

in terms of the range and the maneuverability. Our pilots are better, but the equipment is not as good. The same is true with artillery capability. The Paladin is outgunned in terms of range and fire by almost everything our potential adversaries have. It is not just that we do not have a missile defense in this country when the threat is every bit as real as 1962 when everybody panicked. We have a real job in trying to do an adequate job defending this country with the defense authorization bill that will be forthcoming.

Tonight we have our first meeting. We had subcommittee meetings today, and tonight we have our first meeting. I hope this does not end up being a partisan bill. People recognize defending America has to be the No. 1 priority.

EXPORT ADMINISTRATION ACT OF 2001—Continued

Mr. INHOFE. Mr. President, on the bill before the Senate, it is my understanding some people are trying to work out an agreement, but I rise in opposition to the Export Administration Act. A lot of people state the purpose of this bill is to protect the national security. We are kidding ourselves. The real objective of those who wrote this bill and who actively support it is to promote trade and transfers of the very dual-use high technologies which, in the wrong hands, pose a serious threat to national security. Their emphasis is such liberalized trade will be good for the economy, but we have to ask: At what price?

This debate does not occur in a vacuum. We have the record of the last 8 years when we had an administration which deliberately ignored and undermined our Nation's cold war system of export controls designed to protect national security. Their attitude was that the cold war was over so there was no real threat out there. Why worry about technology transfers? Why worry about rogue state missile systems and weapons programs? This flies in the face of everything that is logical.

We have had very serious problems in hearing things taking place in China. During the elections in Taiwan when there was a notion we might go in there and try to intervene, they were trying to intimidate the elections by firing missiles in the Taiwan Straits. Later on the second highest ranking Chinese military officer said: We are not concerned about America coming to the aid of Taipei because they would rather defend Los Angeles.

Then we had the Defense Minister of China saying, war with America is inevitable, which he has repeated 3 times, once in the last 8 months. We have a serious problem out there and we have to recognize that.

My fear is a lot of this technology is going to go to countries such as China, and specifically China.

I will review the actions of the Clinton administration. The first thing they did in 1994, shortly after taking office, they ended COCOM, the Coordinating Committee on Multinational Export Controls. This was put together so we and our allies could all agree not to export high technology that could get in the hands of the wrong people. That system was set in place, and in 1994 the administration ended that.

The administration, shortly after that in 1996, took control of the authority on export licenses out of the hands of the State Department and put it in the Commerce Department. Later they recognized it was wrong, the public recognized it, and after the Cox report they moved it back to the State Department.

The granting of waivers for missile defense technologies—we all remember the significant problem we had when the administration signed a waiver to allow China to have the guidance technology produced by the Loral Corporation, owned by the Hughes Corporation, that allow the Chinese to have the guided-missile technology that gave them more control over where the missiles might go, even if one might be coming toward the United States. They allowed transfer of high-performance computers, which ended up helping improve Chinese military systems.

The theft of our nuclear secrets, at that time we had 16 nuclear compromises. Eight were before the last administration; eight were during the Clinton administration. We discovered that of the eight before the Clinton administration, one went back as far as the Carter administration, which was discovered by this country when a walk-in informant came to a CIA office with the documentation that China had that information from those other compromises from the previous administration. Yet it was covered up until the Cox report came out 4 years later and we realized China had virtually everything.

The main thing that concerns me is we have a threat out there today. We have been guilty of allowing our nuclear secrets to get into the hands of the wrong people. Until this is under control, I think it would be premature, in my opinion, to pass, to implement those changes recommended in the Export Administration Act under consideration today.

I yield the floor and suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. REID. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. REID. Mr. President, we have been here now since 2:15. Senator

LEAHY spoke in morning business about Northern Ireland, which was very lucid and understandable. I appreciate his remarks. We had the Senator from Oklahoma, Mr. INHOFE, talk for 5 minutes or so about this bill directly and indirectly. We have a few people who oppose this legislation, but they literally are holding up not only what is going on in the Senate but what we need to do for this country.

We have eight appropriations bills that need to be passed. We could be working on those. We have the education bill and some things we still need to finalize. We have conference reports. We have lots of things that need to be done. There is a hue and cry that we need to get to the Defense bill. We need to do Defense appropriations. We can't do that until we do the Defense authorization bill.

I hope everyone understands that one of the alternatives available on this bill and any other bill is we can move to third reading. We could do that right now. We, of course, will not do that. I will confer with Senator SARBANES. I hope Senator ENZI, who has been managing this bill for the last 2 days, will confer with the ranking member of the Banking Committee, Senator GRAMM, to see if we can get permission to do that. We really want to move forward on this.

I see the chairman of the committee here who has worked so diligently on this bill. I say to my friend from Maryland that we are getting requests now for morning business that are totally unrelated to this legislation. We have been here all this afternoon. We had some very good statements this morning on the bill. It is important that Members have an opportunity to speak on the bill. Here we are, doing nothing, with so many things left to do.

I say to my friend from Maryland who is so ably managing this bill that I think we should be arriving at a point soon, if Members aren't willing to come over and talk about what they want or are not willing to offer amendments, we move to third reading. Certainly there is nothing in the order that would prevent that. Senator DASCHLE said he would not move to cloture under the agreement with Senator THOMPSON, and he will stick to that. But that doesn't mean we do nothing all day Wednesday, Thursday, and Friday.

I know the Senator from Maryland is trying to work out a compromise. All I am saying is that I hope before we have an afternoon of morning business we decide whether or not we are going to be able to complete this legislation.

Mr. SARBANES. Mr. President, first of all, I don't think we should go to morning business. I think we should stay on the bill even if there is a period of time when we are in a quorum call.

Second, I say to my colleagues who are listening that if anyone has any

statement they want to make, they had better get over and do it because we are working on an amendment which is sort of being cleared downtown. If we can get clearance on that and an accommodation, I hope we can then adopt that amendment, probably have some colloquy, do a managers' amendment, and go to the third reading of the bill and finish this bill. That would be our objective.

So if we start moving that way, and people who have not been around and have not been engaged in the process then want to make a statement, or maybe all of a sudden appear from somewhere and offer an amendment, we are going to say: Where have you been? We have been biding our time and waiting and wanting to move ahead, and so forth and so on, and you were not here.

But at the moment we need to get the clearance on this amendment we are working on. We think that is in the works. That is the best I can say to the majority whip on that score.

The PRESIDING OFFICER (Mr. CARPER). The Senator from Arizona.

Mr. KYL. Mr. President, I concur in the admonition of the chairman and the manager on the Republican side that Members who have something to say should come down and speak because as we speak there are some discussions going on about some possible amendments that would move us much closer toward a time when the bill could be completed. In fact, some of us are meeting at 3:30 to try to resolve some issues that are pending right now. So I join in the comment made that people who wish to speak to the bill should do so as soon as possible.

I will take this opportunity to highlight some of the issues, a couple of which might be the subject of a potential agreement that would be added to the bill and that might help to move it along to completion.

As I said in my other remarks, there are some concerns about the way current agreements have been enforced or have not been enforced with respect to dual-technology items that have been sent to these countries. There is a provision in the bill that enables the United States to come down hard on a company which receives an item that is supposed to be used for commercial purposes—for research or university purposes, something such as that—and then in turn transfers that item to some kind of defense program that is unauthorized in the license.

Just to use a purely hypothetical example, I said there might be some nuclear generation facility component which is sent to help build a nuclear generating plant, but the end user, instead of being that commercial reactor facility, sends it over to some defense program for weaponry. That would be a good example of an im-

proper application of one of these dual-use items where the license had been granted for shipment for one purpose but it turns out to have been used for another.

We have a postshipment verification requirement ordinarily. That means we have somebody who goes over and makes sure the item was used in the way and in the place they said it was going to be used. The problem is, in the past we have found those postverification shipment procedures are not followed all the time. Indeed, a lot of the time they are not followed, and there is not much the United States can do about it.

I quoted the statistics earlier today—I am not sure I have them here—but the fact is, with respect to satellites, the United States has an agreement with China that was entered into in 1998 that provides some degree of postshipment verification that the satellite is being used where it is supposed to be used, and so on, but it turns out less than a fourth of the required verifications have been permitted. They have been delayed. There have been requests by the Chinese Government: Let us do the inspection rather than have you do it—this kind of thing.

Clearly, if we are going to have a liberalization of our export control policy, and we are going to be granting more licenses to permit the shipment of dual-technology items which could be put to military use, and we are willing to say, look, if you will put it to commercial use, OK, but we don't want you to put it to military use, and we want to have somebody check that after the fact to make sure that is correct, if we are going to do that procedure, we have to make sure it works, and there has to be some penalty for those who violate it.

The bill has a penalty if it is a company that violates the procedure, but there is no provision to deal with a country that violates it. So one of the proposals that is under active consideration right now as a possible amendment that could be agreed to would make a minor change, but it would have a major effect.

In reference to the subsection on page 296 of the bill, the first seven lines in this case would read: If the country in which the end-user is located refuses to allow post-shipment verification of a controlled item, the Secretary—meaning the Secretary of Commerce—may deny a license for the export of any other controlled item until such post-shipment verification is allowed.

It is very straightforward. It is not mandatory, so there is nothing that makes the Secretary of Commerce do this. But at least the Secretary would have an ability to say to a country, such as China, for example: Look, you have not allowed us to inspect the ultimate user of the last three items we sent you, so we are not going to ap-

prove any more licenses—at least of products A, B, and C—until you allow that. That might be one way to help get this provision of postshipment verification enforced.

So that is one of the ideas we have. As I say, it is one that is being discussed right now. It is one on which possibly there could be some agreement. We hope so. If so, I think that will advance the time that we can get the bill resolved.

Another question has to do with this matter of a product that is available in foreign markets. The concept of the proponents of the bill is if a product is available in a foreign market, then the cat is already out of the bag; we might as well let American companies compete for that business, too.

I raised a lot of questions this morning about how that really works. But leaving that aside, at least one very modest addition which certainly would help somewhat would be to ensure that not only are the items comparable in the sense that if you can buy this particular kind of computer in country A, then why restrict American companies from selling the same kind of computer?—that what we would want to do is ensure that we are talking about computers of comparable quality, not just that they are sold for roughly the same price, not just that they have roughly the same capacity, but that they are truly of the same quality.

The reason for that is most people would like to buy American products because of their quality. It is not enough to say you can buy a similar computer three other places in the world if you are not ready to establish that the computer you are talking about in those three other places is of comparable quality to the U.S. computer. It does not matter if it has the same capacity and if it costs roughly the same; if it is not as good, if it does not have the same quality, then it would not be a comparable item. We just want to make sure when we are talking about foreign availability we really mean the same basic kind of product is available in those foreign countries.

To give you an illustration, you can buy two different cars that go just as fast. One goes just as fast as the other one. One has just as much acceleration as the other one. The air-conditioner is just as good. And it costs about the same amount of money. But what you might find if you read Consumer Reports is the first car will last you about 20,000 miles and then it becomes a piece of junk, whereas the second car has much better quality. It has a 50,000-mile warranty. It has a great service record. The company will always take care of it if there is something wrong, and so on.

That is just a hypothetical example. But I think if we are going to say we are going to permit the export of items

as long as they are available anywhere else in the world, even though they are products we would just as soon not fall into the hands of the wrong countries, if we are going to go that way, we have to make sure we are at least talking about goods that have comparable quality. I think the addition of some language in that regard would be very useful.

Another idea that has been discussed—and there are others who, frankly, would be better able to discuss this than I because it has been their idea—is to have some kind of commission, a blue ribbon commission that would evaluate the success of this new regime after it has been put into place.

Nobody knows for sure how this is going to work. I think almost everybody would concede we are in uncharted territory, that the stakes are enormous, and that what we do not want to do is find out 5 years down the road that something we put in place—locked into place in statutory form—is actually permitting the rogue countries of the world to acquire a lot of equipment or technology that we would rather not have fall into their hands simply because we were not careful enough in writing the legislation.

I don't think most of us are smart enough to predict that far in the future exactly how we want to do all of this. The notion has been that it would be good to have in place some kind of a blue ribbon commission which could be appointed in the not-too-distant future to examine how this is working and to make recommendations to the President and to the Congress on how to make improvements in that. We can talk about the details of how the commission is appointed and when it reports and all those kinds of things. This kind of idea is a good idea, and it would be useful to have that incorporated into the legislation as well.

I believe there will be some kind of agreement on this. I think the parties are talking. Everybody recognizes the value, the utility of that.

A fourth area I will mention is that in the past the Department of Commerce has added items and subtracted items to the so-called controlled commodity list. It has done so under its own rules and regulations which could in fact and maybe does involve some consultation with other departments of government. It is a little unclear exactly how the process works. In the past, the Department of Commerce has been the department in charge. I believe the list is some 2,400 items controlled right now.

Part of the theory of the legislation is that some of those items would be taken off the controlled list so that a party wishing to export them would not have to come to the U.S. Government and obtain a license for the export of that item. That is probably appropriate with respect to many of these

controlled items. Still we have to be careful that we are not taking items off the list which could in fact be used by a hostile country against the interests of the United States.

Given the fact that the Department of Commerce has as its mission trade promotion, it is not exactly evident that that department is in the best position to judge whether or not an item should stay on the list. Obviously, it at least ought to be talking to the intelligence community, the Defense Department, the State Department, the Department of Energy, and so on. We want to have at least some recognition of the fact that as this is going to be administered in the future, the Department of Commerce will, to an extent appropriate, call upon the advice and counsel of these other departments in seeking to make determinations with respect to what items are on that control list or not.

It may be that this is a matter the administration needs to think about and figure out how they want to handle. For my own part, I have, as I have said before, the utmost confidence in this administration and Secretary Don Evans and the other people who would be making the decisions. As a matter of fact, my only beef with Don Evans, the Secretary of Commerce, is that he hired away my chief of staff when he was confirmed. We have a great relationship. I have total confidence in him and in the people in his department. I believe they will, in fact, call upon the expertise of other people in government who may be in a better position to judge with respect to a particular item.

They will have a lot of cross pressures, too. They will have folks in industry pushing them to decontrol as much as possible because obviously it is more costly and more difficult to export an item if you have to go get a license for the export than if you don't have to worry about that.

Given these cross pressures, we would at least like to get some kind of commitment from the administration that it is going to look at this and try to find a way to ensure that the other departments of government are brought into the process as appropriate.

There may be some other things, as the administration has indicated to us, that should be the subject of a subsequent Executive order to implement the legislation. Obviously, we will be interested in working with the administration on what some of those items might be as well. Some of them might be able to correct some of the problems I identified this morning and that some others have as well. We will be expressing that to the administration again. I am sure they will respond with an appropriate response.

These are the kinds of items we are talking about now as possibly being resolved by some kind of amendment or

series of amendments that could get us to a conclusion on this legislation. Since it is very evident from the standpoint of those of us who have concerns about it that in the end legislation is going to pass and we have no desire to delay or to stall it, we are not going to win very many amendments that we propose. Notwithstanding the fact we are very serious and concerned about it, there is no point in us taking up the Senate's time or persisting in a matter on which we are not likely to succeed, especially if, as has been conveyed to us, a few changes might be possible to be agreed to here fairly quickly, and then we could move on with the conclusion of the legislation.

That is why I add my comments to those of the Senator from Maryland and suggest that if there are those who would like to come here to make an opening statement about the legislation or to express concerns or support for it or any particular amendment, this would be a good time to do so. I am hopeful that within the next several minutes we will be able to meet and we will be able to confer about some of the things I have talked about and perhaps come to some conclusion. I am sure it is the position of the managers that they would like to move fairly quickly after that, if we are able to do that. Therefore, it would be appropriate to discuss at this time any concerns or other items with respect to this bill people would like to take up.

I had indicated this morning that I would just quickly detail sort of a list of potential amendments in case anybody is interested. These were proposals that were prepared before the legislation was taken up. I don't know how many people are still planning on offering any of these amendments. My own view is that if we are able to achieve consensus on the items I mentioned a moment ago, it will probably be doubtful that these amendments will be adopted. Therefore, people might want to consider dealing with the subjects in some other way. I will just run through them quickly.

One of the problems has to do with deemed exports. Deemed exports are basically transfer of technology, of knowledge, rather than a particular product, but that can, of course, be just as important to a rogue nation in putting together some kind of weapons program or missile program as the export of a particular item. Some of us believe we should deal a little bit more specifically with the matter of deemed exports. Again, that matter might be at least handled for the time being through some communication with the administration, assurance that it intends to deal with the subject in some way.

I talked about the matter of the controlled list and how other departments probably need to have a little more involvement in that than the legislation

itself provides. The legislation itself provides no assurance that any other departments will be involved in the listing of items on the controlled list. We think it would be a good idea if there were some assurance that they would be included in the process.

I mentioned the standard of finding for foreign availability. There are quite a few different ideas about how that might be strengthened. I mentioned the one about comparable quality. I hope we can do something on that.

There is a question that we are not going to pursue here—at least I will not pursue—but it could be the subject of an amendment. It is important. I wish we could do something about it. It had to do with taking a little bit of extra time to deal with matters that are particularly complex. The Thompson amendment failed yesterday. There are other ideas about how to deal with that so that the Departments of Defense, State, and Energy, and any other agencies that are involved in a particular license would have enough time to review the license application beyond the limit of 30 days, which is currently provided for.

The Thompson amendment provided an additional potentially 60 days. There are some other potential compromises that could be offered there. I doubt, since the Thompson amendment was defeated, that an amendment on this subject will be offered again.

There is a question about the inter-agency dispute resolution process, and there have been some proposed changes that could come up as an amendment with respect thereto. This process requires any dispute over a license, application, or a commodity classification to be resolved by the various departments that should be involved and then to forward any disagreement up the chain of command. This is a recommendation of the Cox commission and frankly would strengthen the hand of individual departments in this inter-agency review process. I am not certain, but I believe the House bill addressed this in some fashion, and it may be that if the House holds to its position and we pass the bill before us today, that issue is going to have to be further visited. At least from my perspective, it would be a wise thing to do.

There is another potential amendment relating to standardization of determination requirements. This is something others have brought up. This is not something that I would bring up. It has to do with the standard for waiving the foreign availability or mass market determinations. I did allude to this in my opening statement—the different standards of serious, significant, or merely a national threat. It may be wise to try to standardize those. Somebody else might bring that up.

There could also be an amendment relating to a reporting requirement for

key proliferators, requiring a report on certain items transferred to certain key proliferator countries. This is something that I think would be useful to the Congress as we continue to review how the act is working and, frankly, useful to a blue ribbon commission as well. It is not in the bill at this point. Somebody else may pursue that. Likewise, a license for key proliferators requiring that a license for certain items transferred to certain key proliferators be actually established in the legislation, rather than leaving it up to a question of what is on the control list.

There is also a proposed amendment relating to congressional notification when changes are made in either the particular countries involved or the tiers—as you know, we have tier I, tier II, and tier III countries—or when violations of the Export Administration Act occur. I think, frankly, this would be a useful report, especially if we have a blue ribbon commission. They are going to want to collect this data anyway.

Congress should be aware of the data. It is especially going to be important for countries that may continue to violate the postshipment verification procedures. I think it would be useful to have a congressional notification process. It is not in the bill now. I have not proposed that this be part of a managers' amendment. I wonder if people will consider that. Somebody may want to offer that amendment.

There is also a different version of the blue ribbon commission which I understand might be proposed, and there may be other amendments.

I think that is a list of at least several of the amendments that were being drafted for presentation a little later. Again, many might be obviated by the discussion I had before.

There are a couple of other items that have to do with specific provisions of the bill, such as the 18-month limitation on the Presidential authority to grant a waiver from the foreign availability. That is too restrictive. I would eliminate that.

There is another possibility in that same section for another change. This has to do with the fact that the President can't delegate his authority. You want the President making the ultimate determinations, but you want him making big determinations, not little ones. There are a lot of things in this bill that have to do with particular items that should not go up to the President. He could delegate that easily to one of his secretaries. I don't believe that will be a proposed amendment.

I want to explain to my colleagues that notwithstanding the fact that an item or a concern may not be proposed here in the form of an amendment, that doesn't mean there are not additional concerns we have with the legis-

lation that I hope eventually, between the House and Senate, will be addressed. Much of that was discussed in my opening comments.

That is the list. I hope in the next few minutes we can try to resolve these remaining issues so we can move forward.

Mr. SARBANES. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Ms. CANTWELL. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Ms. CANTWELL. Mr. President, I rise today in support of Senate bill S. 149, the Export Administration Act of 2001. I am very proud to be an original cosponsor of this bill. I thank the Senator from Wyoming for his tireless efforts in crafting legislation that I believe will move us forward in this area. I am thankful for the leadership of the distinguished chair and the ranking member of the Banking Committee, the Senator from Maryland, and the Senator from Texas, and others who have worked hard to successfully address the issue of export controls in a changing economy.

U.S. competitiveness in the global economy will depend heavily on our ability to foster continued innovation in our technology sector and help domestic companies gain markets overseas.

Mr. President, in my State, technology-based industries are the backbone of the Washington State economy. They now account for the largest share of employment, business activity, and labor income of any sector in the State's economic base. Roughly 38 percent of all Washington State jobs are tied to the tech sector, and the State's 286,000 tech workers earn wages that are 81 percent above the State average.

This sector is gearing up to be a crucial engine for the future of the U.S. economy, and for Washington State in particular. However, to guide the continued development of this sector, we need to ensure the success of U.S. companies and their exports in the international marketplace. This legislation streamlines the process by which companies gain approval to export their products to foreign markets. This is important because it is increasingly important that in today's economy, a company that cannot compete globally will not succeed.

Although the United States currently leads the world in technology, we are not the only technology suppliers and this lead is not guaranteed to last. We sacrifice our position as a global technology and economic leader when we limit U.S. companies' ability

to sell their products abroad through a burdensome, unreasonable, and flawed export control system.

Under the current system, companies lose out in the short term through restrictions on direct sales but also in the long term through loss of market share.

The existing process for U.S. companies to acquire export licenses involves a complex application procedure and a Byzantine system of bureaucratic authority spread over four Federal agencies. Getting the license can take a very long time, which compromises the reliability of U.S. suppliers and makes it hard for manufacturers and customers to plan ahead.

Mr. President, S. 149 will go a long way in streamlining the export control process and ultimately strengthening U.S. economic competitiveness by making three major changes:

First, this bill provides a common-sense approach to the reality of the global economy by recognizing that if a certain technology is available on the mass market or made available for sale to multiple buyers, it simply does not make sense to restrict U.S. companies from these commercial opportunities.

Second, this bill streamlines export control licensing by centralizing authority under one agency and streamlining the process. Let me be clear. It does not do anything to reduce the depth of the review process, nor compromise its effectiveness; it simply provides accountability and structure to ensure that decisions are made in a more timely efficient and transparent manner.

Third, this bill removes the antiquated MTOPS standard for categorizing high-speed computers, and allows the President and his security team to develop a control system that is flexible and specifically tailored to keep pace with advances in technological capability.

United States companies operate in a fiercely competitive environment, and we cannot afford to have outdated regulations make that competition even more difficult—especially if these regulations do not effectively meet their objectives.

This is the fundamental flaw of the current control system. Although restrictions disadvantage American companies globally in the name of national security, in practice, they do not effectively enhance our security interests.

I refer to the December GAO report which states:

The current system of controlling the export of individual machines is ineffective in limiting countries of concern from obtaining high performance computing capabilities for military applications.

This is a crucial point. Especially as we have heard many of our distinguished colleagues in this Chamber characterize this bill as putting business or economic interests over national security interests.

With all due respect to the opponents of this bill, this perceived conflict of economic versus security interests is fundamentally misguided. In fact, this bill helps support our economic interests while enhancing the President's ability to ensure our national security.

And you need not take my word for it. I am joined by leaders of the intelligence community, the Secretary of State, the Secretary of Defense, the National Security Advisor, and President Bush who all agree that these changes will actually strengthen the President's national security authority. Instead of his having to rely on an antiquated system to control security the President will be granted direct authority to intervene in matters where he determines national security is at stake.

This bill helps us focus on those export technologies that constitute true national security threats. And, make no mistake, this bill is not soft on those who break the law. For those firms and individuals who violate the established control laws, this bill authorizes substantially higher criminal and civil penalties that those included in the current system.

We need to establish an export control regime that facilitates our Nation's status as a global economic and technology leader and provides a control system that allows the administration to focus on those exports that do constitute a specific security threat. We must come to realize that these are not competing goals but constitute intertwined objectives. This bill helps to achieve both, and I urge my colleagues to join me in supporting it.

Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The bill clerk proceeded to call the roll.

Mr. KYL. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER (Mr. CORZINE). Without objection, it is so ordered.

Mr. KYL. Mr. President, I ask unanimous consent to have printed in the RECORD at this point a document entitled "Talking Points on High Performance Computers," which describes some of the difficulties we have encountered in the transfer of high-technology computers to other countries, and which basically says we should be more careful about liberalizing export controls on these items.

There being on objection, the material was ordered to be printed in the RECORD, as follows:

TALKING POINTS ON HIGH PERFORMANCE COMPUTERS
INTRODUCTION

In 1997, in response to growing concerns that foreign entities had illegally acquired U.S.-made high performance computers for

military purposes, Congress inserted language into the FY 1998 Defense Authorization Act that was designed to strengthen export controls on such computers.

S. 149 would repeal the sections of that Act requiring prior notification for exports of HPCs above the MTOP threshold to Tier 3 countries (including China), post-shipment verifications for these HPCs, and Congressional notification of an adjustment in MTOP threshold levels. It also contains a provision to repeal the sections that established MTOPS performance levels above which no computers could be sold to certain countries without a license.

CURRENT EXPORT CONTROLS ON HPCS

In January 2001, President Clinton loosened export controls on high performance computers for the sixth time. Under the latest guidelines, computers with a processing speed of less than 85,000 million theoretical operations per seconds (MTOPS) no longer require a license for export to military organizations in Tier 3 countries like China.

The bar requiring firms to notify the Commerce Department of an export was also raised to 85,000 MTOPS—establishing, for the first time, licensing and advanced notification thresholds at the same level. Consequently, the new rules effectively eliminate routine prior U.S. government review of any computer exports below the licensing threshold to Tier 3 countries.

By contrast, in January 2000, computers with processing speeds above 2,000 MTOPS required a license for export to Tier 3 countries—over a 40-fold increase in a 1-year period.

85,000 MTOPS computers are very powerful. As a comparison, in 1997 some of the initial computers developed in the U.S. under the Stockpile Stewardship Program's Accelerated Strategic Computing Initiative (ASCI), called ASCI Red and ASCI Red/1024, had processing speeds of 46,000 and 76,000 MTOPS respectively. These computers were used for 3D modeling and shock physics simulation for nuclear weapons applications.

In March 2001, the General Accounting Office concluded that President Clinton failed to adequately analyze "military significant uses for computers at the new thresholds and assess the national security impact of such uses."

For example, in testimony to the Senate Governmental Affairs Committee in March 2001, Susan Westin, Managing Director of the International Affairs and Trade Division at GAO, stated, "The report does not note that applications for 3-dimensional modeling of armor and anti-armor and 3-dimensional modeling of submarines can be run on computers at about 70,000 MTOPS.

Furthermore, Ms. Westin noted that "The President's report does not state that computers rated up to 85,000 MTOPS could operate all but four of the 194 militarily significant applications identified in the 1998 Defense- and Commerce-sponsored study." (The study to which she referred was one of two studies upon which the report's section on the computer uses of military significance was largely based.)

CONTROLLABILITY OF HIGH PERFORMANCE COMPUTERS

Some cite computer "clustering" as making computer controls ineffective. This involves linking several processors together to create a parallel processing system with greater capabilities than the individual processors.

According to Susan Westin's testimony to the Senate Governmental Affairs Committee

in March, President Clinton set the licensing control threshold of 85,000 MTOPS based on the availability of clustering technologies projected to be available by the end of 2001.

However, as Ms. Westin noted in her testimony, "DOD officials, when asked, could not provide evidence to support their conclusions that there is necessary technical expertise in tier three countries [like China] to cluster to any performance level." (Emphasis in original.)

Additionally, as Andrew Grover, CEO of Intel, concluded during his remarks to the Forum for Technology and Innovation in March 1999, "The physical technology, the hardware technology implicit in building these large parallel machines, is not the same as the physical technology used in building commodity machines."

The report produced in 1999 by a 9-member bipartisan commission chaired by Congressman Chris Cox in the House of Representatives (the Cox Report) also addressed this issue with regard to China's computing abilities, stating that "while the PRC might attempt to perform some HPC functions by other means, these computer work-arounds remain difficult and imperfect."

WHY DO HPC'S NEED TO BE CONTROLLED?

As stated by Gary Milhollin, Executive Director of the Wisconsin project on Nuclear Arms Control, in an op-ed in the Washington Post in March 2000,

"The truth is, high-performance computers aren't like most other exports—they're more like weapons. They are essential to develop the software and hardware that make things like advanced military radar work. And one of the driving forces behind the development of 'supercomputers' has always been the desire to design better nuclear weapons and the missiles that deliver them . . . It is easier, safer, and more economical to stop dangerous exports than to defend against the weapons they produce." (Emphasis added.)

The Cox report discussed in detail China's potential use of high-performance computers for the design and testing of ballistic missiles and advanced conventional weapons, the design and manufacturing of chemical and biological weapons, nuclear weapons development, warfare applications such as computer network attack, intelligence collection and analysis, and military command and control.

The Cox Committee concluded that China is "attempting to achieve parity with U.S. systems and capabilities in its military modernization efforts." As illustrated by Beijing's recent military exercises, its rapid efforts to modernize its military, and its continuing buildup of short-range missiles aimed at Taiwan, China poses a real and growing threat to U.S. national security.

The United States should not ease restrictions on the export of high performance computers that China can use to further its weapons development programs. Unfortunately, this is precisely what S. 149 would accomplish.

NOTIFICATION PROCESS

The 1998 Defense Authorization Act requires exporters to submit for review any proposed Tier 3 sale above the MTOPS threshold. This review is conducted by the Secretaries Commerce, Defense, State, and Energy, and the Director of the Arms Control and Disarmament Agency.

This requirement would be repealed by S. 149.

In his testimony to the House Armed Services Committee in October 1999, Gary Milhollin discussed the importance of the

notification process set forth in the 1998 Defense Authorization Act, stating that it "has worked brilliantly." Furthermore, he concluded, "It has stopped a number of dangerous exports without imposing any significant burden on American industry."

In his testimony, Mr. Milhollin cited a number of instances where the process has been successful.

For example, Digital Equipment Corporation (Now Compaq) applied for permission to sell a supercomputer to the Harbin Institute of Technology in China. According to Mr. Milhollin's testimony, this institute "is overseen by the China Aerospace Corporation, China's principal missile and rocket manufacturer," and it "makes rocket castings and other components for long-range missiles."

The application was denied as a result of objections from the Arms Control and Disarmament Agency and the State Department. Mr. Milhollin further notes that the sale would have been worth only \$348,000, in comparison to Compaq's annual revenue of approximately \$31 billion.

Without the notification process, Digital would most likely have indirectly aided China in its effort to make more long-range ballistic missiles. Do we want to risk such an outcome in the future?

POST-SHIPMENT VERIFICATION

S. 149 would also repeal the section in the 1998 Defense Authorization Act that requires post-shipment verifications for high performance computers exported to Tier 3 countries, like China.

In June 1998, China agreed to allow post-shipment verifications for all exports, including high-performance computers. For the following reasons, the Cox Committee found the terms of the agreement "wholly inadequate":

1. China considers U.S. Commerce Department requests to verify the end-use of a U.S. high performance computer to be non-binding.
2. China insists that one of its own ministries conduct an end-use verification, if it agrees to one at all.
3. China argues that U.S. Embassy and Consulate commercial service personnel may not attend an end-use verification unless invited by China.
4. China argues that it is at China's discretion whether or not to conduct any end-use verification.
5. China will not permit an end-use verification at any time after the first six months of the computer's arrival.

According to the Bureau of Export Administration, out of 857 high-performance computers shipped to China, only 132 post-shipment verifications have been performed.

According to the Cox Report, "The illegal diversion of HPCs for the benefit of the PRC military is facilitated by the lack of effective post-sale verifications of the locations and purposes for which the computers are being used. HPC diversion for PRC military use is also facilitated by the steady relaxation of U.S. export controls over sales of HPCs."

The Cox Report also states, ". . . the United States has no effective way to verify that high-performance computer purchases reportedly made for commercial purposes are not diverted to military uses. The Select Committee judges that the PRC has in fact used high-performance computers to perform nuclear weapon applications."

More recently, during a July 2001 hearing of the House International Relations Com-

mittee, David Tarbell, Deputy Undersecretary of Defense for Technology Security Policy, stated, ". . . the Chinese government has been unwilling to establish a verification regime and an end use monitoring regime that would get all of the security interests that we're interested in to ensure that items that are shipped are not diverted." (Emphasis added.)

When pressed further by Chairman Hyde about whether the post-shipment verification regime is a failure, Secretary Tarbell replied, "I'm not sure I would characterize it as a complete failure, but it is close to . . . It is not something I have a great deal of confidence in." (Emphasis added.)

The lack of an effective post-shipment verification regime for dual-use exports eliminates any benefit to U.S. national security of a licensing process. This bill would allow the Commerce Department to grant licenses to countries that refuse to allow post-shipment verification.

CHINA'S USE OF U.S. HPC'S FOR MILITARY PURPOSES

The Cox report discussed China's use of high performance computers for military applications, stating,

" . . . open source reporting and stated PRC military modernization goals tend to support the belief that the PRC could be using HPCs in the design, development, and operation of missiles, anti-armor weapons, chemical and biological weapons, and information warfare technologies."

Furthermore, specifically with regard to nuclear weapons development and testing, the Cox report states, "The Select Committee judges that the PRC is almost certain to use U.S. HPCs to perform nuclear weapons applications. Moreover the PRC continues to seek HPCs and the related computer programs for these applications."

According to an article in the Washington Times in June 2000, "U.S. high-performance computers are being used at the Chinese Academy of Engineering Physics, the main nuclear weapons facility in Beijing." The Times reported that this was the third time the Chinese government has been detected diverting U.S.-origin computers to defense facilities.

CONCLUSION

S. 149 significantly weakens controls on the export of high performance computers. The bill reverses the efforts of Congress in 1997 to strengthen such controls.

The foreign availability of high performance computers is controllable. Computer "clustering" will not necessarily provide China, or another country, with the capability that would be achieved with a commodity machine purchased from the United States.

The notification process established in the 1998 Defense Authorization Act has been effective in preventing some sales of high performance computers that would most likely have been diverted to military uses.

A mandatory post-shipment verification regime is necessary to ensure that U.S. high performance computers are being used for commercial, not military, purposes.

Mr. KYL. Mr. President, I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The assistant legislative clerk proceeded to call the roll.

Mr. SARBANES. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

Mr. SARBANES. Mr. President, I want to report to our colleagues where I think we are. We had been hopeful that we would have agreement on a few amendments that had been discussed at some length—largely with Senator KYL and Senator THOMPSON—and that those amendments could be agreed to and the managers' amendment would be agreed to, and then we would have been able to go on to final passage of the legislation this evening. I know a number of our colleagues are going to the White House for the state dinner with the President of the Republic of Mexico.

Regrettably, there has been a hang-up, I guess I will describe it as, at this point with respect to this blue ribbon commission amendment that we had discussed. An effort is still underway to try to work that out. We did reach agreement on two other amendments that I think are of some consequence, for which both Senator KYL and Senator THOMPSON earlier in the debate sort of laid out a rationale. Senator ENZI and I joined together in trying to accommodate that concern.

Apparently, it is believed that if we go overnight, that will provide some opportunity to work out the one remaining item.

If Members choose an amendment on that, we will have to deal with the amendment on its terms in one way or another or Members may choose at that point not to offer the amendment. But that would be the situation we would find ourselves in, and then we would move to final passage.

As best we can ascertain, there are not other amendments, and I certainly hope that is the case. That is the premise on which we are now proceeding. In light of that, I expect what we would do shortly is go over until the morning, and if the blue ribbon commission amendment has been worked out, that will be included in what would be passed. If not, we would pass the other two amendments that have been addressed and worked out, pass the managers' amendment, and go to third reading and final passage of the legislation.

This is what we have been trying to work towards all day long, and I think we came close but not quite there. So that is the situation. I want to report that to all of my colleagues. I know a lot of time has been spent in a sense waiting while discussions were going on, but that is not new for this body. We actually had hopes we would be able to get the bill done today. I very much regret that is not the case.

I discussed it with my colleagues on the other side. I do not think there are other amendments hanging out there, but if there are, we certainly want to be enlightened as to them. I am certainly not inviting them. We need to complete this legislation now.

It is clear what the will of this body is with respect to this legislation, and

I hope Members would get a chance to exercise that will and then we will be able to get on with the other extended agenda which confronts the Senate now as we move into the fall period.

Mr. REID. Will the Senator yield for the purpose of asking a question?

Mr. SARBANES. Certainly.

Mr. REID. First of all, it is my understanding the Senator from Maryland and Senator ENZI, who both have managed this bill so well, are going to work with Senator THOMPSON and others, hopefully in the morning when we come in at 10:30, to have some kind of unanimous consent agreement at that time that would give us a final order to dispose of this bill. Is that true?

Mr. SARBANES. We very much hope to achieve that. And if we could do that, I also hope it would not take a great deal of time to implement or carry out a unanimous consent agreement, then not only get the agreement but move from the agreement to where we do the final passage. Then this legislation is completed and the floor is clear for other matters which I know the leadership is anxious to consider.

Mr. REID. I say to my friend before the Senator from Tennessee speaks, we are going to come in at 10:30 tomorrow and then the President of Mexico, as the Senator indicated, will be here in the morning. We will have a short time in the morning. I hope early in the morning the staffs could work with the principals to try to come up with a UC that we can propound before we listen to the President of Mexico. That would really work well.

It is my understanding the Senator from Maryland, the Senator from Wyoming, and the Senator from Tennessee are going to work toward that end so we can move to the Commerce-State-Justice bill, which Senators LOTT and DASCHLE are very anxious we finish this week.

Mr. SARBANES. I yield to the Senator from Tennessee.

The PRESIDING OFFICER. The Senator from Tennessee.

Mr. THOMPSON. Mr. President, the scenario that has been outlined is a probability. That is something for which we can strive. We have accomplished some things in this down time we have had today. We are talking about a couple of amendments, and we are talking about a couple of letters, all of which will need to be finally agreed upon among the parties. I do not think that would be any problem. I do not anticipate other amendments at this time, but I say to my colleagues who might be listening, if anyone has any amendments, they should come forth immediately and announce them. Otherwise, I would anticipate tomorrow morning we would know where we stand with regard to the blue ribbon commission issue and would tomorrow morning be able to enter into some sort of unanimous consent agreement.

There being no further amendments other than our agreeing to the language of the letters and to the other amendments, we will be able to proceed on to final passage.

Mr. REID. Will the Senator yield for a question?

Mr. THOMPSON. I will be happy to.

Mr. REID. I always feel a sense of almost guilt when the Chamber is empty all day long and there are not people offering amendments and discussing the legislation, but it is important to note to all of the Senators within the sound of my voice and anyone else who is watching, today has been a very productive day. There has been tremendous work done by numerous Senators—Senator ENZI, Senator SARBANES, Senator GRAMM, Senator THOMPSON, and Senator KYL. We could go through the whole list of Senators who have been heavily involved in working on this bill today behind the scenes. There has been a lot of work.

The fact that we have not been in the Chamber should not diminish the fact there has been a lot of progress on this legislation.

Will the Senator from Tennessee agree with that statement?

Mr. THOMPSON. I certainly will, and I express appreciation to the leadership for allowing us to do this unfettered and unhassled because I know the Senator wants to finish and move on to other things. We have accomplished a couple of different things in the first day. We have had an opportunity to say our piece on our side to express our concern with some of the provisions. We have also had an opportunity to have a vote. It does not take a genius to count that vote.

After the vote occurred, the proponents of this legislation, in a very reasonable fashion, suggested we get together and see if some of the concerns we expressed could not be addressed. That is what good debate and good interchange is all about: actually listening to each other and learning something from each other and trying to see whether or not we could address some issues.

Those thoughts have been expressed in a way that had not been heard before. All of this happened, and that is a good thing. We are going to wind up with a better product than we otherwise would have. So, yes, I concur with the Senator. It is time to do what we can do and then move on.

I add we still need to be diligent and make sure we agree on the language, as we have orally, and hopefully wrap this thing up tomorrow.

Mr. SARBANES. Mr. President, we are going to strive very hard to get this unanimous consent agreement before we go to the joint meeting of the Congress, and then I hope we can come back and in fairly short order execute the unanimous consent request and move to final passage of this legislation by midday tomorrow, and then

clear the Chamber for the leadership to take up other matters which I know are pressing on their agenda.

I suggest the absence of a quorum.

The PRESIDING OFFICER. The clerk will call the roll.

The legislative clerk proceeded to call the roll.

Mr. REID. Mr. President, I ask unanimous consent that the order for the quorum call be rescinded.

The PRESIDING OFFICER. Without objection, it is so ordered.

MORNING BUSINESS

Mr. REID. I ask unanimous consent there now be a period of morning business with Senators allowed to speak for a period not to exceed 5 minutes each.

The PRESIDING OFFICER. Without objection, it is so ordered.

CELEBRATING AUSTRALIAN-AMERICAN FRIENDSHIP

Mr. LOTT. Mr. President, next week the Senate will be honored with a visit from the Right Honorable John Howard, Prime Minister of Australia. Prime Minister Howard comes to the United States to celebrate the 50th Anniversary of the signing ANZUS Treaty, the document that has formally tied our strategic destinies together for the good of the entire Asian Pacific Rim.

Our relationship with Australia did not begin with the ratification of one treaty. American and Australian soldiers have fought together on every battlefield of the world from the Meuse Argonne in 1918 to the Mekong Delta and Desert Storm. We share a common historic and cultural heritage. We are immigrant peoples forged from the British Empire. We conquered our continents and became a beacon of hope for people struggling to be free.

For over 100 years, the United States and Australia have been the foundation for stability in the South Pacific. Today, we are on the precipice of a new day in this vital region. The potential for economic growth there is staggering. Where our two countries provided the military basis for peace in that hemisphere, we now can set the stage for a new free market order that will open the frontiers of freedom for countless millions.

On September 5th, I sent a letter to President Bush asking that he accelerate the schedule for creating a free trade agreement with Australia. We are Australia's largest source of foreign investment and second largest trading partner with a two way trade totaling over \$19 billion. Even though Australia has a relatively small population, they are the 15th largest market for American exports.

An American Australia Free Trade Agreement will be a capstone event on a century of friendship and mutual sac-

rific. It has the potential for setting a new standard for all of the Pacific to follow. So we welcome Prime Minister Howard to the United States and look forward to another century of prosperity and peace.

I ask unanimous consent that a copy of my letter to President Bush dated September 5, 2001 be printed in the RECORD.

There being no objection, the letter was ordered to be printed in the RECORD, as follows:

U.S. SENATE,
OFFICE OF THE REPUBLICAN LEADER,
Washington, DC, September 5, 2001.

The PRESIDENT,
*The White House,
Washington, DC.*

DEAR MR. PRESIDENT: In recognition of the upcoming visit of Prime Minister John Howard, to celebrate the 50th anniversary of our alliance with Australia, I believe that it is a wonderful opportunity to strengthen the historic ties between our countries by launching the United States-Australia Free Trade Agreement.

In addition to a military alliance that has borne fruit on battlefields from the Meuse Argonne to Vietnam, we share a common cultural and economic bond. The United States-Australia strategic partnership is the foundation for stability in the South Pacific. We are Australia's largest source of foreign investment and second largest trading partner and they are one of the top markets for American exports.

The United States-Australia Free Trade Agreement would be the first in a series of formal regimes designed to bring the fruits of the free market to the entire Asian Pacific rim. There is no better place to expand the new economic frontier than with our friends and allies in Australia.

Sincerely,

TRENT LOTT,
Republican Leader.

STEM CELL RESEARCH

Mr. WARNER. Mr. President, I rise today to discuss embryonic stem cell research, having just participated in a hearing on stem cell research before the Senate's Health, Education, Labor, and Pensions Committee.

The future of stem cells in the United States, indeed the world, poses one of the greatest challenges to our Government since the foundation of our Republic over 200 years ago.

Enormous pressures will be placed upon our Presidents. President Bush, at the threshold of this debate on new developments in medical research, has taken an important step forward. I commend the President for supporting some degree of Federal funding for embryonic stem cell research. I also particularly commend the President for his efforts to ban human cloning.

Likewise, Congress must write laws striking a balance. On the one hand, ethical, moral, and religious standards give our Nation its strong foundation and must be considered.

On the other hand, we must allow science to go forward, within reason-

able bounds, to assess the ability of the new frontier of embryonic stem cell research to alleviate the human suffering being experienced by millions.

Like our executive and legislative branches of Government, our judiciary will also be faced with challenges. The judiciary must interpret, not re-write, the law of the land, as a flood of cases will come before the courts.

If the three branches of our Government fail, in the judgment of Americans, to discharge their respective responsibilities in a fair, objective way, there will be many adverse impacts upon the American people.

For example, this science will simply leave the U.S. laboratories and move off shore. The United States will no longer be a Nation that imports and keeps our best researchers; rather, we will become a Nation that exports our brain power in crucial fields. Americans seeking medical treatment will likewise go abroad.

Consequently, our Government is faced with challenges. But, to the extent we allow embryonic stem cell research at home, within a fair and balanced framework of regulations, we can better control the important ethical, moral and religious standards vital to our culture here in the United States.

America has accepted the awesome responsibility of being the only world superpower in areas of security, the preservation of freedom, and the fostering of the principles of democracy and human rights throughout the world. Are we as a Nation going to be a superpower in medical science, advocating ethical standards for others beyond our shores; or are we, as a Nation, going to retreat behind unrealistic, unenforceable barricades, and leave advancement in the science of this emerging field to the rest of the world?

The facts are that an overwhelming amount of evidence exists that indicates that stem cell research holds enormous potential for treatment, and ultimately cures, for many diseases such as Parkinson's disease, cancer, ALS, Alzheimer's, heart disease, spinal chord injuries, muscular dystrophy, multiple sclerosis, arthritis, and diabetes.

Constantly, my Senate staff and I meet and hear from many Virginians who suffer from these and other diseases. And, many of these same individuals succumb to their disease, as no cure has yet been found for their illness. Embryonic stem cell research offers a real opportunity to help save lives in the future.

After thoughtful consideration, I came to the conclusion that the Federal Government, subject to restrictions, should fund embryonic stem cell research so that we remain a superpower in medical science. I joined with several of my colleagues in the Senate in writing to President Bush expressing