force upon signature of this Protocol and remain in force for the duration of the Treaty, and may be amended by the Standing Consultative Commission as it deems appropriate.

DONE at Moscow on July 3, 1974, in duplicate, in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Secretary of State

FOR THE UNION OF SOVIET SOCIALIST REPUBLICS:
Minister of Foreign Affairs

SUPPLEMENTARY PROTOCOL TO THE PROTOCOL ON PROCEDURES GOVERNING REPLACEMENT, DISMANTLING OR DESTRUCTION, AND NOTIFICATION THEREOF, FOR ABM SYSTEMS AND THEIR COMPONENTS OF JULY 3, 1974

Pursuant to the provisions and in implementation of the Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Agreed Statements regarding the Treaty, and the Protocol to the Treaty of July 3, 1974, the Parties thereto have, within the framework of the Standing Consultative Commission and in implementation of the provisions of the Protocol on Procedures Governing Replacement, Dismantling or Destruction, and Notification Thereof, for ABM Systems and Their Components of July 3, 1974, agreed upon procedures governing replacement, dismantling or destruction, and notification thereof, for ABM systems and their components limited by the Treaty, as formulated in the Attachment to this Supplementary Protocol.

This Supplementary Protocol and the attached Procedures shall constitute an integral part of the Protocol on Procedures Governing Replacement, Dismantling or Destruction, and Notification Thereof, for ABM Systems and Their Components of July 3, 1974 and shall be considered the second attachment to that Protocol. The attached Procedures shall enter into force upon signature of this Supplementary Protocol and remain in force for the duration of the Treaty, and may be amended by the Standing Consultative Commission as it deems appropriate.

DONE at Geneva on October 28, 1976, in duplicate, in the English and Russian languages, both texts being equally authentic.

COMMISSIONER,
UNITED STATES OF AMERICA

COMMISSIONER,
UNION OF SOVIET SOCIALIST REPUBLICS

Geneva—November 1, 1978

STANDING CONSULTATIVE COMMISSION

AGREED STATEMENT

Regarding Certain Provisions of Articles II, IV, and VI of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, and the Utilization of Air Defense Radars at the Test Ranges Referred to in Article IV of that Treaty

In accordance with the provisions of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Parties thereto have, within the framework of the Standing Consultative Commission, reached mutual understanding regarding the following:

I.

TEST RANGES REFERRED TO IN ARTICLE IV OF THE TREATY

1. The test ranges referred to in Article IV of the Treaty are any test ranges at which an ABM system or at least one ABM launcher, regardless of whether or not it contains an ABM interceptor missile, or one ABM radar is located or constructed for purposes of testing.

2. Any other types of weapons or military equipment may also be located at such test ranges for testing according to their mission or for range safety purposes. Such location, testing, or use of these other types of weapons or military equipment, provided it is consistent with the provisions of the Treaty, shall not constitute a basis for considering them ABM system components.

3. The current test ranges referred to in Article IV of the Treaty are those test ranges which each Party had on the date of signature of the Treaty, that is, on May 26, 1972. Both the USA and USSR had on May 26, 1972, and have at the present time, two current test ranges: for the USA in the vicinity of White Sands, New Mexico, and on Kwajalein Atoll and for the USSR in the vicinity of Sary Shagan, Kazakhstan, and on the Kamchatka Peninsula.

4. Each Party may establish test ranges referred to in Article IV of the Treaty as "additionally agreed" and locate therein for testing ABM systems or their components as they are defined in Article II of the Treaty, provided that the establishment of such ranges is consistent with the objectives and provisions of the Treaty and, in particular, with the obligations of each Party provided for in Article I of the Treaty not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense.

5. In the event of establishment of an additional test range by either Party, the Party carrying out such action shall provide, within the framework of the Standing Consultative Commission, notification of the location of such a test range no later than thirty days after the beginning of any construction or assembly work, other than earthwork (excavation), associated with locating or constructing at that test range an ABM launcher or antenna (array), ABM radar antenna structures, or an antenna pedestal support which is not a part of an ABM radar building. After presentation of such notification and, if necessary, clarification in the Standing Consultative Commission of any aspects of this notification which are not clear to the Party being notified, the test range being newly established will be considered an "additionally agreed test range," referred to in Article IV of the Treaty.

II.

THE TERM "TESTED IN AN ABM MODE" USED IN THE TREATY

1. The term "tested in an ABM mode," which is used in Article II of the Treaty for defining ABM system components, refers to ABM interceptor missiles, ABM launchers, or ABM radars, which are tested in an ABM mode separately or in conjunction with other ABM system components after the date of signature of the Treaty, that is after May 26, 1972. The term does not refer to components which were tested by the Parties in an ABM mode prior to that date.

2. Testing in an ABM mode is the testing, which, in accordance with the provisions of Articles III and IV of the Treaty regarding locations of ABM systems or their components, is carried out only at test ranges or in an ABM system deployment area, for the purpose of determining the capabilities of an ABM system or its individual components (ABM interceptor missiles, ABM launchers, or ABM radars)

to perform the functions of countering strategic ballistic missiles or their elements in flight trajectory.

3. As applied to testing of ABM interceptor missiles, ABM launchers, or ABM radars, the term "strategic ballistic missiles or their elements in flight trajectory," used in the Treaty, also refers to ballistic target-missiles which, after being launched, are used for testing these ABM system components in an ABM mode, and the flight trajectories of which, over the portions of the flight trajectory involved in such testing, have the characteristics of the flight trajectory of a strategic ballistic missile or its elements.

4. The term "tested in an ABM mode" used in Article II of the Treaty refers to:

(a) an ABM interceptor missile if while guided by an ABM radar it has intercepted a strategic ballistic missile or its elements in flight trajectory regardless of whether such intercept was successful or not; or if an ABM interceptor missile has been launched from an ABM launcher and guided by an ABM radar. If ABM interceptor missiles are given the capability to carry out interception without the use of ABM radars as the means of guidance, application of the term "tested in an ABM mode" to ABM interceptor missiles in that event shall be subject to additional discussion and agreement in the Standing Consultative Commission;

(b) an ABM launcher if it has been used for launching an ABM interceptor missile;

(c) an ABM radar if it has tracked a strategic ballistic missile or its elements in flight trajectory and guided an ABM interceptor missile toward them regardless of whether the intercept was successful or not; or tracked and guided an ABM interceptor missile; or tracked a strategic ballistic missile or its elements in flight trajectory in conjunction with an ABM radar, which is tracking a strategic ballistic missile or its elements in flight trajectory and guiding an ABM interceptor missile toward them or is tracking and guiding an ABM interceptor missile.

5. The provisions of paragraph 4 of this Section shall be applied taking into account Article VI, subparagraph (a), of the Treaty concerning the obligations of the Parties not to give missiles, launchers, or radars, other than ABM system components, capabilities to counter strategic ballistic missiles or their elements in flight trajectory. The term "tested in an ABM mode" shall not be applied to radars for early warning of strategic ballistic missile attack, or to radars, including phased-array radars, used for the purposes of tracking objects in outer space or as national technical means of verification.

6. The term "tested in an ABM mode" shall not be applied to radars, including phased-array radars, which are constructed and used only as instrumentation equipment for testing of any types of weapons or military equipment.

7. The term "tested in an ABM mode" shall not be applied to a radar, including a phased-array radar, which is not an ABM radar or a radar referred to in paragraphs 5 and 6 of this Section, if strategic ballistic missiles or their elements passed through the field of view of the radar while it was operating in accordance with its mission, and it was not, at that time, performing functions inherent only to an ABM radar, and it was not functioning in conjunction with an ABM radar. In the event that ambiguities arise in the future regarding application of the term "tested in an ABM mode" to individual radars which track strategic ballistic missiles or their elements in flight trajectory, the Parties, in accordance with Article XIII of the ABM Treaty, will consider such questions in the Standing Consultative Commission and resolve them on a mutually acceptable basis.

8. Deployment of radars of a type tested in an ABM mode, except as provided in Articles III and IV of the Treaty, to carry out any functions would be inconsistent with the obligation of each Party not to provide a base for an ABM defense of the territory of its country.

III.

UTILIZATION OF AIR DEFENSE RADARS AT THE TEST RANGES REFERRED TO IN ARTICLE IV OF THE TREATY

1. Utilization of air defense radars located at or near a test range to carry out air defense functions, including providing for the safety of that range, is not limited by the provisions of the Treaty and is independent of the testing carried out at that range.

2. When air defense components and ABM system components are co-located at a test range, the Parties, in order to preclude the possibility of ambiguous situations or misunderstandings, will refrain from concurrent testing of such air defense components and ABM system components at that range.

3. In utilizing air defense radars as instrumentation equipment at test ranges the Parties will not use such radars to make measurements on strategic ballistic missiles or their elements in flight trajectory.

STATEMENT BY COMMISSIONER BUCHHEIM

November 1, 1978

Mr. Commissioner, I would like to make the following statement regarding the Agreed Statement which we have just initialed.

FIRST, in paragraph 6 of Section II of the Agreed Statement of November 1, 1978, the Parties agreed that the term "tested in an ABM mode" shall not be applied to radars, including phased-array radars, which are constructed and used only as instrumentation equipment for testing of any types of weapons or military equipment. With respect to such radars the Parties understand that:

(a) phased-array radars which have a potential exceeding three million may be located only at the test ranges referred to, in Article IV of the ABM Treaty;

(b) phased-array radars which have a potential not exceeding three million and which make measurements on strategic ballistic missiles or their elements in flight trajectory may be located only at the test ranges referred to in Article IV of the ABM Treaty, or at locations to which strategic ballistic missiles are launched for testing;

(c) phased-array radars which have a potential not exceeding three million and which do not make measurements on strategic ballistic missiles or their elements in flight trajectory may be located anywhere for instrumentation or other purposes not inconsistent with the ABM Treaty;

(d) non-phased-array radars may be located anywhere for instrumentation or other purposes not inconsistent with the ABM Treaty.

SECOND, in connection with paragraph 7 of Section II of the Agreed Statement of November 1, 1978, the Parties understand that ABM radars, radars for early warning of strategic ballistic missile attack, radars used for tracking objects in outer space or as national technical means of verification, as well as radars constructed and used only as instrumentation equipment for testing of any types of weapons or military equipment can, when operating in accordance with their missions, perform the function inherent to them of tracking strategic ballistic missiles or their elements in flight trajectory.

In addition to the aforementioned radars, both Parties have other radars, including phased-array radars, intended for various missions. When these radars are operating in accordance with their missions, strategic ballistic missiles or their elements might pass through the fields of view of these radars. The passing of strategic ballistic missiles or their elements through the fields of view of such radars will not be equated with tracking of such missiles by these radars and cannot give grounds for either Party to consider that in these cases the radars are being tested in an ABM mode.

If ambiguities arise in the future regarding application of the term "tested in an ABM mode" to individual radars which track strategic ballistic missiles or their elements in flight trajectory, or regarding determination of whether these radars are ABM radars or radars which are not ABM radars, such questions will be subject to consultation in the Standing Consultative Commission in accordance with Article XIII of the ABM Treaty.

THIRD, the Parties, in connection with the Agreed Statement Regarding Certain Provisions of the ABM Treaty, have the common understanding that the Agreed Statement will be used by the Parties in their implementation of those provisions of the ABM Treaty, beginning on the date of initialing of the Agreed Statement by the U.S. and USSR SCC Commissioners, that is, November 1, 1978. Like the statements in connection with paragraphs II.6 and II.7 of the Agreed Statement, this common understanding constitutes a component part of the general understanding reached between the Parties with regard to certain provisions of the ABM Treaty.

STATEMENT BY COMMISSIONER USTINOV

November 1, 1978

Mr. Commissioner, I would like to make the following statement regarding the Agreed Statement which we have just initialed.

FIRST, in paragraph 6 of Section II of the Agreed Statement of November 1, 1978, the Parties agreed that the term "tested in an ABM mode" shall not be applied to radars, including phased-array radars, which are constructed and used only as instrumentation equipment for testing of any types of weapons or military equipment. With respect to such radars the Parties understand that:

(a) phased-array radars which have a potential exceeding three million may be located only at the test ranges referred to in Article IV of the ABM Treaty;

(b) phased-array radars which have a potential not exceeding three million and which make measurements on strategic ballistic missiles or their elements in flight trajectory may be located only at the test ranges referred to in Article IV of the ABM Treaty, or at locations to which strategic ballistic missiles are launched for testing;

(c) phased-array radars which have a potential not exceeding three million and which do not make measurements on strategic ballistic missiles or their elements in flight trajectory may be located anywhere for instrumentation or other purposes not inconsistent with the ABM Treaty;

(d) non-phased-array radars may be located anywhere for instrumentation or other purposes not inconsistent with the ABM Treaty.

SECOND, in connection with paragraph 7 of Section II of the Agreed Statement of November 1, 1978, the Parties understand that ABM radars, radars for early warning of strategic ballistic missile attack, radars used for tracking objects in outer space or as national technical means of verification, as well as radars constructed and used only as instrumentation equipment for testing of any types of weapons or military equipment can, when operating in accordance with their missions, perform the function inherent to them of tracking strategic ballistic missiles or their elements in flight trajectory.

In addition to the aforementioned radars, both Parties have other radars, including phased-array radars, intended for various missions. When these radars are operating in accordance with their missions, strategic ballistic missiles or their elements might pass through the fields of view of these radars. The passing of strategic ballistic missiles or their elements through the fields of view of such radars will not be equated with tracking of such missiles by these radars and cannot give grounds for either Party to consider that in these cases the radars are being tested in an ABM mode.

If ambiguities arise in the future regarding application of the term "tested in an ABM mode" to individual radars which track strategic ballistic missiles or their elements in flight trajectory, or regarding determination of whether these radars are ABM radars or radars which are not ABM radars, such questions will be subject to consultation in the Standing Consultative Commission in accordance with Article XIII of the ABM Treaty.

THIRD, the Parties, in connection with the Agreed Statement Regarding Certain Provisions of the ABM Treaty, have the common understanding that the Agreed Statement will be used by the Parties in their implementation of those provisions of the ABM Treaty, beginning on the date of initialing of the Agreed Statement by the U.S. and USSR SCC Commissioners, that is, November 1, 1978. Like the statements in connection with paragraphs II.6 and II.7 of the Agreed Statement, this common understanding constitutes a component part of the general understanding reached between the Parties with regard to certain provisions of the ABM Treaty.

Geneva—June 6, 1985

STANDING CONSULTATIVE COMMISSION

COMMON UNDERSTANDING

RELATED TO PARAGRAPH 2 OF SECTION III OF THE AGREED STATEMENT OF NOVEMBER 1, 1978, REGARDING CERTAIN PROVISIONS OF ARTICLES II, IV, AND VI OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972, AND THE UTILIZATION OF AIR DEFENSE RADARS AT THE TEST RANGES REFERRED TO IN ARTICLE IV OF THAT TREATY

In accordance with the provisions of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Parties thereto, in further development of the agreement recorded in paragraph 2 of Section III of the Agreed Statement of November 1, 1978, with a view to precluding the possibility of ambiguous situations at the test ranges referred to in Article IV of the Treaty, have, within the framework of the Standing Consultative Commission, additionally agreed that:

each Party will refrain from launching strategic ballistic missiles to the area of such a test range or from launching ABM interceptor missiles at that test range concurrent with the operation of air defense components located at that range;

in agreeing to the foregoing the Parties recognize the possibility of circumstances—the appearance of a hostile or unidentified aircraft—in which, for the purpose of providing for air defense, a necessity for the operation of air defense components, located at the test range for carrying out air defense functions including providing for range safety, may arise unexpectedly during the launch of a strategic ballistic missile to the area of the test range or during the launch of an ABM interceptor missile at that range. Should such an event occur, the Party which had such a concurrent operation will, as soon as possible, but within thirty days, provide notification to the other Party describing the circumstances of the event. It will, if necessary, on a voluntary basis, also inform the other Party about the event or hold consultations with it within the framework of the Standing Consultative Commission, as provided for in Article XIII of the Treaty and paragraph 4 of the Regulations of the Standing Consultative Commission.

This Common Understanding constitutes a component part of the agreement reached between the Parties with regard to the provisions of paragraph 2 of Section III of the Agreed Statement of November 1, 1978, and does not affect other provisions of that Agreed Statement or the provisions of the common understandings thereto reached by Commissioners in the Standing Consultative Commission on November 1, 1978.

The provisions of this Common Understanding will be used by the Parties in their implementation of the provisions of the Treaty and the Agreed Statement of November 1, 1978, beginning on the date of signature of this Common Understanding, that is, June 6, 1985.

COMMISSIONER, UNITED STATES OF AMERICA	COMMISSIONER, UNION OF SOVIET SOCIALIST REPUBLICS

September 26, 1997

MEMORANDUM OF UNDERSTANDING RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

The United States of America, and the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation and Ukraine, hereinafter referred to for purposes of this Memorandum as the Union of Soviet Socialist Republics (USSR) Successor States,

Recognizing the importance of preserving the viability of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the

Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, with the aim of maintaining strategic stability,

Recognizing the changes in the political situation resulting from the establishment of new independent states on the territory of the former USSR,

Have, in connection with the Treaty, agreed as follows:

ARTICLE I

The United States of America, the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation, and Ukraine, upon entry into force of this Memorandum, shall constitute the Parties to the Treaty.

ARTICLE II

The USSR Successor States shall assume the rights and obligations of the former USSR under the Treaty and its associated documents.

ARTICLE III

Each USSR Successor State shall implement the provisions of the Treaty with regard to its territory and with regard to its activities, wherever such activities are carried out by that State, independently or in cooperation with any other State.

ARTICLE IV

For purposes of Treaty implementation:

(a) the term "Union of Soviet Socialist Republics" shall mean the USSR Successor States;

(b) the terms "national territory" and "territory of its country" when used to refer to the former USSR shall mean the combined national territories of the USSR Successor States, and the term "periphery of its national territory" when used to refer to the former USSR shall mean the periphery of the combined national territories of those States; and

(c) the term "capital" when used to refer to the capital of the Union of Soviet Socialist Republics in Article III of the Treaty and the Protocol thereto of July 3, 1974, shall continue to mean the city of Moscow.

ARTICLE V

A USSR Successor State or USSR Successor States may continue to use any facility that is subject to the provisions of the Treaty and that is currently located on the territory of any State that is not a Party to the Treaty, with the consent of such State, and provided that the use of such facility shall remain consistent with the provisions of the Treaty.

ARTICLE VI

The USSR Successor States shall collectively be limited at any one time to a single anti-ballistic missile (ABM) system deployment area and to a total of no more than fifteen ABM launchers at ABM test ranges, in accordance with the provisions of the Treaty and its associated documents, including the Protocols of July 3, 1974.

ARTICLE VII

The obligations contained in Article IX of the Treaty and Agreed Statement "G" Regarding the Treaty shall not apply to transfers between or among the USSR Successor States.

ARTICLE VIII

The Standing Consultative Commission, hereinafter referred to as the Commission, shall function in the manner provided for by the Treaty and the Memorandum of Understanding Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics Regarding the Establishment of a Standing Consultative Commission of December 21, 1972, as well as by the Regulations of the Conmiission, which shall reflect the multilateral character of the Treaty and the equal legal status of the Parties in reaching decisions in the Commission.

ARTICLE IX

1. This Memorandum shall be subject to ratification or approval by the signatory States, in accordance with the constitutional procedures of those States.

2. The functions of the depositary of this Memorandum shall be exercised by the Government of the United States of America.

3. This Memorandum shall enter into force on the date when the Governments of all the signatory States have deposited instruments of ratification or approval of this Memorandum and shall remain in force so long as the Treaty remains in force.

4. Each State that has ratified or approved this Memorandum shall also be bound by the provisions of the First Agreed Statement of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, and the Second Agreed Statement of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972.

DONE at New York City on September 26, 1997, in five copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Madeleine Albright

FOR THE REPUBLIC OF BELARUS:
I. Antonovich

FOR THE REPUBLIC OF KAZAKHSTAN:
K. Tokayev

FOR THE RUSSIAN FEDERATION:
Y. Primakov

FOR UKRAINE:
H. Udovenko

September 26, 1997

STANDING CONSULTATIVE COMMISSION

FIRST AGREED STATEMENT RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

In connection with the provisions of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Parties to the Treaty have, within the framework of the Standing Consultative Commission, reached agreement on the following:

1. Land-based, sea-based, and air-based interceptor missiles, interceptor missile launchers, and radars, other than anti-ballistic missile (ABM) interceptor missiles, ABM launchers, or ABM radars, respectively, shall be deemed, within the meaning of paragraph (a) of Article VI of the Treaty, not to have been given capabilities to counter strategic ballistic missiles or their elements in flight trajectory and not to have been tested in an ABM mode, if, in the course of testing them separately or in a system:

(a) the velocity of the interceptor missile does not exceed 3 km/sec over any part of its flight trajectory;

(b) the velocity of the ballistic target-missile does not exceed 5 km/sec over any part of its flight trajectory; and

(c) the range of the ballistic target-missile does not exceed 3,500 kilometers.

2. The Parties have additionally agreed on reciprocal implementation of the confidence-building measures set forth in the Agreement on Confidence-Building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles of September 26, 1997.

3. This Agreed Statement shall enter into force simultaneously with entry into force of the Memorandum of Understanding of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet

Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972.

DONE at New York City on September 26, 1997, in five copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Stanley Riveles

FOR THE REPUBLIC OF BELARUS:
S. Agurtsou

FOR THE REPUBLIC OF KAZAKHSTAN:
K. Zhanbatyrov

FOR THE RUSSIAN FEDERATION:
V. Koltunov

FOR UKRAINE:
0. Rybak

COMMON UNDERSTANDINGS RELATED TO THE FIRST AGREED STATEMENT OF SEPTEMBER 26, 1997, RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

I.

The term "interceptor missile," as used in the First Agreed Statement of September 26, 1997, shall refer to any missile subject to the provisions of paragraph (a) of Article VI of the Treaty if such a missile:

(a) has been developed by a Party as a missile to counter ballistic missiles other than strategic ballistic missiles; or

(b) has been declared by a Party as a missile to counter ballistic missiles other than strategic ballistic missiles; or

(c) has been tested by a Party even once with the use of a ballistic target-missile.

With respect to subparagraphs (a), (b), or (c), such a missile shall be considered an interceptor missile in all its launches.

II.

The provisions of paragraph 1 of the First Agreed Statement of September 26, 1997, do not supersede or amend any provision of the Agreed Statement of November 1, 1978, and do not alter the meaning of the term "tested in an ABM mode" as that term is used in the Treaty, including the Agreed Statement of November 1, 1978.

III.

The Parties have agreed that, for the purposes of the First Agreed Statement of September 26, 1997, the velocity of an interceptor missile as well as the velocity of a ballistic target-missile shall be determined in an earth-centered coordinate system fixed in relation to the Earth.

IV.

The Parties have agreed that, for the purposes of the First Agreed Statement of September 26, 1997, the velocity of space-based interceptor missiles shall be considered to exceed 3 km/sec.

These Common Understandings shall be considered an attachment to the First Agreed Statement of September 26, 1997, and shall constitute an integral part thereof.

September 26, 1997

STANDING CONSULTATIVE COMMISSION

SECOND AGREED STATEMENT RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

In connection with the provisions of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Parties to the Treaty,

Expressing their commitment to strengthening strategic stability and international security,

Emphasizing the importance of further reductions in strategic offensive arms,

Recognizing the fundamental significance of the Treaty for the above objectives,

Recognizing the necessity for effective systems to counter ballistic missiles other than strategic ballistic missiles,

Considering it their common task to preserve the Treaty, prevent its circumvention and enhance its viability,

Relying on the following principles that have served as a basis for reaching this agreement:

- the Parties are committed to the Treaty as a cornerstone of strategic stability;
- the Parties must have the option to establish and to deploy effective systems to counter ballistic missiles other than strategic ballistic missiles, and such activity must not lead to violation or circumvention of the Treaty;
- systems to counter ballistic missiles other than strategic ballistic missiles may be deployed by each Party which will not pose a realistic threat to the strategic nuclear force of another Party and which will not be tested to give such systems that capability;
- systems to counter ballistic missiles other than strategic ballistic missiles will not be deployed by the Parties for use against each other; and
- the scale of deployment—in number and geographic scope—of systems to counter ballistic missiles other than strategic ballistic missiles by any Party will be consistent with programs for ballistic missiles other than strategic ballistic missiles confronting that Party;

Have, within the framework of the Standing Consultative Commission, with respect to systems to counter ballistic missiles other than strategic ballistic missiles with interceptor missiles whose velocity exceeds 3 km/sec over any part of their flight trajectory, hereinafter referred to as systems covered by this Agreed Statement, reached agreement on the following:

1. Each Party undertakes that, in the course of testing, separately or in a system, land-based, sea-based, and air-based interceptor missiles, interceptor missile launchers, and radars, of systems covered by this Agreed Statement, which are not anti-ballistic missile (ABM) interceptor missiles, ABM launchers, or ABM radars, respectively:

(a) the velocity of the ballistic target-missile will not exceed 5 km/sec over any part of its flight trajectory; and

(b) the range of the ballistic target-missile will not exceed 3,500 kilometers.

2. Each Party, in order to preclude the possibility of ambiguous situations or misunderstandings related to compliance with the provisions of the Treaty, undertakes not to develop, test, or deploy space-based interceptor missiles to counter ballistic missiles other than strategic ballistic missiles, or space-based components based on other physical principles, whether or not part of a system, that are capable of substituting for such interceptor missiles.

3. In order to enhance confidence in compliance with the provisions of the Treaty, the Parties shall implement the provisions of the Agreement on Confidence-Building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles of September 26, 1997, hereinafter referred to as the Confidence-Building Measures Agreement, with respect to systems covered by this Agreed Statement and not subject to the Confidence-Building Measures Agreement on the date of its entry into force. Each such system shall become subject to the provisions of the Confidence-Building Measures Agreement no

later than 180 days in advance of the planned date of the first launch of an interceptor missile of that system. All information provided for in the Confidence-Building Measures Agreement shall initially be provided no later than 30 days after such a system becomes subject to the provisions of the Confidence-Building Measures Agreement.

4. In order to ensure the viability of the Treaty as technologies related to systems to counter ballistic missiles other than strategic ballistic missiles evolve, and in accordatice with Article XIII of the Treaty, the Parties undertake to hold consultations and discuss, within the framework of the Standing Consultative Commission, questions or concerns that any Party may have regarding activities involving systems covered by this Agreed Statement, including questions and concerns related to the implementation of the provisions of this Agreed Statement.

5. This Agreed Statement shall enter into force simultaneously with entry into force of the Memorandum of Understanding of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972.

DONE at New York City on September 26, 1997, in five copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Stanley Riveles

FOR THE REPUBLIC OF BELARUS:
S. Agurtsou

FOR THE REPUBLIC OF KAZAKHSTAN:
K. Zhanbatyrov

FPR THE RUSSIAN FEDERATION:
V. Koltunov

FOR UKRAINE:
O. Rybak

COMMON UNDERSTANDINGS RELATED TO THE SECOND AGREED STATEMENT OF SEPTEMBER 26, 1997, RELATING TO THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

I.

The term "interceptor missile," as used in the Second Agreed Statement of September 26, 1997, shall refer to any missile subject to the provisions of paragraph (a) of Article VI of the Treaty if such a missile:

(a) has been developed by a Party as a missile to counter ballistic missiles other than strategic ballistic missiles; or

(b) has been declared by a Party as a missile to counter ballistic missiles other than strategic ballistic missiles; or

(c) has been tested by a Party even once with the use of a ballistic target-missile.

With respect to subparagraphs (a), (b), or (c), such a missile shall be considered an interceptor missile in all its launches.

II.

The Parties have agreed that, for the purposes of the Second Agreed Statement of September 26, 1997, the velocity of an interceptor missile as well as the velocity of a ballistic target-missile shall be determined in an earth-centered coordinate system fixed in relation to the Earth.

III.

The Parties have agreed that for the purposes of the Second Agreed Statement of September 26, 1997, the velocity of space-based interceptor missiles shall be considered to exceed 3 km/sec.

IV.

For systems to counter ballistic missiles other than strategic ballistic missiles with interceptor missiles whose velocity exceeds 3 km/sec over any part of their flight trajectory, that become subject to the Confidence-Building Measures Agreement in accordance with paragraph 3 of the Second Agreed Statement of September 26, 1997, the Parties understand that, in connection with the provisions of paragraph 2(b) of Section IV of the Confidence-Building Measures Agreement, detailed information on such systems shall be provided in a form and scope as agreed upon by the Parties.

These Common Understandings shall be considered an attachment to the Second Agreed Statement of September 26, 1997, and shall constitute an integral part thereof.

September 26, 1997

AGREEMENT ON CONFIDENCE-BUILDING MEASURES RELATED TO SYSTEMS TO COUNTER BALLISTIC MISSILES OTHER THAN STRATEGIC BALLISTIC MISSILES

The States that have signed this Agreement, hereinafter referred to as the Parties,

Desiring to promote reciprocal openness, greater trust between the Parties, and the preservation of strategic stability,

Declaring their intention to implement, on a reciprocal basis, confidence-building measures with respect to systems to counter ballistic missiles other than strategic ballistic missiles,

Have agreed as follows:

I. GENERAL PROVISIONS

1. Systems subject to this Agreement shall be: for the United States of America—the Theater High-Altitude Area Defense (THAAD) System and the Navy Theater-Wide Theater Ballistic Missile Defense Program, known to the other Parties by the same names; for the Russian Federation—the S–300V system, known to the United States of America as the SA–12 system; for the Republic of Belarus—the S–300V system, known to the United States of America as the SA–12 system; for Ukraine—the S–300V system, known to the United States of America as the SA–12 system; and other systems as agreed upon by the Parties in the future.

2. The Parties shall conduct an initial exchange of information and notifications, as provided for in this Agreement, no later than 90 days after entry into force of this Agreement, reflecting the status as of the date of its entry into force, and update this information annually, unless otherwise agreed. Information shall be updated reflecting the status as of January 1 of each year and provided no later than April 1 of each year.

II. NOTIFICATIONS

1. Each Party shall provide notifications to the other Parties of test ranges and other test areas where launches of interceptor missiles of systems subject to this Agreement will take place. Notifications of test ranges and other test areas shall include the names of ranges (test areas) and their locations. Such notifications shall be provided either within 30 days after entry into force of this Agreement, or no later than 90 days in advance of the first launch of an interceptor missile of a system subject to this Agreement at each test range (test area).

2. Each Party shall provide notification to the other Parties of each launch of an interceptor missile of systems subject to this Agreement, if during that launch a ballistic target-missile is used. In this connection:

(a) an interceptor missile launch notification shall specify the name of the test range (test area) where the interceptor missile launch will take place; the type (designation) of the interceptor missile; the planned date of the interceptor missile launch; the planned launch point of the interceptor missile (geographic coordinates; for air-based systems the geographic coordinates of the projection of the planned launch point of the interceptor missile onto the Earth's surface shall be specified); the planned launch point of the ballistic target-missile (geographic coordinates);

(b) each interceptor missile launch notification shall be provided no later than 10 days in advance of the planned date of the interceptor missile launch and

shall be effective for seven days beginning with the planned date of that launch; and

(c) if the launch of the interceptor missile will not occur or has not occurred within the specified 7-day period, the Party that planned to carry out the launch of the interceptor missile shall provide a notification thereof no later than 24 hours after the expiration of the 7-day period. Such a notification shall state that the interceptor missile launch has not occurred and shall either specify a new launch date, which will establish the beginning of a new 7-day period, or state that a notification of a new launch date will be made in accordance with the procedure specified in subparagraph (b) of this paragraph.

III. Demonstrations of Systems and Observations of Tests

Any Party may on a voluntary basis arrange, for any other Party or Parties, a demonstration of its systems or their components subject to this Agreement or an observation of their tests. In each specific case, the participating Parties shall agree in advance on the purpose of, and the arrangements for, such demonstrations and observations.

IV. Assurances

Each Party shall provide assurances that it will not deploy systems subject to this Agreement in numbers and locations so that these systems could pose a realistic threat to the strategic nuclear force of another Party. The measures used to provide such assurances shall include:

1. Each Party shall provide to the other Parties, in a form and scope as agreed upon by the Parties, an assessment of the programs with respect to the development, testing and deployment of ballistic missiles, other than strategic ballistic missiles, confronting that Party.

2. For each of its systems subject to this Agreement, each Party shall provide the following information:

(a) the name, type (designation), and basing mode of the system as well as of its interceptor missiles, launchers, and associated radars;

(b) the general concept of operation; the status of plans and programs; and, in addition, for systems in testing, the number of systems it plans to possess; the information shall be provided in a form and scope as agreed upon by the Parties;

(c) the class and type of basing platform:

(i) for land-based systems: the number of launchers in a battalion;

(ii) for sea-based systems: the class and type of each ship, and the number of launchers on a ship of that class capable of launching interceptor missiles of each type;

(iii) for air-based systems: the type of each aircraft, and the number of interceptor missiles each aircraft is capable of carrying;

(d) the number of interceptor missiles of a fully loaded launcher.

3. For components of each of its systems subject to this Agreement, each Party shall provide the following information:

(a) for a completely assembled interceptor missile: the number of stages, the length, the maximum diameter, the type of propellant (solid or liquid), maximum velocity demonstrated during launches, and the length and diameter of the interceptor missile launch canister;

(b) for the interceptor missile launcher: the maximum number of interceptor missiles of a fully loaded launcher; and

(c) for the radar: the frequency band (in designations adopted by the International Telecommunication Union) and potential, expressed as a value that is not exceeded by the radar's potential. The potential of a radar shall mean the product of its mean emitted power in watts and its antenna area in square meters.

V. Additional Voluntary Measures

Each Party may provide on a voluntary basis any other information or any other notifications not specified elsewhere in this Agreement. The topics, amount, and time frame for such information and notifications shall be such as each Party determines.

VI. IMPLEMENTATION OF THE AGREEMENT

1. To promote the objectives and implementation of the provisions of this Agreement, the Parties, within the framework of the Standing Consultative Commission established in accordance with the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, shall consider:

(a) issues concerning implementation of the obligations assumed under this Agreement, as well as related situations which may be considered ambiguous; and

(b) amendments to the provisions of this Agreement and other possible proposals on further increasing its viability.

2. The Parties shall use the Nuclear Risk Reduction Center channels or the equivalent government-to-government communications links for providing the notifications and for exchanging the information provided for in Sections II, IV and V of this Agreement.

VII. CONFIDENTIALITY

Each Party undertakes not to release to the public the information provided pursuant to this Agreement except with the express consent of the Party that provided such information.

VIII. ENTRY INTO FORCE AND DURATION

This Agreement shall enter into force simultaneously with entry into force of the First Agreed Statement of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, and the Second Agreed Statement of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, and shall remain in force so long as either of those Agreed Statements remains in force.

DONE at New York City on September 26, 1997, in five copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Stanley Riveles

FOR THE REPUBLIC OF BELARUS:
S. Agurtsou

FOR THE REPUBLIC OF KAZAKHSTAN:
K. Zhanbatyrov

FOR THE RUSSIAN FEDERATION:
V. Koltunov

FOR UKRAINE:
O. Rybak

September 26, 1997—New York City

STANDING CONSULTATIVE COMMISSION

JOINT STATEMENT ON THE ANNUAL EXCHANGE OF INFORMATION ON THE STATUS OF PLANS AND PROGRAMS WITH RESPECT TO SYSTEMS TO COUNTER BALLISTIC MISSILES OTHER THAN STRATEGIC BALLISTIC MISSILES

1. The Parties understand that in implementing the provisions of paragraph 2(b) of Section IV of the Agreement on Confidence-Building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles of September 26, 1997, each Party will provide information annually on the status of its plans and programs with respect to systems to counter ballistic missiles other than strategic ballistic missiles that includes:

(a) whether or not that Party has plans before April 1999 to test, against a ballistic target-missile, land-based, sea-based or air-based interceptor missiles whose velocity exceeds 3 km/sec over any part of their flight trajectory;

(b) whether or not that Party has plans to develop such systems with interceptor missiles whose velocity over any part of their flight trajectory exceeds 5.5 km/sec for land-based and air-based systems or 4.5 km/sec for sea-based systems; and

(c) whether or not that Party has plans to test such systems against ballistic target-missiles with multiple independently targetable reentry vehicles or against reentry vehicles deployed or planned to be deployed on strategic ballistic missiles.

2. The Parties understand that should any Party have questions or concerns regarding activity related to any change in the statement on plans of any other Party, the Parties will, in accordance with Article XIII of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, hereinafter referred to as the Treaty, the Second Agreed Statement of September 26, 1997, Relating to the Treaty, and Section VI of the Agreement on Confidence-Building Measures Related to Systems to Counter Ballistic Missiles Other Than Strategic Ballistic Missiles of September 26, 1997, conduct consultations, within the framework of the Standing Consultative Commission, to discuss such questions or concerns, as well as possible proposals for further increasing the viability of the Treaty, including possible proposals to amend the Second Agreed Statement of September 26, 1997.

S.R. (United States of America)

S.A. (Republic of Belarus)

K.Z. (Republic of Kazakhstan

V.K. (Russian Federation)

O.R. (Ukraine)

September 26, 1997

REGULATIONS OF THE STANDING CONSULTATIVE COMMISSION

In accordance with Article VIII of the Memorandum of Understanding of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, the United States of America, the Republic of Belarus, the Republic of Kazakhstan, the Russian Federation and Ukraine have agreed as follows:

I.

1. Each Party shall have the right to be represented on the Standing Consultative Commission, hereinafter referred to as the Commission.

2. Each Party shall designate a Commissioner, a Deputy Commissioner, and such members, advisors, and experts of its delegation to the Commission as it deems necessary.

3. Each Party shall have the right to participate in all activities of the Commission.

II.

1. At any time, Commissioners may raise for discussion any matter that is within the competence of the Commission.

2. Commissioners may also, at any time, transmit to or request from the other Commissioners, oral or written communications.

3. Commissioners shall, when possible, inform each other in advance of matters to be raised for discussion in the Commission.

4. Commissioners shall alternately preside over the meetings of a session of the Commission, unless otherwise agreed.

5. Each Party may direct that the authorities and functions of a Commissioner may be exercised by a Deputy Commissioner or other authorized person.

6. The Commission may establish working groups to undertake such activities as it may direct, including studying and preparing specific matters.

III.

1. The Commission shall be convened for sessions no less than twice a year. Such sessions proposed during the intersessional period shall be convened on a date, no later than 45 days after the date initially proposed, and with a duration agreed to by the United States of America and at least one other Party.

2. Agreement on the commencement date and duration of a forthcoming session may be reached by consensus during a session in progress.

3. During the intersessional period, any Commissioner may propose convening a session of the Commission by making a proposal or counter-proposal to the other Commissioners on the commencement date and duration of the forthcoming session at least 30 days in advance of the proposed commencement date of the session.

4. The agenda for a session of the Commission shall include all matters proposed by any Commissioner and communicated to the other Commissioners in advance of the session. Any matter raised during the session by any Commissioner may be considered in the Commission.

5. Sessions of the Commission shall be held in the city of Geneva, unless otherwise agreed.

IV.

1. Any matter within the competence of the Commission may be the subject of an agreement.

2. Agreements may be recorded in any form acceptable to the Parties participating in the session.

3. The negotiation of the text of an agreement during a session of the Commission shall be done on the basis of consensus of the Parties participating in the session.

4. The United States of America shall notify, through diplomatic channels, all Parties not represented in a session of the Commission, of the final text of an agreement no later than 15 days after the final text has been negotiated in that session of the Commission.

5. A Party shall approve an agreement negotiated in the Commission by signing it in the Commission or by submitting an instrument of approval. In addition, an agreement shall be considered approved by a Party if it fails to submit a diplomatic note in accordance with subparagraph 7(b) of this Section, or if its objections are withdrawn pursuant to subparagraph 7(b) or paragraph 8 of this Section.

6. Each agreement negotiated in the Commission shall be considered adopted when all Parties have approved the agreement in accordance with paragraph 5 of this Section and shall enter into force on the date of its adoption, unless all Parties have agreed on a later date.

7. A Party that has not approved an agreement negotiated during a session of the Commission shall be bound by the agreement in one of two ways:

(a) if it submits an instrument of approval to all other Parties; or

(b) if it fails to submit a diplomatic note, specifying its objections to the agreement, to all other Parties within 30 days after receipt of a notification pursuant to paragraph 4 of this Section. Withdrawal of all of its objections by a Party shall be regarded as its approval of that agreement.

8. Any diplomatic note submitted in accordance with subparagraph 7(b) of this Section shall include the express intention of the objecting Party to address its objection in the next session of the Commission. Failure of an objecting Party to attend such session shall be considered its withdrawal of its objection unless that objection is renewed by diplomatic note to all other Parties prior to the closing of that session.

9. If the text of an agreement, negotiated in the Commission in accordance with paragraph 3 of this Section, is amended in order to resolve any Party's objection or for any other reason, the amended agreement shall constitute a new agreement subject to the provisions of paragraphs 4, 5, 6, 7 and 8 of this Section.

V.

1. Matters raised and discussed in the Commission, as well as the results of discussions, and any agreements reached, may be recorded in documents which shall be done in English and Russian, both texts being equally authentic, and each Party shall be provided with a complete set of such documents.

2. The Commission shall conduct its proceedings in private and may not make its proceedings public without the express consent of all Commissioners. The texts of agreements adopted by the Parties may be made public, unless otherwise agreed.

3. The official languages of the Commission shall be English and Russian.

4. Each Party shall bear the expenses connected with its participation in the Commission.

VI.

1. These Regulations shall supersede the Regulations of the Standing Consultative Commission approved in accordance with the Protocol of May 30, 1973. The provisions of the Memorandum of Understanding Between the Government of the United States of America and the Government of the Union of Soviet Socialist Republics Regarding the Establishment of a Standing Consultative Commission of December 21, 1972, shall apply to the extent that they are consistent with the provisions of these Regulations.

2. These Regulations shall enter into force simultaneously with entry into force of the Memorandum of Understanding of September 26, 1997, Relating to the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972. The Commission may revise, repeal, or replace these Regulations to the extent and in such manner as the Commission deems necessary.

DONE at New York City on September 26, 1997, in five copies, each in the English and Russian languages, both texts being equally authentic.

FOR THE UNITED STATES OF AMERICA:
Stanley Riveles

FOR THE REPUBLIC OF BELARUS:
S. Agurtsou

FOR THE REPUBLIC OF KAZAKHSTAN:
K. Zhanbatyrov

FOR THE RUSSIAN FEDERATION:
V. Koltunov

FOR UKRAINE:
O. Rybak

Geneva—November 21, 1977

COMMUNIQUE OF THE US-USSR STANDING CONSULTATIVE COMMISSION ON THE REVIEW OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS OF MAY 26, 1972

In accordance with the provisions of Article XIV of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, which entered into force on October 3, 1972, and was amended by the Protocol thereto of July 3, 1974, the Parties to the Treaty, together conducted a review of the Treaty after five years of its operation. By agreement between the Parties, the review was conducted from November 4 to November 21, 1977, in a special session of the Standing Consultative Commission which was convened for that purpose.

The Parties agree that the Treaty is operating effectively, thus demonstrating the mutual commitment of the USA and the USSR to the goal of limiting nuclear arms and to the principle of equal security, serves the security interests of both Parties, decreases the risk of outbreak of nuclear war, facilitates progress in the further limitation and reduction of strategic offensive arms, and requires no amendment at this time.

The Parties note, in connection with the conduct of the review, that during the aforementioned period of operation of the Treaty consultations and discussions have been held in the Standing Consultative Commission on matters pertaining to promoting the implementation of the objectives and provisions of the Treaty. These consultations and discussions have been productive and useful in clarifying the mutual understanding of the Parties concerning certain provisions of the Treaty, in working out appropriate procedures for implementation of its provisions, and in resolving a number of questions related to complete and precise implementation of the provisions of the Treaty.

Mindful of their obligation to conduct together a review of the Treaty at five-year intervals, the Parties will continue the process of consultation concerning the

implementation, as well as the enhancement of the viability and effectiveness, of the provisions of the Treaty.

The Parties reaffirm their mutual commitment to the objectives and provisions of the Treaty and their resolve to maintain and further increase the viability and effectiveness of the Treaty.

Geneva—December 15, 1982

COMMUNIQUE OF THE US-USSR STANDING CONSULTATIVE COMMISSION ON THE SECOND REVIEW OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS

Pursuant to the provisions of Article XIV of the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems of May 26, 1972, which entered into force on October 3, 1972, and was amended by the Protocol thereto of July 3, 1974, the Parties together conducted a review of the Treaty after its second five-year period of operation. By agreement between the Parties, the review was conducted from November 9, 1982, to December 15, 1982, in a session of the Standing Consultative Commission specially convened for that purpose.

During the course of the review, the Parties carefully examined the Preamble and Articles of the Treaty and Protocol and evaluated their implementation in the period covered by the review.

The United States and the Soviet Union each reaffirmed its commitment to the aims and objectives of the Treaty, and to the process of consultation within the framework of the Standing Consultative Commission to promote the implementation of the objectives and provisions of the Treaty and the Protocol thereto of July 3, 1974.

Geneva, Switzerland—August 31, 1988

UNITED STATES UNILATERAL STATEMENT FOLLOWING ABM TREATY REVIEW

The United States and the Soviet Union conducted the third Review of the ABM Treaty as required at five-year intervals by the provisions of that Treaty. The Review was conducted from August 24, 1988 to August 31, 1988. The U.S. Delegation was led by William F. Burns, Director of the Arms Control and Disarmament Agency.

During the Review, the United States emphasized the importance of Soviet violations of the ABM Treaty, which are a threat to the viability of the Treaty. Throughout the Review Conference, the Soviet Union gave no indication that it was prepared to correct the violations without linking their agreement to do so to unacceptable demands.

Specifically, the United States discussed with the Soviets its serious concern that the Soviet Union's deployment of a large phased-array radar near Krasnoyarsk constitutes a significant violation of a central element of the ABM Treaty. Such radars take years to build and are a key to providing a nation-wide defense—which is prohibited by the Treaty. The Treaty's restrictions on the location, orientation, and functions of such radars are, thus, essential provisions of the Treaty. Hence, the Krasnoyarsk violation is very serious, particularly when it is recognized that the radar constitutes one of a network of such radars that have the inherent potential for attack assessment in support of ballistic missile defense.

In order for the Soviet Union to correct this violation, the Krasnoyarsk radar must be dismantled. The United States has been urging the Soviet Union for more than five years, both in the Standing Consultative Commission established by the Treaty and in other diplomatic channels, to correct this clear violation by dismantling the radar. During the Review, the U.S. outlined the specific Soviet actions necessary to correct this violation in a verifiable manner. The United States has also made clear that the continuing existence of the Krasnoyarsk radar makes it impossible to conclude any future arms agreements in the START or Defense and Space areas. The United States has observed a slowdown in construction, but this slowdown, or even a full construction freeze, would not be sufficient either to correct the Treaty violation or to meet U.S. concerns about the significant impact of the violation.

The United States cannot continue indefinitely to tolerate this clear and serious Treaty violation. The violation must be corrected. Until the Krasnoyarsk radar is

dismantled, it will continue to raise the issue of material breach and proportionate responses. Nothing that occurred during the Review Conference or its completion should be interpreted as derogating in any way from rights the U.S. has under international law with regard to any Soviet violation of the Treaty. Since the Soviet Union was not prepared to satisfy U.S. concerns with respect to the Krasnoyarsk radar violation at the Review Conference, the United States will have to consider declaring this continuing violation a material breach of the Treaty. In this connection, the United States reserves all its rights, consistent with international law, to take appropriate and proportionate responses in the future.

During the ABM Treaty Review, the United States also discussed the violation of the ABM Treaty involving the illegally deployed radars at Gomel. The U.S. also reserves its rights to respond to this violation in an appropriate and proportionate manner. The United States also discussed with the Soviet Union a number of ABM-related compliance concerns, the totality of which suggests that the Soviet Union may be preparing a prohibited ABM territorial defense. This is a particularly serious concern. As the President has noted, such a development "would have profound implications for the vital East-West balance. A unilateral Soviet territorial ABM capability acquired in violation of the ABM Treaty could erode our deterrent and leave doubts about its capability."

The U.S. continues to have deep, continuing concerns about the implications of the pattern of Soviet non-compliance with the ABM Treaty. As President Reagan observed in December 1987:

> No violations of a treaty can be considered to be a minor matter, nor can there be confidence in agreements if a country can pick and choose which provisions of an agreement it will comply with. . . . correcting their violations will be a true test of Soviet willingness to enter a more constructive relationship and broaden the basis for cooperation between our two countries on security matters.

The U.S. will not accept Soviet violations or a double standard of Treaty compliance, and reserve the right to take appropriate and proportionate responses in the future.

September 1, 1988

SOVIET STATEMENT IN CONNECTION WITH THE THIRD REVIEW OF THE TREATY BETWEEN THE UNITED STATES OF AMERICA AND THE UNION OF SOVIET SOCIALIST REPUBLICS ON THE LIMITATION OF ANTI-BALLISTIC MISSILE SYSTEMS

In accordance with the provisions of the Treaty Between the USSR and the United States on the Limitation of Anti-Ballistic Missile Systems, talks were held in Geneva August 24–31, 1988 between representatives of the USSR and the United States to review the Treaty after another five years of its operation.

The Soviet side proceeded on the basis that the review should lead to the strengthening of the ABM Treaty, which is of key significance for ensuring further progress in the disarmament sphere and strengthening strategic stability and international security. The preservation and strengthening of this Treaty is the common concern of its participants—the USSR and the United States.

The USSR delegation conducted all the discussions in a non-confrontational spirit, with the aim of seeking mutually acceptable decisions both as regards the political reaffirmation of the sides' commitment to the objectives and tasks of the Treaty, and as regards the quest for concrete technical decisions that could lead to the removal of mutual concerns in unclear situations that have arisen in the exchange of opinions between the sides.

The Soviet delegation sought to ensure that the reaffirmation of commitment to the Treaty and the agreed outlines concerning ways of eliminating the two sides' concerns would be reflected in a joint statement or communique, that would be published as a result of the review of the Treaty's operation. Unfortunately, this proved impossible because of the American side's reluctance to give practical consideration to the Soviet side's concerns and its desire to reduce the entire review of the operation of the ABM Treaty to the acceptance by the Soviet side of the American demand for the dismantling of the Kranoyarsk radar station, which does not yet exist.

On the basis of the results of the discussion, the American side published a unilateral statement which gives an unobjective assessment of the existing situation.

The present statement by the USSR delegation sets forth the facts that give a true picture of the situation as regards compliance with the ABM Treaty and the nature of the discussions that took place.

On the question of the radar station under construction in the Krasnoyarsk region, the Soviet side once again confirmed that this station is intended for the tracking of space objects and does not come under the ABM Treaty restrictions. Despite this, the United States continues to attribute missile attack warning functions to it. These American claims are based not on facts, but on assumptions, and subjective evaluations.

In order to show goodwill, and in an attempt to remove the concern that had arisen on the part of the United States, we expressed readiness to dismantle the equipment of this station in a way that would be verifiable and would cause the United States no doubts, if an accord were reached on compliance with the ABM Treaty in the form in which it was signed in 1972.

The American side also expressed concern in connection with the relocation of individual components of radar stations known in the United States as "Pawn Shop" and "Flat Twin" from the Sary Shagan testing range to the Gomel region, which the American side regards, without foundation, as the start of the deployment of ABM radar stations.

On the basis of the facts we cited and a visit by U.S. official representatives to the Gomel region, the American side saw for itself that in fact the individual components of the "Flat Twin" radar station and the "Pawn Shop" van are being used in the region in question in order to set up measurement testing grounds for the testing and tuning of mirror antennas that are used widely in the country's national economy. These operations are in no way contrary to the ABM Treaty.

At the same time, we stated that in the context of removing the two sides' concerns over questions of compliance with the ABM Treaty, the Soviet side would be prepared for a radical solution to the question of the remaining individual components of the "Flat Twin" radar station and the "Pawn Shop" van to which the American side refers.

The American side once again raised the question that the Soviet Union could be preparing an ABM defense system for its territory. Here, the assertions cited earlier were enumerated, assertions to which the Soviet side had supplied the necessary replies. Neither any one of the questions raised individually nor all of them together provide grounds for the expression of such concern by the United States.

The Soviet side also submitted a number of constructive proposals which, in the event of their implementation, would promote the resolution of other questions raised on both sides, namely:

- To draw up an accord to the effect that the sides would inform each other beforehand about plans for the construction of large phased-array radar stations and indicate their purpose.
- To agree on features making it possible to distinguish ABM radar stations from other radar stations.
- To draw up procedures for the dismantling or destruction of ABM radar stations on testing ranges.
- To permit Soviet representatives to visit the American radar station in Greenland and the construction of a launch site for "balloon rockets" on Shemya Island, to enable the Soviet Union to study on the basis of factual material .U.S actions which, according to the information available, it assesses either as a violation of the Treaty (the Greenland radar station) or as a situation causing concern (the Shemya Island construction site).

Unfortunately, our proposals did not meet with a positive response from the American side. Contrary to the true state of affairs, it continues to issue unfounded denials or to claim that it does not see that serious Soviet concerns exist with regard to U.S. compliance with Treaty commitments. The American side did not respond to some of our proposals, and its answers on the other questions cannot be deemed satisfactory.

Nor did the American side show willingness to take any steps to rectify the violations of the ABM Treaty which it has conmiitted.

Since 1975, the Soviet side has been expressing concern over the U.S. deployment of large phased-array radar stations of the "Pave Paws" type on U.S. territory and elsewhere. The essence of our concern is that these large radar stations have parameters sufficient to carry out the tasks of ABM radar stations. In conjunction with the radar station at the Grand Forks base, these stations could provide a radar base for an ABM defense of US territory, which is incompatible with the provisions of Article 1 of the ABM Treaty prohibiting the creation of a base for ABM defense of the country's territory.

Particular concern is caused on the Soviet side by the U.S. violation of the ABM Treaty in the deployment of a new "Pave Paws" large phased-array radar station in Greenland after the Treaty came into force, and the construction of a similar

radar station in Britain. Under the ABM Treaty, the deployment of large phased-array radar stations having a potential exceeding 3 million watts is strictly regulated, taking into account the purpose of such radar stations. Missile attack warning radar stations with the above characteristics are permitted to be deployed only on the periphery of the national territory, oriented outward.

The American large phased-array radar station at Thule (Greenland) has a potential considerably in excess of 3 million watts. The Thule region does not constitute a position on the perimeter of U.S. national territory. The American side itself has indicated that the radar station at Thule is intended for missile attack warning. Consequently, the deployment of a large phased-array radar station in the Thule region is a violation of the ABM Treaty.

The construction that has begun of a similar radar station at Fylingdales (Britain) is a similar violation.

The Soviet side also expressed other concerns with regard to U.S. compliance with the provision of the ABM Treaty.

Seeking to find solutions to the specific issues that have arisen, the Soviet side demonstrated in practice its readiness to eliminate the two sides' concerns. Naturally, the quest for solutions should take place on a reciprocal basis and should not distract attention from the most important thing—the sides' reaffirmation of their commitment to the objectives and provisions of the ABM Treaty.

Through no fault of ours, it proved impossible to achieve positive solutions to the questions examined at the talks. However, the Soviet side believes that joint efforts with the aim of seeking fundamental solutions could be continued, and we will work toward this. In particular a mechanism established by the Treaty exists for the examination of concerns expressed by the sides—the Standing Consultative Commission. The next session of the Soviet-American Standing Consultative Commission in Geneva in the fall of this year should be used specifically for this work, including work in accordance with instructions that could be given to the Standing Consultative Commission as a result of the forthcoming meeting between the USSR Foreign Minister and the U.S. Secretary of State.

October 1, 1993

JOINT COMMUNIQUE: FOURTH REVIEW OF THE ANTI-BALLISTIC MISSILE (ABM) TREATY

The Fourth Review of the Treaty on the Limitation of Anti-Ballistic Missile Systems was conducted in Geneva, Switzerland, from September 27 to October 1, 1993. The delegations that were present at the Review, representing the Republic of Belarus, the Russian Federation, Ukraine, and the United States of America, exchanged views on the operation of the Treaty, on rights and obligations under the Treaty, and on the question of state succession. Commitment to the ABM Treaty was reaffirmed and it was agreed that maintaining the viability of the Treaty in view of political and technological changes remains important. The delegations at the Review advocated continued efforts to strengthen the ABM Treaty.

PUBLIC LAW 106–38—JULY 22, 1999

113 STAT. 205

Public Law 106–38
106th Congress

AN ACT

To declare it to be the policy of the United States to deploy a national missile defense.

Be it enacted by the Senate and House of Representatives of the United States of America in Congress assembled,

SECTION 1. SHORT TITLE.

This Act may be cited as the "National Missile Defense Act of 1999".

SEC. 2. NATIONAL MISSILE DEFENSE POLICY.

It is the policy of the United States to deploy as soon as is technologically possible an effective National Missile Defense system capable of defending the territory of the United States against limited ballistic missile attack (whether accidental, un-

authorized, or deliberate) with funding subject to the annual authorization of appropriations and the annual appropriation of funds for National Missile Defense.

SEC. 3. POLICY ON REDUCTION OF RUSSIAN NUCLEAR FORCES.

It is the policy of the United States to seek continued negotiated reductions in Russian nuclear forces.

Approved July 22, 1999.

LEGISLATIVE HISTORY H.R. 4 (S. 257) (S. 269):
HOUSE REPORTS: No. 106–39, Pt. 1 (Comm. on Armed Services).
SENATE REPORTS: No. 106–4 accompanying S. 257 (Comm. on Armed Services).
CONGRESSIONAL RECORD, Vol. 145 (1999):
Mar. 18, considered and passed House.
May 18, considered and passed Senate, amended, in lieu of S. 257
May 20, House concurred in Senate amendment.
WEEKLY COMPILATION OF PRESIDENTIAL DOCUMENTS, Vol. 35 (1999):
July 23, Presidential statement.

For Immediate Release—July 23, 1999

THE WHITE HOUSE

OFFICE OF THE PRESS SECRETARY

STATEMENT BY THE PRESIDENT

I have signed into law H.R. 4, the "National Missile Defense Act of 1999." My Administration is committed to addressing the growing danger that rogue nations may develop and field long-range missiles capable of delivering weapons of mass destruction against the United States and our allies.

Section 2 of this Act states that it is the policy of the United States to deploy as soon as technologically possible an effective National Missile Defense (NMD) system with funding subject to the annual authorization of appropriations and the annual appropriation of funds for NMD. By specifying that any NMD deployment must be subject to the authorization and appropriations process, the legislation makes clear that no decision on deployment has been made. This interpretation, which is confirmed by the legislative record taken as a whole, is also required to avoid any possible impairment of my constitutional authorities.

Section 3 of the Act states that it is the policy of the United States to seek continued negotiated reductions in Russian nuclear forces. Thus, section 3 puts the Congress on record as continuing to support negotiated reductions in strategic nuclear arms, reaffirming my Administration's position that our missile defense policy must take into account our arms control and nuclear nonproliferation objectives.

Next year, we will, for the first time, determine whether to deploy a limited National Missile Defense, when we review the results of flight tests and other developmental efforts, consider cost estimates, and evaluate the threat. Any NMD system we deploy must be operationally effective, cost-effective, and enhance our security. In making our determination, we will also review progress in achieving our arms control objectives, including negotiating any amendments to the ABM treaty that may be required to accommodate a possible NMD deployment.

STATEMENT OF SENATOR THAD COCHRAN ON THE STATEMENT OF THE PRESIDENT OF THE UNITED STATES ON SIGNING PUBLIC LAW 106–38

NATIONAL MISSILE DEFENSE ACT (SENATE—JULY 26, 1999)

Mr. COCHRAN. Mr. President, this morning I noticed in the Washington Times newspaper that President Clinton has signed the bill we authored here in the Senate, the National Missile Defense Act. This is very important legislation which the Senate passed after a lot of debate. The House and the Senate then reconciled differences between the House-passed measure and the Senate bill and sent the bill to the President.

The President made a statement in connection with his signing the bill which raises some questions that I thought should be addressed by a comment this morning. After talking about the fact that he is signing the bill to address the growing danger that rogue nations may develop and field long-range missiles capable of de-

livering weapons of mass destruction against the United States and our allies, he then has this to say in his message. He is referring to the fact that authorization and appropriations measures will be a part of the process in terms of when and how and to what extent the funding is available for national missile defense.

> This interpretation, which is confirmed by the legislative record taken as a whole, is also required to avoid a possible impairment of my constitutional authorities.

The President is suggesting that the bill doesn't mean what it says. I think that has to be brought to the attention of the Senate. The bill is very clear. It provides that it is the policy of the United States, upon enactment of this law, to deploy a national missile defense system as soon as technologically possible. That is unequivocal. It does not say "but if." It is a change in policy of our Government. It has passed both Houses by a large majority, and now the President has signed the statute.

It seems to me the President is trying to reinterpret the bill to justify changing his position on this issue. He signed the bill; he didn't veto it. This is not a veto message. He could have vetoed the bill, if he disagreed with the terms, and given Congress an opportunity to review that veto message and override the veto or sustain it, as the Congress' will dictates.

I point this out to suggest that it is clear we have changed our policy, irrespective of the President's qualms about the new policy, and we now are committed as a nation to deploy a national missile defense system. We will do so in the orderly course of authorization and appropriation bills that we pass, as required. We have an annual appropriations bill funding all of the activities of the Department of Defense. But it is clear that one of those activities will be the continued research, development, and deployment of a national missile defense system.

I think it is very timely to point this out because the Prime Minister of Russia is coming to the United States. There will be talks this week with the President.

I am hopeful, and I urge the President to be honest with the Russian leadership about the need to modify the Anti-Ballistic Missile Treaty because the first part of that treaty says that neither signatory will deploy a missile defense system to protect the territory of its nation. But we have just changed the law of the United States to say that is our intention. We are committed to deploying a missile defense system that will protect the territory of the United States.

So, insofar as that is inconsistent with the Anti-Ballistic Missile Treaty, the treaty needs to be changed, and our President should say that to the Prime Minister of Russia unequivocally—not we "may" change our mind when it comes time to authorize a deployment or to fund a deployment.

The decision has been made to deploy a system, and when technology permits us to deploy an effective missile defense system under the terms of this act, we are going to do it irrespective of the provisions of that treaty. So we must change the treaty. And we want to assure the Russians that we are not targeting them. We are not trying to create a new era of tension or competition or to make this a more dangerous relationship—just the opposite; we want to be aboveboard, candid, and honest with the Russians.

REPORT OF THE

COMMISSION TO ASSESS THE BALLISTIC MISSILE THREAT TO THE UNITED STATES

EXECUTIVE SUMMARY

Pursuant to Public Law 201—104th Congress

July 15, 1998

COMMISSION TO ASSESS THE BALLISTIC MISSILE
THREAT TO THE UNITED STATES,
WASHINGTON, DC, *July 15, 1998.*

The Honorable NEWT GINGRICH,
Speaker of the U.S. House of Representatives,
Washington, DC.

DEAR MR. SPEAKER: In accordance with section 1323 of the National Defense Authorization Act for Fiscal Year 1997 (P.L. 104–201), we hereby submit the report of the Commission to Assess the Ballistic Missile Threat to the United States.

The Commission was established to "assess the nature and magnitude of the existing and emerging ballistic missile threat to the United States" and to "submit to the Congress a report on its findings and conclusions."

The Commission's report is unanimous.

It has been an honor to serve.

Respectfully submitted,
Donald H. Rumsfeld, *Chairman*
Barry M. Blechman
G. Lee Butler
Richard L. Garwin
William R. Graham
William Schneider, Jr.
Larry D. Welch
Paul D. Wolfowitz
R. James Woolsey

[Copies to:]

The Honorable TRENT LOTT,
Majority Leader,
U.S. Senate,
Washington, DC.

The Honorable TOM DASCHLE,
Minority Leader,
U.S. Senate,
Washington, DC.

The Honorable RICHARD A. GEPHARDT,
Minority Leader,
U.S. House of Representatives,
Washington, DC.

Enclosure.

MEMBERS OF THE COMMISSION TO ASSESS THE BALLISTIC MISSILE THREAT TO THE UNITED STATES

WERE NOMINATED BY THE

SPEAKER OF THE U.S. HOUSE OF REPRESENTATIVES, THE MAJORITY LEADER OF THE U.S. SENATE AND THE MINORITY LEADERS OF THE U.S. SENATE AND THE U.S. HOUSE OF REPRESENTATIVES

The Honorable Donald H. Rumsfeld, *Chairman*

Dr. Barry M. Blechman

General Lee Butler, U.S. Air Force (Ret.)

Dr. Richard L. Garwin

Dr. William R. Graham

Dr. William Schneider, Jr.

General Larry D. Welch, U.S. Air Force (Ret.)

Dr. Paul D. Wolfowitz

The Honorable R. James Woolsey

AND APPOINTED BY THE

DIRECTOR OF CENTRAL INTELLIGENCE

I. CHARTER AND ORGANIZATION

A. STATUTORY CHARTER OF THE COMMISSION

The Commission To Assess the Ballistic Missile Threat to the United States was established pursuant to Public Law 104–201, the National Defense Authorization Act for Fiscal Year 1997, Section 1321.

The mandate of the Commission was as follows:

> "The Commission shall assess the nature and magnitude of the existing and emerging ballistic missile threat to the United States. In carrying out its duties, the Commission should receive the full and timely cooperation of the Secretary of Defense, the Director of Central Intelligence and any other United States Government official responsible for providing the Commission with analyses, briefings and other information necessary for the fulfillment of its responsibilities. The Commission shall, not later than six months after the date of its first meeting, submit to the Congress a report on its findings and conclusions."

The Commission examined the ballistic missile threat posed to the 50 states. Our assessment included threats posed by ballistic missiles:

- Deployed on the territory of a potentially hostile state.
- Launched from a surface vessel or submarine operating off the coasts of the U.S. or from an aircraft.
- Deployed by a potentially hostile nation on the territory of a third party to reduce the range required of its ballistic missiles to strike the United States.

The Commission examined the potential of both existing and emerging powers to arm ballistic missiles with weapons of mass destruction. The examination included the domestic design, development and production of nuclear material and nuclear weapons as well as the potential for states to acquire—through clandestine or covert sale, transfer or theft—either technology; material or weapons. The Commission examined biological and chemical weapons programs of the ballistic missile powers, as well as the potential means for delivering such agents by ballistic missiles.

The Commission reviewed U.S. collection and analysis capabilities to gain an appreciation for the capability of the U.S. Intelligence Community, today and into the future, to warn of the ballistic missile threat.

The Commission did not examine in detail the threat posed to U.S. territories or possessions or to U.S. forward-deployed forces, allies and friends. Nevertheless, a short discussion of the threat to U.S. forward deployed forces, allies and friends is presented. The Commission did not assess the cruise missile threat. A detailed examination would have taken it beyond its charter. However, the Commission is of

the view that cruise missiles have a number of characteristics which could be seen as increasingly valuable in fulfilling the aspirations of emerging ballistic missile states. The Commission did not address in detail the impact of ballistic missile threats on U.S. military strategy and doctrine, but noted the difficulty the U.S had in dealing with Iraqi missiles during the Persian Gulf War. A brief discussion is presented of the possible impact of the Year 2000 (Y2K) problem on the ballistic missile threat. A brief discussion is also presented of the relationship of ballistic missile threats to the ongoing revolution in military affairs.

The Commission was not asked to address the policy issues on which its assessment would bear. Responses to the threat as assessed by the Commission are matters of considerable public interest. Debate and agreement on the appropriate responses to the ballistic missile threat are needed. The Commission hopes that the following assessment will be helpful in that regard.

B. ORGANIZATION OF THE REPORT

This is an unclassified Executive Summary of the classified Report of the Commission To Assess the Ballistic Missile Threat to the United States, which runs to more than 300 pages, including text and graphics. The full Report is accompanied by two classified appendices and one unclassified appendix (the table of contents of Appendix III is listed in Attachment 2).

The full Report includes discussions of a number of additional states, such as Libya and Syria, which are not included in this Executive Summary. The full Report includes as well a discussion of the full range of supplier states, particularly Western powers, including the United States.

II. EXECUTIVE SUMMARY

A. CONCLUSIONS OF THE COMMISSIONERS

The nine Commissioners are unanimous in concluding that:

- Concerted efforts by a number of overtly or potentially hostile nations to acquire ballistic missiles with biological or nuclear payloads pose a growing threat to the United States, its deployed forces and its friends and allies. These newer, developing threats in North Korea, Iran and Iraq are in addition to those still posed by the existing ballistic missile arsenals of Russia and China, nations with which the United States is not now in conflict but which remain in uncertain transitions. The newer ballistic missile-equipped nations' capabilities will not match those of U.S. systems for accuracy or reliability. However, they would be able to inflict major destruction on the U.S. within about five years of a decision to acquire such a capability (10 years in the case of Iraq). During several of those years, the U.S. might not be aware that such a decision had been made.
- The threat to the U.S. posed by these emerging capabilities is broader, more mature and evolving more rapidly than has been reported in estimates and reports by the Intelligence Community.
- The Intelligence Community's ability to provide timely and accurate estimates of ballistic missile threats to the U.S. is eroding. This erosion has roots both within and beyond the intelligence process itself. The Community's capabilities in this area need to be strengthened in terms of both resources and methodology.
- The warning times the U.S. can expect of new, threatening ballistic missile deployments are being reduced. Under some plausible scenarios—including re-basing or transfer of operational missiles, sea- and air-launch options, shortened development programs that might include testing in a third country, or some combination of these—the U.S. might well have little or no warning before operational deployment.

Therefore, we unanimously recommend that U.S. analyses, practices and policies that depend on expectations of extended warning of deployment be reviewed and, as appropriate, revised to reflect the reality of an environment in which there may be little or no warning.

B. THE COMMISSION AND ITS METHODS

The Commissioners brought to their task the perspectives of former senior policymakers from outside the Intelligence Community who have decades of experience and a variety of views as users of the Intelligence Community's products. We shared an informed understanding of intelligence processes. In making our assessment, we took into account not only the hard data available, but also the often significant gaps in that data. We had access to both data and experts drawn from the full array

of departments and agencies as well as from sources throughout the Intelligence Community. We also drew on experts from outside that Community and on studies sponsored by the Commission. Our aim was to ensure that we were exposed to a wide range of opinion and to the greatest possible depth and breadth of analysis.

We began this study with different views about how to respond to ballistic missile threats, and we continue to have differences. Nevertheless, as a result of our intensive study over the last six months we are unanimous in our assessment of the threat, an assessment which differs from published intelligence estimates.

This divergence between the Commission's findings and authoritative estimates by the Intelligence Community stems primarily from our use of a somewhat more comprehensive methodology in assessing ballistic missile development and deployment programs. We believe that our approach takes more fully into account three crucial factors now shaping new ballistic missile threats to the United States:

- Newer ballistic missile and weapons of mass destruction (WMD) development programs no longer follow the patterns initially set by the U.S. and the Soviet Union. These programs require neither high standards of missile accuracy, reliability and safety nor large numbers of missiles and therefore can move ahead more rapidly.
- A nation that wants to develop ballistic missiles and weapons of mass destruction can now obtain extensive technical assistance from outside sources. Foreign assistance is not a wild card. It is a fact.
- Nations are increasingly able to conceal important elements of their ballistic missile and associated WMD programs and are highly motivated to do so.

C. NEW THREATS IN A TRANSFORMED SECURITY ENVIRONMENT

The Commission did not assess nuclear, biological and chemical weapons programs on a global basis. We considered those countries about which we felt particular reason to be concerned and examined their capabilities to acquire ballistic missiles armed with weapons of mass destruction.

All of the nations whose programs we examined that are developing long-range ballistic missiles have the option to arm these, as well as their shorter range systems, with biological or chemical weapons. These weapons can take the form of bomblets as well as a single, large warhead.

The knowledge needed to design and build a nuclear weapon is now widespread. The emerging ballistic missile powers have access to, or are pursuing the acquisition of, the needed fissile material both through domestic efforts and foreign channels.

As our work went forward, it became increasingly clear to us that nations about which the U.S. has reason to be concerned are exploiting a dramatically transformed international security environment. That environment provides an ever-widening access to technology, information and expertise that can be and is used to speed both the development and deployment of ballistic missiles and weapons of mass destruction. It can also be used to develop denial and deception techniques that seek to impede U.S. intelligence gathering about the development and deployment programs of those nations.

1. Geopolitical Change and Role for Ballistic Missiles

A number of countries with regional ambitions do not welcome the U.S. role as a stabilizing power in their regions and have not accepted it passively. Because of their ambitions, they want to place restraints on the U.S. capability to project power or influence into their regions. They see the acquisition of missile and WMD technology as a way of doing so.

Since the end of the Cold War, the geopolitical environment and the roles of ballistic missiles and weapons of mass destruction have both evolved. Ballistic missiles provide a cost-effective delivery system that can be used for both conventional and non-conventional weapons. For those seeking to thwart the projection of U.S. power, the capability to combine ballistic missiles with weapons of mass destruction provides a strategic counter to U.S. conventional and information-based military superiority. With such weapons, these nations can pose a serious threat to the United States, to its forward-based forces and their staging areas and to U.S. friends and allies.

Whether short- or long-range, a successfully launched ballistic missile has a high probability of delivering its payload to its target compared to other means of delivery. Emerging powers therefore see ballistic missiles as highly effective deterrent weapons and as an effective means of coercing or intimidating adversaries, including the United States.

2. Russia

With regard to Russia, the principal cloud over the future is lingering political uncertainty. Despite enormous changes since the break-up of the Soviet Union, Russia is in an uncertain, in some ways precarious, transition. It may succeed in establishing a stable democracy allied with the West in maintaining peace and extending freedom. Or it may not. Or it might be torn by internal struggles for an extended period. In its present situation, accurate U.S. intelligence estimates are difficult to make.

Russia continues to pose a ballistic missile threat to the United States, although of a different character than in the past. The number of missiles in its inventory is likely to decline further compared with Cold War levels in that large numbers of Soviet strategic missiles deployed in the 1970s and 1980s are scheduled to be retired. Still, Russian ballistic missile forces continue to be modernized and improved, although the pace of modernization has been slowed from planned schedules by economic constraints. The Russian ballistic missile early warning system and nuclear command and control (C2) system have also been affected by aging and delays in planned modernization. In the context of a crisis growing out of civil strife, present early warning and C2 weaknesses could pose a risk of unauthorized or inadvertent launch of missiles against the United States.[1]

With the Cold War ended, the likelihood of a deliberate missile attack on the U.S. from Russia has been greatly lessened but not entirely eliminated. However, Russia's leaders issued a new national security policy in 1993 that places greater reliance on nuclear deterrence, very likely in response to Russia's economic difficulties and decline in its conventional military capabilities. At the same time, the risk of an accident or of a loss of control over Russian ballistic missile forces—a risk which now appears small—could increase sharply and with little warning if the political situation in Russia were to deteriorate.

Also, quite apart from these risks, Russia poses a threat to the U.S. as a major exporter of enabling technologies, including ballistic missile technologies, to countries hostile to the United States. In particular, Russian assistance has greatly accelerated Iran's ballistic missile program.

3. China

As in the case of Russia, China's future is clouded by a range of uncertainties. China, too, is going through a transition, but one which has been going on for 20 years. The improvement in Sino-U.S. relations, interrupted in 1989, has resumed. Although the U.S. and China are developing a more cooperative relationship, significant potential conflicts remain, and China is less constrained today by fear of Russia than it once was by fear of the Soviet Union. Taiwan is an obvious potential flashpoint. Other flashpoints could arise as China pursues its drive for greater influence in Asia and the Western Pacific. Even now China has conflicts with several of its neighbors, some of which could involve the U.S. in a confrontation.

China is modernizing its long-range missiles and nuclear weapons in ways that will make it a more threatening power in the event of a crisis. China's 1995–96 missile firings in the Taiwan Strait, aimed at intimidating Taiwan in the lead-up to its presidential election, provoked a sharp confrontation with the United States. For example, a pointed question was posed by Lt. Gen. Xiong Guang Kai, a frequent spokesman for Chinese policy, about U.S. willingness to trade Los Angeles for Taipei. This comment seemed designed to link China's ballistic missile capabilities with its regional priorities.

China also poses a threat to the U.S. as a significant proliferator of ballistic missiles, weapons of mass destruction and enabling technologies. It has carried out extensive transfers to Iran's solid-fueled ballistic missile program. It has supplied Pakistan with a design for a nuclear weapon and additional nuclear weapons assistance. It has even transferred complete ballistic missile systems to Saudi Arabia (the 3,100-km-range CSS–2) and Pakistan (the 350-km-range M–11).

The behavior thus far of Russia and China makes it appear unlikely, albeit for different reasons—strategic, political, economic or some combination of all three—that either government will soon effectively reduce its country's sizable transfer of critical technologies, experts or expertise to the emerging ballistic missile powers.

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[1] An unauthorized launch is one that has not received the required authorizations from senior political leaders and that might be conducted by elements within the General Staff or subordinate commanders. An inadvertent launch is one resulting from a mistaken assessment of sensor data, including from ballistic missile early warning systems, or a misinterpretation of the strategic situation or some combination of the two, especially in times of crisis generated either by domestic or international events.

4. Countries With Scud-Based Missile Infrastructures

The basis of most missile developments by emerging ballistic missile powers is the Soviet Scud missile and its derivatives. The Scud is derived from the World War II-era German V–2 rocket. With the external help now readily available, a nation with a well-developed, Scud-based ballistic missile infrastructure would be able to achieve first flight of a long-range missile, up to and including intercontinental ballistic missile (ICBM) range,[2] within about five years of deciding to do so. During several of those years the U.S. might not be aware that such a decision had been made. Early production models would probably be limited in number. They would be unlikely to meet U.S. standards of safety, accuracy and reliability. But the purposes of these nations would not require such standards. A larger force armed with scores of missiles and warheads and meeting higher operational standards would take somewhat longer to test, produce and deploy. But meanwhile, even a few of the simpler missiles could be highly effective for the purposes of those countries.

The extraordinary level of resources North Korea and Iran are now devoting to developing their own ballistic missile capabilities poses a substantial and immediate danger to the U.S., its vital interests and its allies. While these nations' missile programs may presently be aimed primarily at regional adversaries, they inevitably and inescapably engage the vital interests of the U.S. as well. Their targeted adversaries include key U.S. friends and allies. U.S. deployed forces are already at risk from these nations' growing arsenals. Each of these nations places a high priority on threatening U.S. territory, and each is even now pursuing advanced ballistic missile capabilities to pose a direct threat to U.S. territory.

a. North Korea

There is evidence that North Korea is working hard on the *Taepo Dong 2* (TD–2) ballistic missile. The status of the system's development cannot be determined precisely. Nevertheless, the ballistic missile test infrastructure in North Korea is well developed. Once the system is assessed to be ready, a test flight could be conducted within six months of a decision to do so. If North Korea judged the test to be a success, the TD–2 could be deployed rapidly. It is unlikely the U.S. would know of such a decision much before the missile was launched. This missile could reach major cities and military bases in Alaska and the smaller, westernmost islands in the Hawaiian chain. Light-weight variations of the TD–2 could fly as far as 10,000 km, placing at risk western U.S. territory in an arc extending northwest from Phoenix, Arizona, to Madison, Wisconsin. These variants of the TD–2 would require additional time to develop and would likely require an additional flight test.

North Korea has developed and deployed the *No Dong,* a medium-range ballistic missile[3] (MRBM) using a scaled-up Scud engine, which is capable of flying 1,300 km. With this missile, North Korea can threaten Japan, South Korea and U.S. bases in the vicinity of North Korea. North Korea has reportedly tested the *No Dong* only once, in 1993. The Commission judges that the *No Dong* was operationally deployed long before the U.S. Government recognized that fact. There is ample evidence that North Korea has created a sizable missile production infrastructure, and therefore it is highly likely that considerable numbers of *No Dongs* have been produced.

In light of the considerable difficulties the Intelligence Community encountered in assessing the pace and scope of the *No Dong* missile program, the U.S. may have very little warning prior to the deployment of the *Taepo Dong 2.*

North Korea maintains an active WMD program, including a nuclear weapon program. It is known that North Korea diverted material in the late 1980s for at least one or possibly two weapons. North Korea's ongoing nuclear program activity raises the possibility that it could produce additional nuclear weapons. North Korea also possesses biological weapons production and dispensing technology, including the capability to deploy chemical or biological warheads on missiles.

North Korea also poses a major threat to American interests, and potentially to the United States itself, because it is a major proliferator of the ballistic missile capabilities it possesses—missiles, technology, technicians, transporter-erector-launchers (TELs) and underground facility expertise—to other countries of missile proliferation concern. These countries include Iran, Pakistan and others.

b. Iran

Iran is placing extraordinary emphasis on its ballistic missile and WMD development programs. The ballistic missile infrastructure in Iran is now more sophisticated than that of North Korea, and has benefited from broad, essential, long-term assistance from Russia and important assistance from China as well. Iran is making

[2] An ICBM has a range greater than 5,500 km.
[3] An MRBM has a range of 1,000 to 3,000 km.

very rapid progress in developing the *Shahab 3* MRBM, which like the North Korean *No Dong* has a range of 1,300 km. This missile may be flight tested at any time and deployed soon thereafter.

The Commission judges that Iran now has the technical capability and resources to demonstrate an ICBM-range ballistic missile, similar to the TD–2 (based on scaled-up Scud technology), within five years of a decision to proceed—whether that decision has already been made or is yet to be made.

In addition to this Scud-based long-range ballistic missile program, Iran has acquired and is seeking major, advanced missile components that can be combined to produce ballistic missiles with sufficient range to strike the United States. For example, Iran is reported to have acquired engines or engine designs for the RD–214 engine, which powered the Soviet SS–4 MRBM and served as the first stage of the SL–7 space-launch vehicle. Iran is known to have an interest in even more advanced engines. A 10,000 km-range Iranian missile could hold the U.S. at risk in an arc extending northeast of a line from Philadelphia, Pennsylvania, to St. Paul, Minnesota.

Iran has also developed a solid-fueled rocket infrastructure; it already produces short-range solid-fueled rockets. It is seeking long-range missile technology from outside sources, purportedly for a space-launch vehicle. Both contribute directly to Iran's ballistic missile technology base. Iran is known to rely heavily on imports of missile technology from foreign sources, particularly Russia and North Korea. These imports have allowed Iran's missile programs to proceed swiftly, and they can be incorporated into Iran's domestic infrastructure as well.

Iran is developing weapons of mass destruction. It has a nuclear energy and weapons program which aims to design, develop and, as soon as possible, produce nuclear weapons. The Commission judges that the only issue as to whether or not Iran may soon have or already has a nuclear weapon is the amount of fissile material available to it. Because of significant gaps in our knowledge, the U.S. is unlikely to know whether Iran possesses nuclear weapons until after the fact. While Iran's civil nuclear program is currently under International Atomic Energy Agency (IAEA) safeguards, it could be used as a source of sufficient fissile material to construct a small number of weapons within the next 10 years if Iran were willing to violate safeguards. If Iran were to accumulate enough fissile material from foreign sources, it might be able to develop a nuclear weapon in only one to three years. Iran also has an active chemical weapon development and production program and is conducting research into biological weapons.

c. Iraq

Iraq has maintained the skills and industrial capabilities needed to reconstitute its long-range ballistic missile program. Its plant and equipment are less developed than those of North Korea or Iran as a result of actions forced by United Nations (U.N.) Resolutions and monitoring. However, Iraq has actively continued work on short-range (under 150 km) liquid- and solid-fueled missiles, programs allowed by the U.N. Resolutions. Once U.N.-imposed controls are lifted, Iraq could mount a determined effort to acquire needed plant and equipment, whether directly or indirectly. Such an effort would allow Iraq to pose an ICBM threat to the United States within 10 years. Iraq could develop a shorter range, covert, ship-launched missile threat that could threaten the United States in a very short time.

Iraq had a large, intense ballistic missile development and production program prior to the Gulf War. The Iraqis produced Scuds and then modified Scud missiles to produce the 600-km-range *Al Hussein* and 900-km-range *Al Abbas* missiles. The expertise, as well as some of the equipment and materials from this program remain in Iraq and provide a strong foundation for a revived ballistic missile program.

Prior to the invasion of Kuwait in 1990, Iraq could have had nuclear weapons in the 1993–1995 time frame, although it still had technical hurdles to overcome. After the invasion of Kuwait, Iraq began a crash program to produce a nuclear device in six to nine months based on highly enriched uranium removed from the safeguarded reactor at Tuwaitha. Iraq has the capability to reconstitute its nuclear weapon program; the speed at which it can do so depends on the availability of fissile material. It would take several years to build the required production facilities from scratch. It is possible that Iraq has hidden some material from U.N. Special Commission (UNSCOM) inspection or that it could acquire fissile material abroad (from another "rogue" state, for example). Iraq also had large chemical and biological weapons programs prior to the war and produced chemical and biological warheads for its missiles. Knowledge, personnel and equipment related to WMD remain in Iraq so that it could reconstitute these programs rapidly following the end of sanctions.

5. India

India is developing a number of ballistic missiles from short-range to those with ICBM-class capabilities, along with a submarine-launched ballistic missile (SLBM) and a short-range, surface ship-launched system. India has the infrastructure to develop and produce these missiles. It is aggressively seeking technology from other states, particularly Russia. While it develops its long-range ballistic missiles, India's space-launch vehicles provide an option for an interim ICBM capability. India has detonated several nuclear devices, and it is clear that it is developing warheads for its missile systems. India has biological and chemical weapons programs. Since the Pakistani nuclear tests, India has announced its intention to increase its spending on missiles and nuclear weapons.

India's program to develop ballistic missiles began in 1983 and grew out of its space-launch program, which was based on Scout rocket technology acquired from the United States. India currently has developed and deployed the *Prithvi* short-range ballistic missile[4] (SRBM), and is developing longer range, liquid- and solid-fueled missiles. They include the *Prithui II* SRBM, the *Agni, Agni–Plus* and *Agni–B* intermediate-range ballistic missiles[5] (IRBMs), a sea-launched ballistic missile and an SLBM, the *Sagarika.*

India detonated a nuclear device in 1974, conducted a test series in May 1998, and it is clear that it is developing warheads for its missile systems. Indian leaders recently declared that India has developed nuclear weapons for deployment on the *Prithui* SRBM and the *Agni Plus* MRBM.

India his acquired and continues to seek Russian, U.S. and Western European technology for its missile programs. Technology and expertise acquired from other states, particularly from Russia, are helping India to accelerate the development and increase the sophistication of its missile systems. For example, Russian assistance is critical to the development of the Indian SLBM and its related submarine. But India is rapidly enhancing its own missile science and technology base as well. Many Indian nationals are educated and work in the U.S., Europe and other advanced nations; some of the knowledge thereby acquired returns to the Indian missile program. While India continues to benefit from foreign technology and expertise, its programs and industrial base are now sufficiently advanced that supplier control regimes can affect only the rate of acceleration in India's programs. India is in a position to supply material and technical assistance to others.

6. Pakistan

Pakistan's ballistic missile infrastructure is now more advanced than that of North Korea. It will support development of a missile of 2,500-km range, which we believe Pakistan will seek in order to put all of India within range of Pakistani missiles. The development of a 2,500-km missile will give Pakistan the technical base for developing a much longer range missile system. Through foreign acquisition, and beginning without an extensive domestic science and technology base, Pakistan has acquired these missile capabilities quite rapidly. China and North Korea are Pakistan's major sources of ballistic missiles, production facilities and technology.

Pakistan currently possesses nuclear-capable M–11 SRBMs acquired from China, and it may produce its own missile, the *Tarmuk,* based on the M–11. In 1998, Pakistan tested and deployed the 1,300-km-*Ghauri* MRBM, a version of the North Korean *No Dong,* and the Commission believes Pakistan has acquired production facilities for this missile as well.

Pakistan possesses nuclear weapons that employ highly-enriched uranium and conducted its first nuclear weapon test series in May 1998. A new Pakistani nuclear reactor has been completed that could be used for the production of plutonium. In addition to its nuclear weapons, Pakistan has biological and chemical weapons programs. Chinese assistance has been crucial to Pakistan's nuclear weapons program.

India and Pakistan are not hostile to the United States. The prospect of U.S. military confrontation with either seems at present to be slight. However, beyond the possibility of nuclear war on the subcontinent, their aggressive, competitive development of ballistic missiles and weapons of mass destruction poses three concerns in particular. First, it enables them to supply relevant technologies to other nations. Second, India and Pakistan may seek additional technical assistance through cooperation with their current major suppliers—India from Russia, Pakistan from North Korea and China—because of the threats they perceive from one another and because of India's anxieties about China, combined with their mounting international isolation. Third, their growing missile and WMD capabilities have direct

[4] An SRBM has a range of less than 1,000 km.
[5] An IRBM has a range of 3,000 to 5,500 km.

effects on U.S. policies, both regional and global, and could significantly affect U.S. capability to play a stabilizing role in Asia.

D. A NEW NON-PROLIFERATION ENVIRONMENT

Since the end of the Cold War a number of developments have made ballistic missile and WMD technologies increasingly available. They include:

- A number of nations have chosen not to join non-proliferation agreements.
- Some participants in those agreements have cheated.
- As global trade has steadily expanded, access has increased to the information, technology and technicians needed for missile and WMD development.
- Access to technologies used in early generations of U.S. and Soviet missiles has eased. However rudimentary compared to present U.S. standards, these technologies serve the needs of emerging ballistic missile powers.
- Among those countries of concern to the U.S., commerce in ballistic missile and WMD technology and hardware has been growing, which may make proliferation self-sustaining among them and facilitate their ability to proliferate technology and hardware to others.

Some countries which could have readily acquired nuclear weapons and ballistic missiles—such as Germany, Japan and South Korea—have been successfully encouraged not to do so by U.S. security guarantees and by non-proliferation agreements. Even though they lack such security guarantees, other countries have also joined nonproliferation agreements and abandoned development programs and weapons systems. Some examples are Argentina, Brazil, South Africa and the former Soviet republics of Belarus, Kazakhstan and Ukraine.

1. Increased Competence of and Trade Among Emerging Ballistic Missile Powers

Conversely, there are other countries—some of which are themselves parties to various non-proliferation agreements and treaties—that either have acquired ballistic missile or WMD capabilities or are working hard to do so. North Korea, Iran and Iraq, as well as India and Pakistan, are at the forefront of this group. They now have increased incentives to cooperate with one another. They have extensive access to technology, information and expertise from developed countries such as Russia and China. They also have access through commercial and other channels in the West, including the United States. Through this trade and their own indigenous efforts, these second-tier powers are on the verge of being able to provide to one another, if they have not already done so, the capabilities needed to develop long-range ballistic missiles.

2. U.S. as a Contributor to Proliferation

The U.S. is the world's leading developer and user of advanced technology. Once it is transferred by the U.S. or by another developed country; there is no way to ensure that the transferred technology will not be used for hostile purposes. The U.S. tries to limit technology transfers to hostile powers, but history teaches that such transfers cannot be stopped for long periods. They can only be slowed and made more costly, and even that requires the cooperation of other developed nations. The acquisition and use of transferred technologies in ballistic missile and WMD programs has been facilitated by foreign student training in the U.S., by wide dissemination of technical information, by the illegal acquisition of U.S. designs and equipment and by the relaxation of U.S. export control policies. As a result, the U.S. has been and is today a major, albeit unintentional, contributor to the proliferation of ballistic missiles and associated weapons of mass destruction.

3. Motives of Countries of Concern

Recent ballistic missile and nuclear tests in South Asia should not be viewed as merely a sharp but temporary setback in the expanding reach of non-proliferation regimes. While policymakers may try to reverse or at least contain the trends of which these tests are a part, the missile and WMD programs of these nations are clearly the results of fundamental political calculations of their vital interests. Those nations willing and able to supply dangerous technologies and systems to one another, including Russia, China and their quasi-governmental commercial entities, may be motivated by commercial, foreign policy or national security interests or by a combination thereof. As noted, such countries are increasingly cooperating with one another, perhaps in some instances because they have reciprocal needs for what one has and the other lacks. The transfer of complete missile systems, such as China's transfer to Saudi Arabia, will continue to be available. Short of radical political change, there is every reason to assume that the nations engaged in these missile

and WMD development activities will continue their programs as matters of high priority.

4. Readier Market Access to Technology

In today's increasingly market-driven, global economy, nations so motivated have faster, cheaper and more efficient access to modern technology. Commercial exchanges and technology transfers have multiplied the pathways to those technologies needed for ballistic missiles and weapons of mass destruction. These pathways reduce development times and costs, lowering both technical and budget obstacles to missile development and deployment.

Expanding world trade and the explosion in information technology have accelerated the global diffusion of scientific, technical and industrial information. The channels—both public and private, legal and illegal—through which technology; components and individual technicians can be moved among nations have increased exponentially.

5. Availability of Classified Information and Export-Controlled Technology

Trends in the commercial sector of a market-driven, global economy have been accompanied, and in many ways accelerated, by an increased availability of classified information as a result of:

- Lax enforcement of export controls.
- Relaxation of U.S. and Western export controls.
- Growth in dual-use technologies.
- Economic incentives to sell ballistic missile components and systems.
- Extensive declassification of materials related to ballistic missiles and weapons of mass destruction.
- Continued, intense espionage facilitated by security measures increasingly inadequate for the new environment.
- Extensive disclosure of classified information, including information compromising intelligence sources and methods. Damaging information appears almost daily in the national and international media and on the Internet.

E. ALTERNATIVE BALLISTIC MISSILE LAUNCH MODES

In evaluating present threats, it is misleading to use old patterns of development as guides. The history of U.S. and Soviet missile and WMD development has become irrelevant. Approaches that the U.S. considered and specifically rejected on grounds of safety, reliability, accuracy and requirements for high volume production are in many cases well-suited to nations less concerned about safety and able to meet their needs with only a few, less accurate, less reliable weapons. Analytical approaches the Intelligence Community could realistically rely on in the past need to be restudied and reevaluated in light of this newer model.

The Commission believes the U.S. needs to pay attention to the possibility that complete, long-range ballistic missile systems could be transferred from one nation to another, just as China transferred operational CSS–2s to Saudi Arabia in 1988. Such missiles could be equipped with weapons of mass destruction.

One nation's use of another nation's territory also needs to be considered. The U.S. did this during the Cold War and the Soviet Union tried to do it in Cuba in the early 1960s. For example, if Iran were to deploy ballistic missiles in Libya, it could reduce the range required to threaten the U.S. as well as Europe. Given the existing patterns of cooperation the Commission has already seen, both testing by one country on the territory of another and deriving data from other-country tests are also distinct possibilities.

Sea launch of shorter range ballistic missiles is another possibility. This could enable a country to pose a direct territorial threat to the U.S. sooner than it could by waiting to develop an ICBM for launch from its own territory. Sea launching could also permit it to target a larger area of the U.S. than would a missile fired from its home territory. India is working on a sea launch capability. Air launch is another possible mode of delivering a shorter range missile to U.S. territory.

The key importance of these approaches is that each would significantly shorten the warning time of deployment available to the United States.

F. EROSION OF WARNING

Precise forecasts of the growth in ballistic missile capabilities over the next two decades—tests by year, production rates, weapons deployed by year, weapon characteristics by system type and circular error probable (CEP)—cannot be provided with confidence. Deception and denial efforts are intense and often successful, and U.S.

collection and analysis assets are limited. Together they create a high risk of continued surprise.

The question is not simply whether the U.S. will have warning of an emerging capability, but whether the nature and magnitude of a particular threat will be perceived with sufficient clarity in time to take appropriate action.

Concealment, denial and deception efforts by key target countries are intended to delay the discovery of strategically significant activities until well after they had been carried out successfully. The fact that some of these secret activities are discovered over time is to the credit of the U.S. Intelligence Community. However, the fact that there are delays in discovery of those activities provides a sharp warning that a great deal of activity goes undetected.

Both technical and human intelligence are inherently more difficult to collect in those countries where the U.S. has limited access, which include most of the ballistic missile countries of concern. The U.S. is not able to predict and anticipate with confidence the behavior and actions of emerging ballistic missile powers and their related political decision-making.

Their ballistic missile programs often do not follow a single, known pattern or model, and they use unexpected development patterns. These are not models of development the U.S. follows or that intelligence analysts expect to see. For example, Pakistan's test launch in April 1998 of its *Ghauri* MRBM—its version of the North Korean *No Dong*—could not be predicted on the basis of any known pattern of technical development either for MRBMs generally or Pakistan in particular. Similarly, North Korea's decision to deploy the *No Dong* after what is believed to be a single successful test flight is another example. Based on U.S. and Russian experience, the Intelligence Community had expected that a regular test series would be required to provide the confidence needed before any country would produce and deploy a ballistic missile system. Yet North Korea deployed the *No Dong*.

The Commission believes that the technical means of collection now employed will not meet emerging requirements, and considerable uncertainty persists whether planned collection and analysis systems will do so.

G. METHODOLOGY

In analyzing the ballistic missile threat, the Commission used an expanded methodology. We used it as a complement to the traditional analysis in which a country's known program status is used to establish estimates of its current missile capabilities. We believe this expanded approach provides insights into emerging threats that the prevailing approaches used by the Intelligence Community may not bring to the surface.

To guide our assessment of the ballistic missile threat to the United States, we posed three questions:

- What is known about the ballistic missile threat, including the domestic infrastructure of a ballistic missile power; the efforts of a power to acquire foreign technology, materials and expertise; and the scale, pace and progress of its programs?
- What is not known about the threat in each of those three categories?
- Can a power intent on posing a ballistic missile threat to any part of the United States, including the use of but not limited to ICBM-range missiles, use the open market, the black market and/or espionage to secure the needed technology and expertise and then carry out its program in ways that will minimize the interval between the time the U.S. becomes aware of the threat and the fielding of that capability?

In seeking answers to these questions, we familiarized ourselves with the current state of knowledge as well as the depth of analytic capability within the Intelligence Community related to ballistic missile and WMD threats. The Commission used its broad access to individuals, special compartmented intelligence and special access programs. We consulted with experts in the broader government and private analytic and policy communities. We reviewed the strengths, weaknesses and vulnerabilities of current and planned human and technical collection efforts and capabilities, especially in light of the increasingly sophisticated means and methods available to target countries to hide from U.S. intelligence collection. We reviewed with scientists, engineers and program managers from the public and private sectors the technical issues associated with the design, development and testing of ballistic missiles and the means and methods available to the emerging ballistic missile powers to meet the challenges associated with long-range ballistic missile development and testing.

The Commission analyzed the available information in order to develop an understanding of the threat from three perspectives:

- We examined the known size and quality of the deployed forces, the doctrine and the command and control systems that govern the forces and the availability of weapons of mass destruction to arm the forces. We reviewed the infrastructure supporting the programs and the extent of past and present foreign assistance available to those programs from Russia, China and other countries, including the West.
- We examined the ways in which the programs of emerging ballistic missile powers compared with one another. For example, we traced the development histories of the related programs of North Korea, Iran, Iraq and Pakistan and the relationships among them. This comparison helped in identifying the similarities between programs, the extent to which each had aided one another in overcoming critical development hurdles and, importantly, the pace at which a determined country can progress in its program development.
- We reviewed the resources ("inputs") available and the ways in which they provide indicators of the prospects for successful missile development.

By integrating these perspectives, we were able to partially bridge a significant number of intelligence gaps. Emphasizing inputs makes two important contributions to the analysis. Inputs include domestic opportunity costs, the foreign technology and expertise sought and obtained, the urgency with which facilities are constructed both above and below ground and the willingness to absorb cost and time penalties in order to hide activities from detection by U.S. intelligence. Attention to inputs across all elements of a program helps develop an understanding of the scale and scope of a program before traditional output indicators, such as testing and production rates, can be observed and evaluated. When combined with observed outputs and the application of engineering judgments, the understanding of the scale and scope of a program that this provided helped us to measure the probable pace and magnitude of a program and its potential products. We were then able to make what we believe to be reasonably confident estimates of what the various programs can achieve.

Rather than measuring how far a program had progressed from a known starting point, the Commission sought to measure how close a program might be to demonstrating the first flight of a long-range ballistic missile. This approach requires that analysts extrapolate a program's scope, scale, pace and direction beyond what the hard evidence at hand unequivocally supports. It is in sharp contrast to a narrow focus on the certain that obscures the almost-certain. The approach helps reduce the effects of denial and deception efforts. When strategically significant programs were assessed by narrowly focusing on what is known, the assessments lagged the actual state of the programs by two to eight years and in some cases completely missed significant programs.

We chose to focus on what is left to be accomplished in the programs of potentially threatening ballistic missile powers and alternative paths they can follow to attain their goals. We reviewed program histories and current activities, including foreign assistance, to determine whether a ballistic missile program acquired the means to overcome its identified problems. We considered the multiple pathways available for completing its development given the combination of expertise and technology available to it and the circumstances in which it is operating. This approach accepts as a basic premise that a power determined to possess a long-range missile, knowing that the U.S. is trying to track its every action but aware of U.S. intelligence methods and sources, will do its best to deny information and to deceive the U.S. about its actual progress.

Because of these options available to emerging ballistic missile powers, the Commission, unanimously recognizing that missile development and deployment now follows new models, strongly urges the use of an expanded approach to intelligence that assesses both inputs and outputs in other countries' ballistic missile programs. We believe this approach is needed in order to capture both sooner and more accurately the speed and magnitude of potential ballistic missile proliferation in the post-Cold War world and to assess, in time, the various threats this proliferation poses to the United States.

The Commission's key judgments are derived from applying this methodology and examining the evidence in light of the individual and collective experience of the nine Commissioners.

H. SUMMARY

Ballistic missiles armed with WMD payloads pose a strategic threat to the United States. This is not a distant threat. Characterizing foreign assistance as a wild card is both incorrect and misleading. Foreign assistance is pervasive, enabling and often the preferred path to ballistic missile and WMD capability.

A new strategic environment now gives emerging ballistic missile powers the capacity through a combination of domestic development and foreign assistance, to acquire the means to strike the U.S. within about five years of a decision to acquire such a capability (10 years in the case of Iraq). During several of those years, the U.S. might not be aware that such a decision had been made. Available alternative means of delivery can shorten the warning time of deployment nearly to zero.

The threat is exacerbated by the ability of both existing and emerging ballistic missile powers to hide their activities from the U.S. and to deceive the U.S. about the pace, scope and direction of their development and proliferation programs. Therefore, we unanimously recommend that U.S. analyses, practices and policies that depend on expectations of extended warning of deployment be reviewed and, as appropriate, revised to reflect the reality of an environment in which there may be little or no warning.

ATTACHMENT 1.

A. YEAR 2000 (Y2K) COMPUTER PROBLEM

The widely-discussed Year 2000 (Y2K) problem concerns computer hardware with embedded clocks and software with date recognition functions that still designate years with only two digits and are programmed to interpret "00" as the year 1900 rather than 2000. The tasks of reprogramming are immense and complex, and uncertainties surrounding their pace and outcome plague many aspects of life and commerce. The Commission judges that military and intelligence operations are not immune to the effects of the Y2K problem.

Not only at the millennium but for some undetermined time before and after it the Y2K problem can affect U.S. and Russian ballistic missile forces and, to a lesser extent, those of China, the United Kingdom (U.K.) and France. The U.S. particularly and Russia somewhat less so depend on computer-based and computer-aided intelligence and surveillance and on automated processes to assure that their ballistic missile forces will function under all conceivable circumstances. The Y2K problem can potentially upset some of those calculations by interfering with the capacity of the U.S. and Russia to:

- Monitor the activities of each other at the strategic level, including the disposition and posture of their conventional military forces.
- Provide tactical warning of military operations, particularly ballistic missile operations, through collection of data from space-, air- and ground-based sensors.
- Process and fuse the data received from sensors in the command and control nets.
- Maintain positive control over ballistic missile forces and, if automated responses to false data and warnings are triggered, retain or regain control by the national military and political leadership.

Y2K problems are complex and not easy to deal with. Efforts are underway to isolate critical systems from the problem, but they may not totally eliminate vulnerabilities for two reasons:

- No system is completely isolated. Command centers may have new software installed, but if the support services—electric, water, gas and communications, for example—are not self-contained the center may fail. Even if support services are self-contained, the need for the center to function via computer or by computer-dependent communication systems makes it vulnerable to Y2K problems up or downstream from it.
- Efforts to correct the problem provide their own attractive opportunities for unfriendly agents and powers to tamper with mission-critical software. Errors can be programmed which are designed to appear only much later and in circumstances that cannot be anticipated. The Commission is troubled by the amount of Y2K software work being performed in foreign countries, particularly India, for U.S. industry and for the U.S. Government—including elements of the Intelligence Community.

B. REVOLUTION IN MILITARY AFFAIRS AND INFORMATION WARFARE

The term "Revolution in Military Affairs" (RMA) is used to describe the impact of leading-edge military technologies and information warfare on the conduct of military operations from the tactical to the strategic level. Key RMA technologies include precision-guided munitions, stealth technology and the use of space-based assets for command, control, communications, intelligence, surveillance and reconnaissance, as well as modern computational capabilities to integrate these functions.

The U.S. military is adopting new weapon systems and tactical, operational and strategic concepts based on the elements of the RMA. The objective is to make U.S. forces lighter but more lethal so that fewer personnel with less equipment can strike over longer distances and with a far more powerful effect. This gives prospective adversaries greater incentives to find new ways of offsetting the new RMA-based capabilities of the U.S. and in particular to come up with new "asymmetric" strategies—that is, strategies that can cripple U.S. ability to use its forces without the adversary having to confront those forces directly.

These asymmetric strategies of potential adversaries of the U.S. could well include ballistic missile operations against ports, airfields, communications centers or urban and industrial areas. Attacking ports and airfields the U.S. might use could severely hamper operations and could undercut the military advantages U.S. technological superiority provides. Interrupting communications channels would make it more difficult to plan, organize and conduct operations. Strikes by an adversary on urban and industrial centers could change the nature of the conflict from what the U.S. prefers—one confined to precision attacks against military forces in the field and point targets in urban and industrial settings—to one of indiscriminate damage to civilians and the infrastructure supporting them.

In the 1991 Persian Gulf War, Iraqi ballistic missiles threatened to undermine the coalition's political strategy, and the coalition's military responses failed to halt Iraqi ballistic missile attacks. Doctrinal shifts in Russia and China have placed added emphasis on ballistic missile operations. Together, these highlight the vulnerability to such operations of the U.S., its forces and its allies, whether conducted by Russia, China or emerging ballistic missile powers. A number of other nations are incorporating technical features of the RMA into their forces. These features include space-based surveillance and reconnaissance. They also include communications using either space-based networks (perhaps using civilian assets) or land-based fiber-optic networks, guidance from the space-based global positioning system/global navigation satellite system (GPS/GLONASS) to increase the accuracy of missiles and the computational capabilities needed to plan, organize and conduct operations. Their capacity to conduct asymmetric operations with ballistic missiles, including attacks on RMA sites in the U.S., will increase.

ATTACHMENT 2. UNCLASSIFIED WORKING PAPERS

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Iran/Iraq: W. Seth Carus, Michael Eisenstadt, Ken Katzman and Ken Timmerman
Russia/Ukraine: Bruce Blair, Stephen Blank, Daniel Goure and Nadia Schadlow
China/Japan/Korea: Gerrit W. Gong, Selig Harrison, Robert Manning and David Wright
India/Pakistan: Daniel Goure, Michael Krepon and David Tanks
North Africa/Israel: W. Seth Carus and Dov Zakheim
Technology Transfers: David C. Isby, John M. Myrah and Henry Sokoiski
Pathways for Transfer: Dennis M. Gormley, Aaron Karp and Richard T. Cupitt
Supplier Nations: Robbin Laird, Tim McCarthy, Keith Payne and David Smith

Roundtable Papers:

Bruce Blair, "The Plight of the Russian Military and Nuclear Control"
Stephen J. Blank, "Nuclear Strategy and Nuclear Proliferation in Russian Strategy"
W. Seth Carus, "Ballistic Missiles in Iran and Iraq: 1988-1998"
W. Seth Carus, "Israeli Ballistic Missile Developments"
Richard T. Cupitt, "Export Controls and Missile Technology Transfer"
Michael Eisenstadt, "Missiles and Weapons of Mass Destruction (WMDs) in Iraq and Iran: Current Developments and Potential for Future Surprises"
Gerrit W. Gong, "Assessing the Ballistic Missile Threat: China-Japan-Korea-Taiwan Issues"
Dennis M. Gormley, "Transfer Pathways for Cruise Missiles"
Daniel Goure, "The Evolution of Russian Nuclear Forces: Working to a Plan"
Daniel Goure, "WMD and Ballistic Missiles in South Asia"
Selig S. Harrison, "Missile Capabilities in Northeast Asia: Japan, South Korea and North Korea"
David C. Isby, "Barriers to Proliferation and Pathways to Transfer: Building Ballistic Missile Capabilities Under MTCR"
Aaron Karp, "Technology Pathways to Ballistic Missiles in Iran"
Kenneth Katzman, "Iran's Long-Range Missile Capabilities"
Kenneth Katzman, "Iraq's Long-Range Missile Capabilities"

Michael Krepon, "India, Pakistan and the Ballistic Missile Threat"
Robbin Laird, "Rethinking the Role of Western States as Supplier Nations"
Robert A. Manning, "Missile Proliferation Threats in Northeast Asia"
John M. Myrah, "The Proliferation of Ballistic Missiles: What Should We Do to Stop It?"
Keith Payne, "The Missile Technology Control Regime: European Involvement and Compliance Issues"
Nadia Schadlow, "Patterns of Ukrainian Conduct"
David J. Smith, "Friendly Countries and Missile Proliferation: Dealing With Different Perceptions"
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David R. Tanks, "Ballistic Missiles in South Asia: Are ICBMs a Future Possibility?"
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David C. Wright, "An Analysis of the North Korean Missile Program"

Additional Papers:

Kurt Guthe and Keith Payne, "The Unique Value of Ballistic Missiles for Deterrence and Coercion: The Chinese Case"
Keith Payne and Robert Rudney, "The Unique Value of Ballistic Missiles for Deterrence and Coercion"
Gilbert Siegert, "The Chinese Space Program"
Gilbert Siegert, "Potential Threats from Global Commercial Space Capabilities"
System Planning Corporation, "Non-Proliferation Issues"

1. France
2. Great Britain
3. Germany
4. Japan
5. South Korea

ATTACHMENT 3.

A. RESUMES OF COMMISSION MEMBERS

The Honorable Donald H. Rumsfeld, Chairman

Mr. Rumsfeld is Chairman of the Board of Directors of Gilead Sciences, Inc. Previously he served in a variety of government posts, including: Naval Aviator (1954–57), Member of Congress (1963–69), U.S. Ambassador to NATO (1972–74), White House Chief of Staff (1974–75), Secretary of Defense (1975–77) and Presidential Envoy to the Middle East (1983–84). He also served as Chairman of the Rand Corporation (1981–86; 1995–96) and as Chairman and CEO of G. D. Searle & Co. (1977–85) and of General Instrument Corporation (1990–93). He received the Presidential Medal of Freedom in 1977.

Dr. Barry M. Blechman

Dr. Blechman is the president and founder of DFI International (in 1984) and chairman and co-founder of the Henry L. Stimson Center beginning in 1989. He served as Assistant Director of the U.S. Arms Control and Disarmament Agency (1977–80). He was previously affiliated with the U.S. Army (1964–66), the Center for Naval Analyses (1966–71) and Brookings Institution (1971–77). He also was affiliated with the Carnegie Endowment (1980–82) and the Center for Strategic and International Studies (1982–84). He is the author of Face Without War and The Politics of National Security, among others. Dr. Blechman has a Ph.D. in international relations.

General Lee Butler, U.S. Air Force (Ret.)

General Butler served as the Commander-in-Chief of the U.S. Strategic Command and Strategic Air Command (1992–94) and as the Director of Strategic Plans and Policy on the Joint Chiefs of Staff (1989–91). In 1987, he was the Director of Operations at USAF Headquarters and served as the Inspector General of the Strategic Air Command (1984–86). From 1982 to 1984, he was the Commander of the 96th and 320th Bomb Wings. General Butler was an Olmsted Scholar.

Dr. Richard L. Garwin

Dr. Garwin is a Senior Fellow for Science and Technology with the Council on Foreign Relations. He has been an IBM Fellow Emeritus at the Thomas J. Watson Research Center since 1993 and was a Fellow from 1952 to 1993. He has served as a member of the President's Science Advisory Committee twice, from 1962 to 1965 and from 1969 to 1972, and he served on the Defense Science Board (1966–

69). In 1996, the U.S. Foreign Intelligence Community awarded him the R.V. Jones Award for Scientific Intelligence, and the President and the Department of Energy awarded him the Enrico Fermi Award. Dr. Garwin has a Ph.D. in physics.

Dr. William H. Graham

Dr. Graham is the Chairman of the Board and President of National Security Research (1996 to present). He previously was the Director of the White House Office of Science & Technology Policy (1986–89) and the Deputy Administrator of NASA (1985–86). He has a Ph.D. in electrical engineering.

Dr. William Schneider, Jr.

Dr. Schneider is the President of International Planning Services, Inc. (1986 to present). He previously served as the Under Secretary of State for Security Assistance (1982–86) and the Chairman of the President's General Advisory Committee on Arms Control and Disarmament (1987–93). He has a Ph.D. in economics.

General Larry D. Welch, U.S. Air Force (Ret.)

General Welch is the President and CEO of the Institute for Defense Analyses (1990 to present). He previously served as the Chief of Staff of the U.S. Air Force (1986–90) and the Commander in Chief of the U.S. Strategic Air Command (1985–86).

Dr. Paul D. Wolfowitz

Dr. Wolfowitz is Dean of the Paul H. Nitze School of Advanced International Studies at Johns Hopkins University (1994 to present). He previously served as the Under Secretary of Defense for Policy (1989–93), the U.S. Ambassador to Indonesia (1986–89), the Assistant Secretary of State for East Asian and Pacific Affairs (1982–86) and Director of the State Department Policy Planning Staff (1981–82). He was a member of the Commission on the Roles and Capabilities of the United-States Intelligence Community (1995–95). He has a Ph.D. in political science.

The Honorable R. James Woolsey

Mr. Woolsey is a partner in the law firm of Shea & Gardner (1995 to present, 1991–93, 1979–89). He previously served as Director of Central Intelligence (1993–95), Ambassador and U.S. Representative to the Negotiation on Conventional Armed Forces in Europe (1989–91) and Under Secretary of the Navy (1977–79). He was a Delegate-at-Large to the U.S.-Soviet START and Nuclear and Space Arms Talks (1983–85). He served as a member of the Scowcroft Commission (Presidential Commission on Strategic Forces, 1983) and the Packard Commission (Presidential Blue Ribbon Commission on Defense Management, 1985–86).

B. RESUMES OF CORE STAFF OF THE COMMISSION

Dr. Stephen A. Cambone, Staff Director. Senior Fellow, Center for Strategic and International Studies (1993 to present). Director, Strategic Defense Policy, Office of the Secretary of Defense (1990–93); Deputy Director of Strategic Analysis, SRS Technologies (1986–90); Staff Analyst, Los Alamos National Laboratory (1982–86). Ph.D. in political science.

Dr. Steven A. Maaranen. Policy Planning Staff, Los Alamos National Laboratory (1980 to present). Chief, Defense and Space Division, U.S. Arms Control and Disarmament Agency (1987–88); Assistant Professor, Claremont McKenna College (1976–80). Ph.D. in political science.

Eric Desautels. Member of Technical Staff TASC, Inc. (1994–98). Masters in international security.

David H. Dunham. Member of Technical Staff TASC, Inc. (1994–98); Assistant Director of the Eisenhower World Affairs Institute (1994); Special Assistant, Safe and Secure Dismantlement Delegation; Deputy Executive Director, General Advisory Committee, U.S. Arms Control and Disarmament Agency (1991–94).

Jason W. Roback. Analyst with the National Institute for Public Policy and National Security Research, Inc. (1997 to present). M.S. in defense and strategic studies.

Bernard C. Victory. Analyst at the National Institute for Public Policy (1988 to present). Congressional Research Service (1987–88). M.A. in international affairs.

Delonnie Henry. Administrative Assistant, National Defense University (1993–98). M.Ed.

DCI LIAISON

Richard Haver. Chief of Staff of the National Intelligence Council. Formerly: National Intelligence Officer for Special Activities, Executive Director for Intelligence

Community Affairs, Assistant to the Secretary of Defense for Intelligence Policy and Deputy Director for Naval Intelligence.

C. COMMISSION MEETINGS AND AGENDAS

Date	Subject or Activity	Visitor
Jan. 14	Organization of Commission	
Jan. 15	U.S. Technical Collection Capabilities Simulation, Imagery Intelligence (IMINT), Signals Intelligence (SIGINT) Foreign Instrumentation Signals Measures and Signature Intelligence (MASINT)	
Jan. 29	**Russia** Changing Political and Economic Circumstances Military Changes Nuclear Doctrine Strategic Force Projections Warning, Inadvertent Launch, Anti-Ballistic Missile Status C3I, Unauthorized and Accidental Launch	
Jan. 30	**China** Political Overview Taiwan Economic Overview Military Overview China's Space Program Nuclear Doctrine Force Structure and Projections Chinese C3I	
Feb. 4	Deception and Denial Analytic Depth: China	
Feb. 5	External Proliferation Concerns Technology Transfer and End Use **China** Hard Target Missile Program and Russian Assistance Infrastructure and Government Oversight	
Feb. 9	Nuclear Programs	
Feb. 19	Nonproliferation Center and Methodological Challenges of Proliferation **Russia** The Spread of Underground Facilities Hard Target Military Missile and Technological Infrastructure External Proliferation Concerns The Russian-Iranian Connection	
Mar. 4	**Iran** Collection Challenges Ballistic Missile Program Engine Testing Missile Infrastructure Alternate Launch Modes Nuclear Program Biological Weapons Chemical Weapons Buyer, Seller, Broker	
Mar. 5	**North Korea** Collection Challenges Ballistic Missile Program	

Date	Subject or Activity	Visitor
	Buyer, Seller, Broker Forces and Doctrine Chemical Weapons Biological Weapons Nuclear Program	
Mar. 19	The Honorable George Tenet Ambassador Rolf Ekeus The Honorable Andrew Marshall David Osias David Ivry	Director of Central Intelligence Ambassador of Sweden to the U.S. Office of Net Assessment, Office of the Secretary of Defense Defense Intelligence Officer Director-General, Israeli Ministry of Defense (Ret.)
Mar. 24	**Saudi Arabia** **Algeria** **Egypt** **Libya** **Syria**	
Mar. 25	Meeting of Commissioners at the National Security Agency	
Mar. 30	**Iraq** Collection Overview IAEA/UNSCOM Inspection Program Missile Program Chemical Weapons Biological Weapons Nuclear Program	
Mar. 31	**India and Pakistan** Hard Target Weapons of Mass Destruction: Motivations, Decision-makers and Doctrine Missile Systems: Capabilities and Production India's Naval Development India's Space Program Foreign Proliferation Assistance Missile Forces in 2015 Chemical & Biological Weapons Nuclear Programs Broker and Seller: Issues of Safety and Security Collection Overview	
Apr. 7	Intelligence Process The Honorable Edward C. ''Pete'' Aldridge, Jr. Project West Wing Iranian and North Korean Ballistic Missile Program Ballistic Missile Technical Hurdles and Work-a-Rounds	 President and CEO, Aerospace Corporation
Apr. 8	Deception and Denial Yamantau and Russian Underground Activity	
Apr. 16	Admiral William Studeman, U.S. Navy (Ret.) Hurdles of Long-range Ballistic Missiles and Work-a-Rounds: 1. Liquid Rocket Propulsion 2. Solid Rocket Propulsion 3. Aerodynamics, Reentry Vehicle 4. Design and Missile Materials Russian Command and Control Modernization	Former Deputy Director of Central Intelligence
Apr. 20	Lt. Gen. Lester Lyles, U.S. Air Force Lt. Gen. Patrick Hughes, U.S. Army Dr. Fred Ikle Analysis of Pakistan's Ghauri/No Dong Launch	Director, Ballistic Missile Defense Organization Director, Defense Intelligence Agency Former Under Secretary of Defense (Policy)

Date	Subject or Activity	Visitor
Apr. 21	Emerging Long-Range Threat to the U.S	Boeing Corporation
	Ambassador Frank Wisner	Former U.S. Ambassador to India and Special Ambassador to Russia
Apr. 27	Counterintelligence Brief Industrial Espionage Legal Snooping	
	1993 No Dong Flight	
	Foreign Missile Threats	
	Scope of Ballistic Missile Proliferation Activities	
	Non-Proliferation Methodologies	
	Dr. Sidney Drell	Deputy Director, Stanford Linear Accelerator Center
May 7	Foreign Missile Assessment	Lockheed Martin Corporation
	Payload Fabrication and Delivery	
	Commercial Space-Launch Vehicles, Peacekeeper Conversion	Orbital Sciences Corporation
	Contemporaneous History of Iran's Missile Programs	
May 8	Gordon Oehler	Former Director, Office of the Director of Central Intelligence Nonproliferation Center
	The Honorable William Reinsch	Undersecretary of Commerce for Export Administration
May 18	Naval Intelligence Briefing	
	Contemporaneous History of North Korea's Missile Program Assessment of a Hypothetical Taepo Dong III	
	Dr. William J. Perry	Former Secretary of Defense
	Lt. General William Odom, U.S. Army (Ret.)	Former Director of the National Security Agency
May 19	Drafting of Final Report	
May 27	Dr. James Schlesinger	Former Secretary of Defense and Director of Central Intelligence
	Drafting of Final Report	
Jun. 3	Drafting of Final Report	
Jun. 4	Dr. Harold Brown	Former Secretary of Defense
	Drafting of Final Report	
Jun. 11	Drafting of Final Report	
Jun. 16	The Honorable Caspar Weinberger	Former Secretary of Defense
	Drafting of Final Report	
Jun. 17	Office Call with the Honorable William S. Cohen	Secretary of Defense, The Pentagon
	Drafting of Final Report	
Jun. 23	Information Warfare	
	Dr. John Deutch	Former Director of Central Intelligence
	Brief on Israel	
	Drafting of Final Report	
Jun. 24	General Colin Powell, U.S. Army (Ret.)	Former Chairman, Joint Chiefs of Staff
	Lt. Gen. Brent Scowcroft, U.S. Air Force (Ret.)	Former National Security Advisor to the President
	Cruise Missiles	
	Drafting of Final Report	
Jun. 29	Office Call with General Henry H.Shelton, U.S. Army	Chairman, Joint Chiefs of Staff, The Pentagon
	Drafting of Final Report	
Jun. 30	Drafting of Final Report	
Jul. 7	Office Call with the Honorable Samuel R. ''Sandy'' Berger	Assistant to the President for National Security, The White House
	Foreign Students in the United States	
Jul. 8	Information Warfare	
	Space Reconnaissance	

Date	Subject or Activity	Visitor
	Y2K Problem in Russia Collection Capabilities	
Jul. 15	Deliver Report to Congress	Senior Leadership of the U.S. Senate and U.S. House of Representatives, The Capitol

D. SITE VISITS [1]

March 6: National Air Intelligence Center Wright Patterson Air Force Base, Dayton, Ohio
March 10: Sandia National Laboratories, Kirtland Air Force Base, Albuquerque, New Mexico
March 16: Aerospace Corporation, Los Angeles, California
March 25: National Security Agency, Fort Meade, Maryland
April 3: Center for International Security Affairs, Los Alamos National Laboratory, Los Alamos, New Mexico
April 22: National Reconnaissance Office, Sterling, Virginia
May 6: Defense Intelligence Agency Briefing, Andrews Air Force Base, Suitland, Maryland
May 15: Missile and Space Intelligence Center, Redstone Arsenal, Huntsville, Alabama
June 5: U.S. Space Command, Peterson Air Force Base, Colorado Springs, Colorado
June 8: Lawrence Livermore National Laboratory, Livermore, California

E. INTERVIEWS

Dr. Edward C. "Pete" Aldridge, Jr., former Secretary of the Air Force and Director of the National Reconnaissance Office
The Honorable Samuel R. "Sandy" Berger, Assistant to the President for National Security Affairs
The Honorable Dr. Harold Brown, former Secretary of Defense
The Honorable William S. Cohen, Secretary of Defense
The Honorable Dr. John Deutch, former Director of Central Intelligence and Deputy Secretary of Defense
Dr. Sidney Drell, Deputy Director, Stanford Linear Accelerator Center
Ambassador Rolf Ekeus, Ambassador of Sweden to the United States
Lieutenant General Patrick Hughes, U.S. Army, Director, Defense Intelligence Agency
David Ivry, former Director-General of the Ministry of Defense of Israel
Dr. Frederick Ikle, former Undersecretary of Defense
David A. Kier, Deputy Director for the National Reconnaissance Office
Lieutenant General Lester Lyles, U.S. Air Force, Director, Ballistic Missile Defense Organization
The Honorable Andrew Marshall, Director of Net Assessment, Office of the Secretary of Defense
Barbara McNamara, Deputy Director, National Security Agency
Lieutenant General William Odom, U.S. Army (Ret.), former Director of the National Security Agency
Gordon Oehler, former Director Nonproliferation Center, Office of the Director of Central Intelligence
David Osias, Defense Intelligence Officer for Acquisition Support, Counter-proliferation and Arms Control
The Honorable Dr. William J. Perry, former Secretary of Defense
General Colin A. Powell, U.S. Army (Ret.), former Chairman of the Joint Chiefs of Staff and National Security Advisor to the President
The Honorable William A. Reinsch, Undersecretary of Commerce for Export Administration
The Honorable Dr. James Schlesinger, former Secretary of Defense, Director of Central Intelligence and Secretary of Energy
Lieutenant General Brent Scowcroft, U.S. Air Force (Ret.), former National Security Advisor to the President

[1] All sites except the National Air Intelligence Center were visited by one or more Commissioners.

General Henry H. Shelton, U.S. Army, Chairman, Joint Chiefs of Staff
Admiral William Studeman, U.S. Navy (Ret.), former Deputy Director of Central Intelligence and Director, National Security Agency
The Honorable George J. Tenet, Director of Central Intelligence
The Honorable Caspar Weinberger, former Secretary of Defense
Ambassador Frank Wisner, former U.S. Ambassador to India

F. ACKNOWLEDGMENTS

The Commissioners wish to express their appreciation to the men and women of the U.S. Intelligence Community. Over 300 of them took time to meet with the Commissioners on the subject of the ballistic missile threat to the United States.

In particular, the Commissioners express their thanks to the Honorable George Tenet, Director, Central Intelligence, and to the directors of the Defense Intelligence Agency, National Security Agency, National Reconnaissance Office, National Imagery and Mapping Agency and the Office of Naval Intelligence for making the time of their analysts available to the Commission and for providing a level of access to information infrequently granted.

Special thanks are extended to Rich Haver, the DCI's liaison to the Commission. His knowledge of the issues, familiarity with the ways of the Intelligence Community and his unfailing good humor made the task of the Commission far easier than it might otherwise have been. The Commissioners would like to thank those analysts and managers of the Bureau of Intelligence and Research (Department of State), Defense Technology Security Administration (Department of Defense), CIA, DIA, NSA, NRO and NIMA who served as the points of contact for their respective agencies. Their efforts to schedule briefings and to provide information is greatly appreciated.

The Commissioners would also like to thank the support staff provided by the Central Intelligence Agency who served in the Commission office and those in the Multimedia Production Group, Cartography Department and Printing and Photography Group who assisted in the design and publication of the final version of the Report.

U.S. CONGRESS,
COMMITTEE ON INTERNATIONAL RELATIONS,
WASHINGTON, DC, *June 16, 1997.*

THE PRESIDENT
The White House
Washington, DC.

DEAR MR. PRESIDENT:

Last week the House of Representatives approved H.R. 1758, the "European Security Act of 1997." I originally introduced this legislation on April 24th of this year with the cosponsorship of Dick Armey, Jerry Solomon, Porter Goss, Curt Weldon, and others to address a number of issues bearing on U.S. relations with Russia.

Pursuant to House Resolution 159, the European Security Act as passed by the House has been appended to H.R. 1757, the "Foreign Relations Authorization Act for Fiscal Year 1998 and 1999." Inasmuch as the Senate companion measure to H.R. 1757 is scheduled for Senate floor action this week, it appears likely that the European Security Act will be addressed in a House-Senate conference committee in the very near future.

As we prepare for conference on the European Security Act, we find it necessary to ask for additional information relevant to one of the bill's provisions relating to multilateralization of the Anti-Ballistic Missile (ABM) Treaty.

Section 6(c)(1) of the European Security Act states that:

> It is the sense of the Congress that until the United States has taken the steps necessary to ensure that the ABM Treaty remains a bilateral treaty between the United States and the Russian Federation (such state being the only successor state of the Union of Soviet Socialist Republics that has deployed or realistically may deploy an anti-ballistic missile defense system), no ABM/TMD demarcation agreement will be considered for approval for entry into force with respect to the United States. . . .

I am aware that, subsequent to the introduction of the European Security Act, the Senate on May 14th approved Treaty Doc. No. 105–5, a resolution advising and consenting to ratification of the CFE Flank Agreement. Condition 9 of this resolution required the President to:

> . . . certify to Congress that he will submit for Senate advice and consent to ratification any international agreement . . . that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty . . .

I am further aware that, on May 15th, you submitted to Congress the certification required by Condition 9 of Treaty Doc. No. 105–5.

In order to help the conferees on the European Security Act understand the degree to which section 6(c)(1) of that bill has been addressed (and perhaps rendered unnecessary) by Condition 9 of Treaty Doc. 105–5, I would appreciate receiving your prompt response to the following questions:

1. In the view of the Administration, what countries in addition to the United States are today parties to the ABM Treaty?

2. What countries sent representatives to the most recent meeting of the Standing Consultative Commission in Geneva?

3. To the extent that the list of countries identified in response to question no. 1 includes countries in addition to those identified in response to question no. 2, does the Administration believe that those additional countries have the legal right to send representatives to meetings of the Standing Consultative Commission and otherwise participate in the administration of the ABM Treaty? .

4. To the extent that the list of countries identified in response to question no. 1 includes countries in addition to those identified in response to question no. 2, why are those additional countries not currently participating in the Standing Consultative Commission? Are those additional countries aware that, in the view of the United States Government, they are parties to and are bound by the ABM Treaty? On what date were they informed of this fact by the United States Government?

5. To the extent that the list of countries identified in response to question no. 2 includes countries in addition to those identified in response to question no. 1, what is the legal justification for the participation of those additional countries in the Standing Consultative Commission?

6. Does the Administration currently intend to conclude with Russia, Ukraine, Kazakhstan, Belarus, or any other of the newly independent states an agreement or agreements regarding ABM Treaty succession?

7. In the event that the Senate fails to act on an agreement submitted to it by the Administration regarding ABM Treaty succession, what countries in addition to the United States will, in the view of the Administration, be parties to the ABM Treaty?

8. In the event that the Senate votes to reject an agreement submitted to it by the Administration regarding ABM Treaty succession, what countries in addition to the United States will, in the view of the Administration, be parties to the ABM Treaty?

9. Apart from the consequences that would flow from Senate approval of, rejection of, or inaction on an agreement submitted to it by the Administration regarding ABM Treaty succession, what other developments, if any, may lead to a change in the list of countries that are today parties to the ABM Treaty?

10. Apart from the consequences that would flow from Senate approval of, rejection of, or inaction on an agreement submitted to it by the Administration regarding ABM Treaty succession, what other developments, if any, may lead to a change in the list of countries legally entitled to send representatives to meetings of the Standing Consultative Commission and otherwise participate in the administration of the ABM Treaty?

I appreciate your cooperation in this matter.

With warmest regards,

Sincerely,

BENJAMIN A. GILMAN, *Chairman.*

THE WHITE HOUSE

WASHINGTON

NOVEMBER 21, 1997

The Honorable BENJAMIN A. GILMAN, *Chairman,*
Committee on International Relations,
House of Representatives,
Washington, DC.

DEAR MR. CHAIRMAN:

Thank you for your letter concerning the Anti-Ballistic Missile (ABM) Treaty succession arrangements. As you know, after discussion between our staffs, we deferred this formal response to your letter pending completion of the ABM-related agreement, including the Memorandum of Understanding (MOU) on ABM Treaty succession. These documents were signed on September 26, 1997, and mark, along with the START II documents that were signed the same day, a significant step forward. The MOU, as well as the agreements relating to the demarcation between theater and strategic ballistic missile defense systems, will be provided to the Senate for its advice and consent. Thus, the Congressional concerns that you raised related to approval of these agreements have been directly addressed.

You raised a number of questions on ABM Treaty discussion generally. Let me make a few background points. The MOU on succession was the result of detailed negotiations spanning several years. When the USSR dissolved at the end of 1991, it became necessary to reach agreement as to which former Soviet states would collectively assume its rights and obligations under the Treaty (which clearly continued in force by its own terms). The United States took the view that, as a general principle, agreements between the United States and the USSR that were in force at the time of the dissolution of the Soviet Union would be presumed to continue in force as to the former Republics. It became clear, however, particularly in the area of arms control, that a case-by-case review of each agreement was necessary.

In dealing with matters of succession, a key U.S. objective has been to preserve the substance of the origina1 treaty regime as closely as possible. This was true with respect to the elaboration of the MOU as well. Accordingly, the MOU works to preserve the original object and purpose of the Treaty. For example, it restricts the four successor states to only those rights held by the former Soviet Union by limiting them collectively to no more than 100 interceptors on 100 launchers at a single ABM deployment area and precluding the transfer of ABM systems and components to states that are not Party to the Treaty. Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972.

Our willingness to work with key successor states, in addition to Russia, on strategic arms control issues has served, and will continue to serve, U.S. national security interests. Under the Lisbon Protocol to the START I Treaty, Belarus, Kazakhstan, Russia and Ukraine, the successor states on whose territory, all strategic offensive arms of the former Soviet Union were based and all declared START-related facilities were located, assumed the rights and obligations of the former Soviet Union under the START I Treaty. The Protocol also obligated Belarus, Kazakhstan, and Ukraine to adhere to the Treaty on the Nonproliferation of Nuclear Weapons. Both the Bush Administration and Clinton Administration engaged in major diplomatic initiatives to ensure implementation of the Lisbon Protocol, especially with respect to the removal of all nuclear warheads from Ukraine, Belarus, and Kazakhstan, the accession at these successor states to the Nonproliferation Treaty, and the entry into force of START I.

For certain key successor states to the former Soviet Union, ABM Treaty succession was, and remains, a priority issue. Ukraine, in particular, has made clear to us that it considers Ukraine's legal status under the ABM Treaty to be the same as under the INF Treaty (to which it is considered a Party) and that, in its view, its succession status with regard to both Treaties should be the same.

There are many complex factors in our strategic relationship with the former Soviet states. Had we been unwilling to engage with states in addition to Russia on key arms control agreements (START, INF and ABM), it is unlikely that we would have achieved the kind of comprehensive resolution of issues related to the disposition of strategic assets that has been achieved. A change in course at this time that would exclude key successor states from the ABM succession formula could place at risk continued progress on strategic arms and other nuclear matters.

Since the last review of the ABM Treaty in 1993, (required every five years by the terms of the Treaty, Belarus, Kazakhstan, Russia, and Ukraine—each of which have ABM Treaty-related assets on its territory—have been the only former Soviet republics that have participated in the ABM Treaty-related discussions held in the Standing Consultative Commission (SCC). While the other eight former Soviet republics have been informed of SCC sessions, none has participated, and three—Armenia, Azerbaijan, and Moldova—have expressed their lack of interest in being considered as Parties to the Treaty. Indeed, it became clear over the past four years of negotiations that, in addition to Russia, the former Soviet republics of Belarus, Kazakhstan, and Ukraine have substantial interest in the specific subject matter of the Treaty. For these reasons, prior to the signing of the MOU, the United States

notified the other eight new independent states of our intentions to bring the succession issue to closure and to sign the MOU with Belarus, Kazakhstan, the Russian Federation, and Ukraine, recognizing that these four successor states, along with the United States, constitute the Parties to the ABM Treaty.

Upon its entry into force, the MOU will confirm the four former Soviet states participating in the SCC as the successor states to the Soviet Union for purposes of the Treaty. This does not constitute a substantive modification of rights and obligations under the Treaty; rather, it is a recognition of the status of those former Soviet republics in light of the dissolution of the USSR. As a practical matter, the recently signed SCC regulations make clear that the increased SCC participation will be structured in a way similar to, and having the same effect as, that which has been successful for the United States in working with Belarus, Kazakhstan, Russia and Ukraine in implementing the START and INF Treaties.

As to your question regarding the possibility that the Senate might fail to act upon or might reject the MOU on succession, we believe that the case for all the ABM-related agreements, including the MOU on succession, will prevail on its merits. We further believe that the package of agreements serves U.S. national security and foreign policy objectives. If, however, the Senate were to fail to act or to disagree and disapprove the agreements, succession arrangements will simply remain unsettled. The ABM Treaty itself would clearly remain in force.

We appreciate this opportunity to clarify the record in this area and look forward to future opportunities to communicate and consult with you on these matters.

Sincerely,

BILL CLINTON.

U.S. CONGRESS,
WASHINGTON, DC, *March 3, 1998.*

THE PRESIDENT
The White House
Washington, DC.

DEAR MR. PRESIDENT:

We appreciate your response of November 21, 1997, to Chairman Gilman's letter of June 16, 1997, regarding the proposed multilateralization of the Anti-Ballistic Missile (ABM) Treaty. We appreciate as well your making Administration lawyers available to meet with congressional staff on January 30, 1998, to elaborate on your November 21st response.

The most important legal question that arises in connection with multilateralization of the ABM Treaty is the first question posed in Chairman Gilman's letter: In the view of the Administration, what countries in addition to the United States are today parties to the ABM Treaty?

Your response to this question appears to be: Until an agreement on succession to the ABM Treaty comes into force, the identity of the other party or parties to the ABM Treaty is "unsettled." Indeed, when asked on January 30th whether Russia, Ukraine, Uzbekistan, or any other country that emerged from the Soviet Union is today prohibited by the ABM Treaty from deploying an ABM system at more than one site, Administration lawyers stated repeatedly that it is "unclear" whether any of these countries is so bound.

The Administration's response is profoundly disturbing. If it is unclear as a matter of law whether Russia or any other country that emerged from the Soviet Union is today bound by the ABM Treaty, then it also should be unclear whether the United States is so bound. Yet the Administration has insisted for years that the United States remains fully bound by the ABM Treaty.

With regard to ballistic missile defense, for example, the Administration has argued consistently that the United States should not test or deploy certain systems that could provide our nation highly effective protection against ballistic missile attack because such systems would violate our nation's obligations under the ABM Treaty. It now appears, however, that the Administration views the United States, at least for the time being, as the only country that is clearly subject to those obligations.

It is obvious to us, however, that under basic principles of international law a treaty requires more than one state party in order to give rise to binding legal obligations. If the Administration is unable to identify any country in addition to the United States that is today clearly bound by the ABM Treaty, then there is no country that the United States can look to today to uphold the obligations previously imposed on the Soviet Union by the Treaty, and no country that today is entitled to complain if the United States fails to uphold the Treaty.

If, in fact, the Administration does not consider the United States to be the only country that is today clearly bound by the ABM Treaty, we would appreciate your identifying for us the other country (or countries) that is today party to—and bound by—the Treaty. In the absence of such clarification, we will have no choice but to conclude that the ABM Treaty has lapsed until such time as the Senate approves a succession agreement reviving the Treaty.

Thank you for your attention to this inquiry.

With best wishes,

Sincerely,

BENJAMIN A. GILMAN, *Chairman,*
Committee on International Relations.

JESSE HELMS, *Chairman,*
Committee on Foreign Relations.

THE WHITE HOUSE

WASHINGTON

MAY 21, 1998

The Honorable JESSE HELMS, *Chairman,*
Committee on Foreign Relations,
U.S. Senate,
Washington, DC.

DEAR MR. CHAIRMAN:

Thank you for your letter concerning the Anti-Ballistic Missile (ABM) Treaty succession arrangements. As I said in my letter of November 21, 1997, the Administration will provide to the Senate for its advice and consent the Memorandum of Understanding (MOU) on ABM Treaty succession, which was signed on September 26, 1997. Moreover, the MOU will settle ABM Treaty succession. Upon its entry into force, the MOU will confirm Belarus, Kazakhstan, Russia, and Ukraine as the successor states to the Soviet Union for purposes of the Treaty and make clear that only these four states, along with the United States, are the ABM Treaty Parties.

In your letter of March 3, you state that if the Administration is unable to identify any country in addition to the United States that is clearly bound by the Treaty, then you would have no choice but to conclude that the Treaty has lapsed until such time as the Senate approves a succession agreement reviving the Treaty.

Following the dissolution of the Soviet Union, ten of the twelve states of the former Soviet Union initially asserted a right in a Commonwealth of Independent States resolution, signed on October 9, 1992, in Bishkek, to assume obligations as successor states to the Soviet Union for purposes of the Treaty. Only four of these states have subsequently participated in the work of the Standing Consultative Commission (SCC), and none of the other six has reacted negatively when we informed each of them that, pursuant to the MOU, it will not be recognized as an ABM successor state. A principal advantage of the Senate's approving the MOU is that the MOU's entry into force will effectively dispose of any such claim by any of the other six states.

In contrast, Belarus, Kazakhstan and Ukraine each has ABM Treaty-related assets on its territory; each has participated in the work of the SCC; and each has affirmed its desire to succeed to the obligations of the former Soviet Union under the Treaty. Thus, a strong case can be made that, even without the MOU, these three states are Parties to the Treaty.

Finally, the United States and Russia clearly are Parties to the Treaty. Each has reaffirmed its intention to be bound by the Treaty; each has actively participated in every phase of the implementation of the Treaty, including the work of the SCC; and each has on its territory extensive ABM Treaty-related facilities.

Thus, there is no question that the ABM Treaty has continued in force and will continue in force even if the MOU is not ratified. However, the entry into force of the MOU remains essential. As I pointed out in my letter of November 21, the United States has a clear interest both in confirming that these states (and only these states) are bound by the obligations of the Treaty, and in resolving definitively the issues about ABM Treaty succession that are dealt with in the MOU. Without the MOU, ambiguity will remain about the extent to which states other than Russia are Parties, and about the way in which ABM Treaty obligations apply to the successors to the Soviet Union. Equally important, maintaining the viability of the

ABM Treaty is key to further reductions in strategic offensive forces under START II and START III.

I appreciate this further opportunity to clarify the record in this area.

Sincerely,

BILL CLINTON.

U.S. CONGRESS,
COMMITTEE ON INTERNATIONAL RELATIONS,
WASHINGTON, DC, *August 14, 1998.*

THE PRESIDENT
The White House
Washington, DC.

DEAR MR. PRESIDENT:

Thank you for your letters of November 21, 1997 and May 21, 1998, responding to inquiries from me and Chairman Helms about succession to the Anti-Ballistic Missile (ABM) Treaty. As stated in our letter to you of March 3, 1998, the most important question that arises in this connection is the following: In the view of the Administration, what countries in addition to the United States are today parties to the ABM Treaty?

I understand from your letter of May 21st that the Administration's answer to this question is that Russia "clearly" is a party to the Treaty, and that with regard to Belarus, Kazakhstan, and Ukraine, "a strong case can be made that . . . these three states are Parties to the Treaty." In other words, you draw a distinction between Russia on the one hand and Belarus, Kazakhstan, and Ukraine on the other, and believe that Russia succeeded automatically to the USSR's obligations under the ABM Treaty, while Belarus, Kazakhstan, and Ukraine may not have succeeded automatically to those obligations. But you do not rule out the possibility that, upon further consideration, the Administration may conclude that Belarus, Kazakhstan, and Ukraine automatically succeeded as well.

This answer raises several additional questions that are set forth below:

1. To the degree that Belarus, Kazakhstan, and Ukraine may have succeeded automatically under international law to the obligations of the USSR under the ABM Treaty, would that succession result in a series of *bilateral* ABM Treaties (U.S.-Belarus, U.S.-Kazakhstan, and U.S.-Ukraine, as well as U.S.-Russia), or one *multilateral* ABM Treaty to which all of these countries are parties?

2. If the response to the previous question is that the result of automatic succession by Belarus, Kazakhstan, and Ukraine would be one multilateral ABM Treaty, please identify the historical precedents, if any, for such a succession. In other words, please describe any other bilateral treaties that, upon the dissolution of one of the parties to the treaty, were converted automatically by operation of international law into multilateral treaties involving two or more of the successor states.

3. Will Belarus, Kazakhstan, and Ukraine participate in future meetings of the Standing Consultative Commission (SCC) and in the next five-year review conference of parties to the ABM Treaty?

4. If the response to the previous question is that Belarus, Kazakhstan, and Ukraine will participate in future SCC meetings and the next five-year review conference, what will be the legal basis for such participation? To the degree that such participation does not rest on a conclusion that Belarus, Kazakhstan, and Ukraine succeeded automatically under international law to the ABM Treaty, please explain why such participation is not inconsistent with (1) Article IX(3) of the Memorandum of Understanding on Succession to the ABM Treaty of September 26, 1997, and (2) your certification to the Congress of May 15, 1997, in accordance with Condition 9 of the Senate resolution advising and consenting ratification of the CFE Flank Agreement (Treaty Doc. No. 105–5).

I look forward to your prompt response to these questions.

With warmest regards,

Sincerely,

BENJAMIN A. GILMAN, *Chairman.*

U.S. SENATE,
WASHINGTON, DC, *October 5, 1998.*

THE PRESIDENT
The White House
Washington, DC.

DEAR MR. PRESIDENT:

Your May 21, 1998, letter regarding the status of the 1972 Anti-Ballistic Missile (ABM) Treaty is clearly at odds with historical fact, your administration's past representations regarding this issue, and the Memorandum of Understanding (MOU) on succession itself.

Moreover, your letter seeks to repudiate your pledge to the Senate, made in a treaty-related certification on May 14, 1997, that you would respect your Constitutional obligation to seek the advice and consent of the Senate for any agreement adding parties to the ABM Treaty, or changing its geographic scope.

If your administration persists in the assertions made in the letter of May 21, 1998, the validity of the ratification of the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe of November 19, 1990, also known as the CFE Flank Agreement, will be called into question. Your recent letter directly contravenes your certification of May 14, 1997, raising the inescapable conclusion that the instrument of ratification for the CFE Flank Agreement deposited on behalf of the United States is defective under U.S. constitutional law. Failure to reconsider your position not only will make further cooperation between Congress and your Administration on arms control matters difficult; it will undermine both the credibility of your administration, and of the United States, in the international affairs of the nation.

In a November 21, 1997 letter to Representative Gilman, and in accompanying briefings by Administration lawyers, your administration stated that ABM Treaty succession arrangements were "unsettled" and would remain so in the absence of a new agreement (which you certified you would submit for Senate approval). Moreover, your letter to Mr. Gilman takes note of no distinction between the legal status of Russia and that of the other states proposed as ABM Treaty parties. Indeed, you stated in that letter:

> Neither a simple recognition of Russia as the sole ABM successor (which would have ignored several former Soviet states with significant ABM interests) nor a simple recognition of all NIS states as full ABM successors would have preserved fully the original purpose and substance of the Treaty, as approved by the Senate in 1972.

However, in your May 21, 1998, letter, you reversed course by asserting that "the United States and Russia clearly are parties to the Treaty." Russia's desire to become a party, its participation in the treaty's activities, and the presence of "ABM-Treaty related facilities"—a newly-invented term found nowhere in the ABM Treaty—on its territory are cited as reasons for this conclusion. You also decline to identify Belarus, Kazakhstan and Ukraine as parties, although you assert that "a strong case can be made that even without the MOU, these three states are Parties to the Treaty," citing substantially the same factors that supposedly make Russia a party.

Mr. President, there is *no basis* for any distinction between the legal status of Russia and that of the other states you mention. In a briefing to congressional staff on January 30, 1998, Administration lawyers were asked directly whether Russia was the only other clear party to the Treaty. They stated definitively that this was not the case. Numerous Administration representations and public statements, including the State Department's publication of "Treaties in Force," have been consistent in making no legal distinction among the former Soviet states who are potential successors to the ABM Treaty. Article VIII of the MOU itself notes that regulations of the Standing Consultative Commission "shall reflect the equal legal status of the Parties." Further, we are confident that the record of negotiation on the succession issue is replete with expressions by the United States of the view that the potential successors to the Soviet Union all have the same legal status. In short, your recent letter has no basis in historical fact.

Moreover, your May 21, 1998, assertion that "a strong case could be made" that four countries could today be parties to the treaty is directly contradicted by Article I of the MOU, which states that the United States, Belarus, Kazakhstan, Ukraine, and Russia "upon entry into force of this Memorandum, shall constitute the Parties to the Treaty." Very clearly, the entry-into-force of the MOU is the triggering event—and one that has not yet occurred—by which these states may become parties to the ABM Treaty. In short, none of the potential successors were identified as parties to the ABM Treaty during the period of negotiation, nor at any time pre-

ceding your certification. Nothing has transpired since that time that would constitute formal recognition of any state as a party to the ABM Treaty.

Your assertion that Russia is a Party to the ABM Treaty, and your claim that the three other states might be, imply that the issue of the ABM treaty's status is fundamentally settled. Mr. President, this matter is most definitely *not* settled unless and until the Senate approves the MOU, or a similar agreement, through the exercise of the advice and consent powers assigned to it by the Constitution. It is the Senate's constitutional responsibility, and its duty, to advise on and consent to treaty arrangements made on behalf of the United States. Any such arrangements are invalid without the Senate's consent.

Consent was given to the CFE Flank Agreement on condition that you would certify to the Congress of the United States that you would submit for the advice and consent of the Senate:

> . . . any international agreement (i) that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or (ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national territory" as used in Article VI and Article IX of the ABM Treaty.

On May 14, 1997, you made this certification.

Since it is impossible to resolve the ABM Treaty's status without meeting one of these two conditions, your certification put to rest any question about whether ABM Treaty succession requires the advice and consent of the Senate. Your assertion now that Russia, and perhaps Belarus, Kazakhstan and Ukraine are parties to the ABM Treaty "even without the MOU" is, a repudiation of your certification. It implies that Senate advice and consent is not only unnecessary, but also irrelevant, and that these states may already have succeeded to the Treaty without Senate approval.

The Senate's advice and consent powers are not ceremonial or pro forma. They do not exist for the convenience of the executive branch in order to clarify "ambiguity," as your letter states. They are the powers by which the legislative branch—and the legislative branch alone—decides whether, how, and with whom the United States is bound by treaty.

In light of the numerous and irreconcilable inconsistencies between your letters of November 21, 1997, and May 21, 1998, the internal contradictions within your most recent letter, the disregard for the negotiating record and historical fact, and other contrivances without basis in the treaty, we have no choice but to conclude that the ABM Treaty did not survive the dissolution of the Soviet Union. Accordingly, it is our position that the ABM Treaty has lapsed and is of no force and effect unless the Senate approves the MOU, or some similar agreement, to revive the treaty.

We strongly urge that you reconsider your position of May 21, 1998, and reaffirm your pledge of more than a year ago.

Sincerely,

TRENT LOTT
JESSE HELMS
DON NICKLES
CONNIE MACK
LARRY E. CRAIG
PAUL COVERDELL
JON KYL
BOB SMITH

THE WHITE HOUSE

WASHINGTON

DECEMBER 17, 1998

The Honorable JESSE HELMS, *Chairman,*
Committee on Foreign Relations,
U.S. Senate,
Washington, DC.

DEAR MR. CHAIRMAN:

Thank you for your letter concerning the Anti-Ballistic Missile (ABM) Treaty succession arrangements. As I said in my two previous letters on this subject, the

Memorandum of Understanding (MOU) on ABM Treaty succession, which was signed on September 26, 1997, will be provided to the Senate for its advice and consent.

While I respect the fact that the MOU will not enter into force without the advice and consent of the Senate, there is no question the ABM Treaty has continued in force following the dissolution of the Soviet Union. If the Senate were to fail to approve the MOU, ambiguity would remain about the extent to which states other than Russia are Parties; however, the ABM Treaty would continue in force.

The United States has a clear interest in resolving definitively the issues about ABM Treaty succession that are dealt with in the MOU. I am confident that any differences of views regarding the MOU, or additional questions you may have, will be debated fully as the Senate considers the MOU. In the interim, I suggest our staffs continue their dialogue regarding the technical legal aspects of ABM Treaty succession.

Sincerely,

BILL CLINTON.

PRESIDENTIAL MESSAGE 35 (MAY 14, 1997)

TO THE CONGRESS OF THE UNITED STATES:

In accordance with the resolution of advice and consent to ratification on the Document Agreed Among the States Parties to the Treaty on Conventional Armed Forces in Europe of November 19, 1990 ("the CFE Flank Document"), adopted by the Senate of the United States on May 14, 1997, I hereby certify that:

In connection with Condition (2), Violations of State Sovereignty, the United States and the governments of Belgium, Canada, Denmark, France, Germany, Greece, Iceland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Turkey and the United Kingdom have issued a joint statement affirming that (i) the CFE Flank Document does not give any State Party the right to station (under Article IV, paragraph 5 of the Treaty) or temporarily deploy (under Article V, paragraphs 1 (B) and (C) of the Treaty) conventional arms and equipment limited by the Treaty on the territory of other States Parties to the Treaty without the freely expressed consent of the receiving State Party; (ii) the CFE Flank Document does not alter or abridge the right of any State Party under the Treaty to utilize fully its declared maximum levels for conventional armaments and equipment limited by the Treaty notified pursuant to Article VII of the Treaty; and (iii) the CFE Flank Document does not alter in any way the requirement for the freely expressed consent of all States Parties concerned in the exercise of any reallocations envisioned under Article IV, paragraph 3 of the CFE Flank Document.

In connection with Condition (6), Application and Effectiveness of Senate Advice and Consent, in the course of extension of the period of provisional application of the CFE Flank Document or a change of a minor administrative or technical nature; (ii) secure the adoption of a new United States obligation under, or in relation to, the CFE Treaty or the CFE Flank Document, unless such obligation is solely of a minor administrative or technical nature; or (iii) secure the provision of assurances, or endorsement of a course of action or a diplomatic position, inconsistent with the principles and policies established under conditions (1), (2), and (3) of the resolution of advice and consent to ratification of the CFE Flank Document.

In connection with Condition (7), Modifications of the CFE Flank Zone, any subsequent agreement to modify, revise, amend or alter the boundaries of the CFE flank zone, as delineated by the map entitled "Revised CFE Flank Zone" submitted to the Senate on April 7, 1997, shall require the submission of such agreement to the Senate for its advice and consent to ratification, if such changes are not solely of a minor administrative or technical nature.

In connection with Condition (9), Senate Prerogatives on Multilateralization of the ABM Treaty, I will submit to the Senate for advice and consent to ratification any international agreement (i) that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or (ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national territory" as used in Article VI and Article IX of the ABM Treaty.

In connection with Condition (11), Temporary deployments, the United States has informed all other States Parties to the Treaty that the United States (A) will continue to interpret the term "temporary deployment," as used in the Treaty, to mean a deployment of severely limited duration measured in days or weeks or, at most, several months, but not years; (B) will pursue measures designed to ensure that any

State Party seeking to utilize the temporary deployments provision of the Treaty will be required to furnish the Joint Consultative Group established by the Treaty with a statement of the purpose and intended duration of the deployment, together with a description of the object of verification and the location of origin and destination of the relevant conventional armaments and equipment limited by the Treaty; and (C) will vigorously reject any effort by a State Party to use the right of temporary deployment under the Treaty (i) to justify military deployments on a permanent basis; or (ii) to justify military deployments without the full and complete agreement of the State Party upon whose territory the armed forces or military equipment of another State Party are to be deployed.

WILLIAM J. CLINTON

THE WHITE HOUSE,
May 14, 1997.

PRESIDENTIAL MESSAGE 36 (MAY 14, 1997)

TO THE SENATE OF THE UNITED STATES:

I am gratified that the Senate has given its advice and consent to the ratification to the CFE Flank Document and I look forward to the entry into force of this important agreement. It will reaffirm the integrity of one of the CFE Treaty's core provisions and will facilitate progress on CFE adaptation and, thus, NATO enlargement, key elements for advancing United States and European security.

I must, however, make clear my view of several of the Conditions attached to the resolution of advice and consent to ratification, including Conditions 2, 3, 4, 6, 7, 9 and 11. These Conditions all purport to direct the exercise of authorities entrusted exclusively to the President under our Constitution, including for the conduct of diplomacy and the implementation of treaties. The explicit limitation on diplomatic activities in Condition 3 is a particularly clear example of this point. As I wrote the Senate following approval of the Chemical Weapons Convention, a condition in a resolution of ratification cannot alter the allocation of authority and responsibility under the Constitution. I will, therefore, interpret the Conditions of concern in the resolution in a manner consistent with the responsibilities entrusted to me as President under the Constitution. Nevertheless, without prejudice to my Constitutional authorities, I will implement the Conditions in the resolution.

Condition (9), which requires my certification that any agreement governing ABM Treaty succession will be submitted to the Senate for advice and consent, is an issue of particular concern not only because it addresses a matter reserved to the President under our Constitution, but also because it is substantively unrelated to the Senate's review of the CFE Flank Document. It is clearly within the President's authorities to determine the successor States to a treaty when the original Party dissolves, to make the adjustments required to accomplish such succession, and to enter into agreements for this purpose. Indeed, throughout our history the executive branch has made a large number of determinations concerning the succession of new States to the treaty rights and obligations of their predecessors. The ABM Succession MOU negotiated by the United States effectuated no substantive change in the ABM Treaty requiring Senate advice and consent. Nonetheless, in light of the exceptional history of the ABM Treaty and in view of my commitment to agree to seek Senate approval of the Demarcation Agreements associated with the ABM Treaty, I have, without prejudice to the legal principles involved, certified, consistent with Condition (9), that I will submit any agreement concluded on ABM Treaty succession to the Senate for advice and consent.

WILLIAM J. CLINTON

THE WHITE HOUSE,
May 14, 1997.

CONDITION #9 OF THE EXECUTIVE REPORT 105–1, RESOLUTION OF RATIFICATION FOR THE FLANK DOCUMENT TO THE CONVENTIONAL ARMED FORCES IN EUROPE TREATY

(9) SENATE PREROGATIVES ON MULTILATERALIZATION OF THE ABM TREATY.—

(A) FINDINGS.—THE SENATE MAKES THE FOLLOWING FINDINGS:

(i) Section 232 of the National Defense Authorization Act for Fiscal Year 1995 (Public Law 103–337) states that "the United States shall not be bound by any international agreement entered into by the President that would substantively modify the ABM Treaty unless the

agreement is entered pursuant to the treaty making power of the President under the Constitution".

(ii) The conference report accompanying the National Defense Authorization Act for Fiscal Year 1997 (Public Law 104–201) states "...the accord on ABM Treaty succession, tentatively agreed to by the administration, would constitute a substantive change to the ABM Treaty, which may only be entered into pursuant to the treaty making power of the President under the Constitution".

(B) CERTIFICATION REQUIRED.—Prior to the deposit of the United States instrument of ratification, the President shall certify to the Senate that he will submit for Senate advice and consent to ratification any international agreement—

(i) that would add one or more countries as States Parties to the ABM Treaty, or otherwise convert the ABM Treaty from a bilateral treaty to a multilateral treaty; or

(ii) that would change the geographic scope or coverage of the ABM Treaty, or otherwise modify the meaning of the term "national territory" as used in Article VI and Article IX of the ABM Treaty.

(C) ABM TREATY DEFINED.—For the purposes of this resolution, the term "ABM Treaty" means the Treaty Between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic Missile Systems, signed in Moscow on May 26, 1972, with related protocol, signed in Moscow on July 3, 1974.

Condition 9: Senate prerogatives on multilateralization of the ABM Treaty

Condition (9) protects the Senate's constitutional prerogatives by requiring the President to agree that any agreement to multilateralize the 1972 Anti-Ballistic Missile Treaty would be submitted to the Senate for advice and consent since any such agreement would, by definition, substantively alter the rights and obligations of the United States and others under the ABM Treaty.

This condition builds upon a clear and unambiguous legislative history. The Fiscal Year 1995 Defense Authorization Act requires that any agreement that "substantively modifies" the ABM Treaty must be submitted to the Senate for advice and consent to ratification. The conference report accompanying the fiscal year 1997 Defense Authorization Act states that any agreement to add signatories to the ABM Treaty would constitute a substantive change to the treaty requiring Senate advice and consent.

The majority of the committee views multilateralization of the ABM Treaty as a substantive modification requiring Senate advice and consent for a variety of reasons. (This was the one condition with which questions were raised.) The committee noted with interest a June 6, 1996 study by the American Law Division of the Library of Congress. While the study concludes that "an apportionment of the rights and obligations of the USSR under the ABM Treaty to its successor states would not, in itself, seem to require Senate participation," it does not contemplate just how those rights and obligations are to be apportioned. Indeed, the study does not seem even to take into account the actual Memorandum of Understanding relating to ABM Treaty successorship.

Accordingly, the sentence preceding the June 6, 1996, study's conclusion is highly relevant, stating that "a multilateralization agreement could include matters that would alter the substance of the ABM Treaty and require Senate advice and consent." Thorough analysis of how the addition of new States Parties to the ABM Treaty would alter its functioning reveals a number of problems which must be addressed by the Senate.

First, new Parties to the ABM Treaty cannot be added without specially-negotiated, limited rights, but there is no way to do this within the existing provisions of the treaty. Yet such is necessary if the United States does not want to entitle each new successor to an ABM-system and ABM test-ranges. Thus the multilateralization agreement must add or alter provisions in the current treaty to ensure that ABM capabilities on the territory of the Soviet Union are not multiplied.

Second, multilateralization inevitably will change the amount of territory covered by the ABM Treaty. In so doing, it will also change the geographic scope and coverage of the ABM Treaty. Since several fundamental limitations in the treaty (such as location of ABM radars) are defined in terms of "national territory," any change to this definition changes the basic limitation in the treaty. For example, Russia continues to operate large-phased array radars which used to be "on the periphery" of the Soviet Union (as required by Article VI(b)) but which are now in Ukraine, Belarus, Latvia, and Kazakhstan. A new agreement would conflict with ABM pe-

riphery requirements if Russia (or another country) were suddenly able to build a new string of radars along its borders. But if Russia is forbidden to do this, then the agreement must necessarily "grandfather" Russia's continued owning and operating of radars in other countries. By providing Russia extraterritorial treaty-rights and a military presence in another country, this agreement would most certainly constitute a significant change to the treaty (and a major legal/political issue for countries which want Russian troops withdrawn from their territories).

Further, if a country of the former Soviet Union opts not to join the multilateralization agreement, the committee is concerned to know whether they would be free (in the future) to develop ABM systems. If so, this too significantly alters the geographic coverage of the treaty.

Third, multilateralization of the ABM Treaty cannot be done without permanently, and significantly, altering United States rights under the treaty. New Parties doubtless will be given an official say at the Standing Consultative Commission (SCC), which interprets and administers the ABM Treaty. Under the bilateral ABM Treaty, the United States may take actions as approved through bilateral agreements. Yet with multilateralization, the United States presumably will no longer have this ability. Expanding the bilateral consensus arrangement into a multilateral consensus process means that, in the future, one country (such as Belarus) could effectively block U.S. actions or demand U.S. concessions even if Russia and the others agreed with the United States. A second alternative would be to alter the SCC to operate by means of a majority vote. Yet, if this occurs the United States could find itself overruled on matters where currently it cannot be.

The history of succession agreements to the various treaties concluded between the United States and the Soviet Union further supports the case for Senate consideration of any ABM successorship document. The United States has engaged in a case-by-case review of treaty successorship issues. In the one case of the INF Treaty, where the treaty carried a negative obligation—namely to not possess any intermediate-range nuclear missiles—the treaty could be multilateralized without Senate advice and consent. No treaty terms were altered and the United States incurred no modification or new treaty rights or obligations. Thus advice and consent was not necessary.

Multilateralization of the START Treaty under the Lisbon Protocol, on the other hand, required Senate advice and consent. In this case, multilateralization had clear implications for the treaty's text and object and purpose. The Lisbon Protocol determined the extent to which countries other than Russia would be allowed to possess strategic nuclear weapons. Similarly, ratification of the Lisbon Protocol also effectively determined successorship questions to the Treaty on Non-Proliferation of Nuclear Weapons (NPT). Under the protocol, Belarus, Kazakhstan, and Ukraine agreed to a legally-binding commitment to join the NPT as non-nuclear weapons states. Finally, the Senate specifically considered the question of multilateralization of the treaty on Conventional Armed Forces in Europe (CFE) under Condition (5) of the resolution of ratification for the CFE Treaty.

Moreover, the ABM Treaty specifically provides that any amendment to the treaty be considered under Senate advice and consent procedures. Article 14 of the Treaty states that "agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty." In other words, An amendment is to be adopted through the ratification process.

Under Article II, section 2, clause 2 of the Constitution, the Senate holds a coequal treaty making power. John Jay made one of the most cogent arguments in this respect, noting that "of course, treaties could be amended, but let us not forget that treaties are made not by only one of the contracting parties, but by both, and consequently that as the consent of both was essential to their formation at first, so must it ever afterwards be to alter * * * them."

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