AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 2009

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON DEFENSE

JOHN P. MURTHA, Pennsylvania, *Chairman*

NORMAN D. DICKS, Washington
PETER J. VISCLOSKY, Indiana
JAMES P. MORAN, Virginia
MARCY KAPTUR, Ohio
ROBERT E. "BUD" CRAMER, JR., Alabama
ALLEN BOYD, Florida
STEVEN R. ROTHMAN, New Jersey
SANFORD D. BISHOP, JR., Georgia

C. W. BILL YOUNG, Florida
DAVID L. HOBSON, Ohio
RODNEY P. FRELINGHUYSEN, New Jersey
TODD TIAHRT, Kansas
JACK KINGSTON, Georgia
KAY GRANGER, Texas

NOTE: Under Committee Rules, Mr. Obey, as Chairman of the Full Committee, and Mr. Lewis, as Ranking Minority Member of the Full Committee, are authorized to sit as Members of all Subcommittees.

PAUL JUOLA, GREG LANKLER, SARAH YOUNG, PAUL TERRY, KRIS MALLARD, LINDA PAGELSEN, ADAM HARRIS, ANN REESE, TIM PRINCE, BROOKE BOYER, MATT WASHINGTON, B G WRIGHT, CHRIS WHITE, CELES HUGHES, and ADRIENNE RAMSAY, *Staff Assistants*
SHERRY L. YOUNG, *Administrative Aide*

PART 2

	Page
Fiscal Year 2009 Department of Defense Budget Overview	**1**
U.S. Marine Corps Readiness	**83**
Army Readiness	**139**
Missile Defense Agency	**189**
Shipbuilding	**291**

Printed for the use of the Committee on Appropriations

PART 2—DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 2009

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 2009

HEARINGS

BEFORE A

SUBCOMMITTEE OF THE

COMMITTEE ON APPROPRIATIONS

HOUSE OF REPRESENTATIVES

ONE HUNDRED TENTH CONGRESS

SECOND SESSION

SUBCOMMITTEE ON DEFENSE

JOHN P. MURTHA, Pennsylvania, *Chairman*

NORMAN D. DICKS, Washington
PETER J. VISCLOSKY, Indiana
JAMES P. MORAN, Virginia
MARCY KAPTUR, Ohio
ROBERT E. "BUD" CRAMER, JR., Alabama
ALLEN BOYD, Florida
STEVEN R. ROTHMAN, New Jersey
SANFORD D. BISHOP, JR., Georgia

C. W. BILL YOUNG, Florida
DAVID L. HOBSON, Ohio
RODNEY P. FRELINGHUYSEN, New Jersey
TODD TIAHRT, Kansas
JACK KINGSTON, Georgia
KAY GRANGER, Texas

NOTE: Under Committee Rules, Mr. Obey, as Chairman of the Full Committee, and Mr. Lewis, as Ranking Minority Member of the Full Committee, are authorized to sit as Members of all Subcommittees.

PAUL JUOLA, GREG LANKLER, SARAH YOUNG, PAUL TERRY, KRIS MALLARD, LINDA PAGELSEN, ADAM HARRIS, ANN REESE, TIM PRINCE, BROOKE BOYER, MATT WASHINGTON, B G WRIGHT, CHRIS WHITE, CELES HUGHES, and ADRIENNE RAMSAY, *Staff Assistants*
SHERRY L. YOUNG, *Administrative Aide*

PART 2

	Page
Fiscal Year 2009 Department of Defense Budget Overview	**1**
U.S. Marine Corps Readiness	**83**
Army Readiness	**139**
Missile Defense Agency	**189**
Shipbuilding	**291**

U.S. GOVERNMENT PRINTING OFFICE

46–474 WASHINGTON : 2009

COMMITTEE ON APPROPRIATIONS

DAVID R. OBEY, Wisconsin, *Chairman*

JOHN P. MURTHA, Pennsylvania
NORMAN D. DICKS, Washington
ALAN B. MOLLOHAN, West Virginia
MARCY KAPTUR, Ohio
PETER J. VISCLOSKY, Indiana
NITA M. LOWEY, New York
JOSÉ E. SERRANO, New York
ROSA L. DELAURO, Connecticut
JAMES P. MORAN, Virginia
JOHN W. OLVER, Massachusetts
ED PASTOR, Arizona
DAVID E. PRICE, North Carolina
CHET EDWARDS, Texas
ROBERT E. "BUD" CRAMER, JR., Alabama
PATRICK J. KENNEDY, Rhode Island
MAURICE D. HINCHEY, New York
LUCILLE ROYBAL-ALLARD, California
SAM FARR, California
JESSE L. JACKSON, JR., Illinois
CAROLYN C. KILPATRICK, Michigan
ALLEN BOYD, Florida
CHAKA FATTAH, Pennsylvania
STEVEN R. ROTHMAN, New Jersey
SANFORD D. BISHOP, JR., Georgia
MARION BERRY, Arkansas
BARBARA LEE, California
TOM UDALL, New Mexico
ADAM SCHIFF, California
MICHAEL HONDA, California
BETTY MCCOLLUM, Minnesota
STEVE ISRAEL, New York
TIM RYAN, Ohio
C.A. "DUTCH" RUPPERSBERGER, Maryland
BEN CHANDLER, Kentucky
DEBBIE WASSERMAN SCHULTZ, Florida
CIRO RODRIGUEZ, Texas

JERRY LEWIS, California
C. W. BILL YOUNG, Florida
RALPH REGULA, Ohio
HAROLD ROGERS, Kentucky
FRANK R. WOLF, Virginia
JAMES T. WALSH, New York
DAVID L. HOBSON, Ohio
JOE KNOLLENBERG, Michigan
JACK KINGSTON, Georgia
RODNEY P. FRELINGHUYSEN, New Jersey
TODD TIAHRT, Kansas
ZACH WAMP, Tennessee
TOM LATHAM, Iowa
ROBERT B. ADERHOLT, Alabama
JO ANN EMERSON, Missouri
KAY GRANGER, Texas
JOHN E. PETERSON, Pennsylvania
VIRGIL H. GOODE, JR., Virginia
RAY LAHOOD, Illinois
DAVE WELDON, Florida
MICHAEL K. SIMPSON, Idaho
JOHN ABNEY CULBERSON, Texas
MARK STEVEN KIRK, Illinois
ANDER CRENSHAW, Florida
DENNIS R. REHBERG, Montana
JOHN R. CARTER, Texas
RODNEY ALEXANDER, Louisiana
KEN CALVERT, California
JO BONNER, Alabama

ROB NABORS, *Clerk and Staff Director*

(II)

DEPARTMENT OF DEFENSE APPROPRIATIONS FOR 2009

WEDNESDAY, FEBRUARY 13, 2008.

FISCAL YEAR 2009 DEPARTMENT OF DEFENSE BUDGET OVERVIEW

WITNESSES

HON. GORDON ENGLAND, DEPUTY SECRETARY OF DEFENSE

ADMIRAL MICHAEL G. MULLEN, USN, CHAIRMAN, JOINT CHIEFS OF STAFF

HON. TINA W. JONAS, UNDER SECRETARY OF DEFENSE (COMPTROLLER)

OPENING REMARKS OF MR. MURTHA

Mr. MURTHA. We want to welcome my good friend Gordon England to the Committee; also Ms. Jonas and the Chairman of the Joint Chiefs welcome to the Committee. I want to say, Mr. Secretary, that I am sure that Secretary Gates got good care at Walter Reed. And one of the reasons is because when Bill Young was Chairman we poured good money into Walter Reed. I remember going to Walter Reed years ago, not years ago, I guess a year and a half ago, and visited a friend of mine who had cancer. And he was in an un-air-conditioned room and they had a temporary air-conditioner. And the maintenance was not up to par. And we kept asking—Bill Young would ask, and I would ask, Jerry Lewis would ask when he was Chairman, What do you need? And they were hesitant under the former Secretary in order to answer those questions, because they felt like they would be restricted or constricted by the policy. We put the money in anyway. And I think the care is much better. I know the facilities—when I visit it now, I see a much better facility.

The amputee center is another example. We put money in, and it was a couple of years before we could get the money released in order to go forward. And yet they have done as good a job in that amputee center as they did in Texas where they spent a lot more money. This young major that handled that did a marvelous job in handling the overall work of the construction and making sure they had it. And, of course, most of the amputees come through Walter Reed.

The concerns that I have is the readiness is slipping and we are having to violate our own guidelines. And you have heard me say this over and over again. We have had to waive more troops than we have ever waived before. We got less high school graduates in the system than we ever have before.

And I heard under the volunteer Army that we needed high school graduates. And I know this: that when I left the Marine Corps in 1955, and I went back in 1966, there was very little change. Today the change is so different. I mean, the technology is so great, you have to really be well prepared. I haven't yet heard the same complaints I heard after the Vietnam War where people were inadequately prepared. I worry that that is going to happen if we continue to reduce the standards.

At one time we wouldn't even take tattoos, only high school graduates. Now it went from 94 to 79 percent high school graduates. And, of course, we waive twice as many people today with criminal records, with drug problems, than we did before. And I hope we are not going to get to the point where we were in the Vietnam—or after the Vietnam era, where we had to get rid of thousands and thousands of people who were inadequately prepared. Admiral Mullen remembers this, because I am sure he was part of the establishment that got rid of people during that period of time.

Now, I received a letter. When Secretary Gates was before the committee last year he said, I want to get rid of stop loss. And we got rid of stop loss. I am not going to ask you a question now, but I know we haven't gotten rid of stop loss.

A young fellow wrote to me and he said, I am on my fourth deployment. Yet I asked the staff to check with the Department to see how many people hadn't been deployed and they said 37 percent have not been deployed in the Army. And so he is on his fourth deployment. He said he knows somebody else on his fifth deployment.

One deployment in Vietnam, having been there, I know how tough it was on the family, on me. Two deployments, three deployments, we have to get this down so that these folks have some family time. And yet we added money unanimously in this committee to take care of the families, and you cut it by 39 percent.

Now, I know you were under constraints, and you have to make a decision based on the amount of money you get. But I see the families and I see the kids, I see the children in the schools that are suffering from those extended deployments. It is frustrating for us who have been in the forefront of trying to make sure you have what you need.

For instance, we put $70 billion in a couple of years ago when Mr. Young was the Chairman. We couldn't even get the Department to tell us how to spend the money. You remember this. We had a heck of a fight trying to figure out exactly how to spend the money.

It has gotten better. Secretary Gates is a breath of fresh air. We welcome him in. And every time I say that, I get claps from all over the place when I am talking to a group because they are so happy to see a new face in the Department.

But our troops deserve better, and I would hope that we can work together. We have got two supplementals this year. I am sure one is going to be $200 billion and one is going to be $100 billion. I am sure we can work together with your advice, with the Chairman of Joint Chiefs' advice, in coming up with a—not only Iraq, but looking beyond Iraq.

The one thing I am disappointed in is to see the Secretary say, well, we haven't used the F–22 in Iraq and Afghanistan. Well, I understand that, but we have got to look beyond that, and we have to decide is there a threat big enough that we need to keep the F–22 line going. And I have seen what you have said, but I think we have to look at the threat down the road, because some of it is going to still be here next year and the year after that.

I am not predicting that anybody is going to attack us, but our committee has tried its best to make sure that it is always bipartisan. The $550 billion we passed for the war, I voted for every penny. Even though I disagree with the policy, I still voted for every penny. And most of the Members on the Committee have voted for every penny of that war. So we may disagree about policy, but we certainly want to try to work in a bipartisan manner to solve some of these problems.

With that I recognize Mr. Young for any statement he may have.

OPENING REMARKS OF MR. YOUNG

Mr. YOUNG. Well, Mr. Chairman, thank you very much. And I want to welcome Secretary England and Admiral Mullen and Ms. Jonas for what could prove to be an interesting day. And the reason I say that is because I read your statements last night, statements prepared by Secretary Gates, and also Admiral Mullen. And you have touched on not only immediate issues of today, but you have talked about requirements, problems, possible solutions into the future. And I think that is good because we have a lot of—we do have a lot of work to do.

Once we are not involved with Iraq, or in Afghanistan, we have an awful lot of rebuilding to do. And it is essential that we do that quickly and it is essential that we do that properly. But we also have to do a lot of rebuilding with the most important part of our military capability, and that is the men and women who wear the uniform and who use the equipment that we are talking about. And so we will get into some of the questions on those issues after your testimony.

But I must say that I was just tremendously impressed with the depth and the detail that both statements went into as I read them last night and earmarked—maybe I shouldn't say earmarked—but I earmarked a couple of the pages that I wanted to come back to, and I reread this morning. So I will have some interesting questions about those issues.

And, Mr. Secretary, if you would please express our condolences to Secretary Gates about his accident and his injury, and we hope that he recovers quickly.

We are happy you are here. We appreciate the job that you do and your commitment to our young men and women who serve our country. Thank you, Mr. Chairman.

Mr. MURTHA. Mr. Secretary, if you will, we will put your full statement in the record, Admiral Mullen's full statement in the record, without objection. And, Ms. Jonas, summarize your comments for us.

SUMMARY STATEMENT OF SECRETARY ENGLAND

Mr. ENGLAND. Mr. Chairman, thank you very much, and Mr. Young and members of the committee. Mr. Chairman, if I could just make a comment, I do have the statement, the verbal statement by Secretary Gates, and I would like to just give that verbatim for him, if you don't mind.

I also want to comment on your comments regarding Walter Reed. You are right, we did not have that right. I believe we do have it right, or close to right, now. And a lot of great work has been accomplished this year. But I do thank the committee.

In a number of areas, by the way, you had it right and we didn't, and I thank you for that. Regarding the Army recruiting and readiness in terms of graduates and waivers, I can tell you this is at the very highest level of attention by Secretary Gates. I mean, obviously, we need a high-quality force. Quality is much more important than quantity in this military. And so it has his attention. I can tell you he tracks it, monitors, has this discussion regularly, so he is exactly where you are on these issues.

So, if you would allow me. By the way, Mr. Young, you are right. I will tell you, more than anyone else in Washington, I am anxious for the Secretary to be back on the job. So he definitely has my best wishes to get well quickly.

So with your permission, I would like to read his opening statement, please.

Mr. Chairman, members of the subcommittee, first let me thank you for your continued support of our military for these many years. I appreciate the opportunity to discuss the President's defense budget request for fiscal year 2009.

Before getting into the components of the budget, I thought it useful to consider this request in light of the current strategic landscape, a landscape still being shaped by forces unleashed by the end of the Cold War nearly two decades ago.

In recent years, old hatreds and conflicts have combined with new threats and forces of instability, challenges made more dangerous and prolific by modern technology. Among them, terrorism, extremism and violent jihadism; ethnic, tribal and sectarian conflict; proliferation of dangerous weapons and materials; failed and failing states; nations discontented with their role in the international order; and rising and resurgent powers whose future paths are still uncertain.

In light of this strategic environment, we must make the choices and investments necessary to protect the security, prosperity and freedom of Americans for today and for future generations. The investment in our military being presented to this committee is $491 billion out of a total Department of Defense request of $515.4 billion. That is because there are some of the moneys under other jurisdictions. When combined with war costs, the total defense budget request is about 4 percent of our gross domestic product. And this compares to spending, as you have heard, levels of spending of GDP during the Korean War of about 14 percent, and about 9 percent during Vietnam. So these are large amounts of money, but fortunately our economy has grown. So hopefully we are still at an affordable level.

Our fiscal year 2009 request is a 7½ percent increase or $35.9 billion over last year's enacted level. When accounting for inflation, this translates into a real increase of about 5½ percent. The difference consists of four main categories, which are outlined in more detail in the Secretary's submitted statement.

Overall, the budget includes $183.8 billion for overall strategic modernization, including $104 billion for procurement to sustain our Nation's technological advantage of recurrent and future adversaries; about $158 billion for operations, readiness and support to maintain a skilled and national fighting force; about $150 billion to enhance quality of life, and that is for paid benefits, health care and other services earned by our all volunteer force; and approximately $20 billion to increase ground capabilities, and that includes growing the Army and the Marine Corps and that alleviates some of the issues that you discussed, Mr. Chairman, in terms of growing our forces. It also includes almost $6 billion for military construction. And the budget includes new funding for critical ongoing initiatives, such as global training equipped to build the security capacity of our partner nations and security and stabilization assistance, foreign language capabilities and our new AFRICOM Command.

In summary, this request provides the resources needed to respond to current threats while preparing for range of conventional and irregular challenges that our Nation may face in the years ahead. In addition to the base budget, our request includes $70 billion in emergency bridge funding that would cover war costs into the next calendar year. And a more detailed request will be submitted later this year when the Department has a better picture of what level of funding will be needed.

Now, the 2007 National Defense Authorization Act requires the Department of Defense to provide an estimate of cost for the global war on terror, and we would like to be fully responsive to this request. And in fact, last year I was—the Secretary was voluntarily responsive to a similar request.

Now, some have alleged that the administration has taken this position in order to somehow hide the true cost of the war, and nothing could be further from the truth. The Department has been very open about what we know about our costs, as well as what we don't know. So the challenge we face is that a realistic or meaningful estimate requires answers to questions that we don't know, such as when and if the Department will receive the request of $102.5 billion balance of the fiscal year 2008 supplemental war request, and for how much. And what, if any, adjustments at troop levels in Iraq will result from the upcoming recommendations of General Petraeus, Central Command, and the Joint Chiefs of Staff.

We should also keep in mind that nearly three-quarters of the fiscal year 2009 supplemental request will likely be spent in the next administration, thus making it even more difficult to make an accurate projection.

I have worked hard during my time in this job to be responsive and transparent to the Congress. Nothing has changed. But while I would like to be in a position to give you a realistic estimate of what the Department will need for the fiscal year 2009 supplemental funds, I simply cannot at this point.

As I just mentioned, Congress has yet to appropriate the remaining balance of last year's war funding request. This delay is degrading our ability to operate and sustain the force at home and in theater, and it is making it difficult to manage this Department in a way that is fiscally sound. The Department of Defense is like the world's biggest supertanker; it cannot turn on a dime and cannot be steered like a skiff. So I urge approval of the fiscal year 2008 GWOT request as quickly as possible.

Mr. Chairman, with your indulgence, and in closing, I do want to take a moment to thank you and the subcommittee. Last year and this year, it became clear to me that you had serious concerns over how well the Department was dealing with the large presence of contractors on the battlefield. A year later, I must tell you that most of your concerns were well-founded. We have discovered a number of problems, from alleged criminal activity to lax management to inadequate legal and contractual controls. As a result of investigations by the IG and the Army, we will increase the number of contracting officers in Iraq from 63 this past fall to over 300 by this April. Thirteen individuals have been convicted of wrongdoing and 91 additional investigations are ongoing. We are holding people in positions of responsibility accountable. I know we have been keeping you apprised of our efforts to better manage contractors on the battlefield, and I welcome the opportunity to discuss this topic further.

We have made significant progress in bounding the problem and taking concrete action to address resource management and procedural shortfalls. However, credit is due to the many Members who raised this issue last year. You properly identified this as an area needing my attention, and I thank you.

And Mr. Chairman, if I can add also, I recall a conversation with you where you recommended we add 1,000 contracting personnel, and my view was we needed 1,000 acquisition personnel. Well, it turned out we were both right. But you are absolutely right; we did need more contracting personnel. I just wasn't aware of it at the time. So I thank you for that because we have also addressed that issue.

So I thank you for the opportunity to provide the comments for Secretary Gates. Thank you, sir.

[The statement of Secretary Gates follows:]

FOR OFFICIAL USE ONLY
UNTIL RELEASED BY THE
HOUSE APPROPRIATIONS
COMMITTEE

STATEMENT OF

Robert M. Gates
Secretary of Defense

BEFORE THE

SUBCOMMITTEE ON DEFENSE
HOUSE APPROPRIATIONS COMMITTEE

13 FEBRUARY 2008

FOR OFFICIAL USE ONLY
UNTIL RELEASED BY THE
H0USE APPROPRIATIONS
COMMITTEE

Mr. Chairman, members of the Subcommittee:

Thank you for your continued support of our military these many years. I appreciate the opportunity to discuss the President's Fiscal Year 2009 Defense Budget request.

Before getting into the components of this request, I thought it useful to consider it in light of the current strategic landscape – a landscape still being shaped by forces unleashed by the end of the Cold War nearly two decades ago. In recent years old hatreds and conflicts have combined with new threats and forces of instability – challenges made more dangerous and prolific by modern technology. Among them:

- Terrorism, extremism, and violent jihadism;
- Ethnic, tribal, and sectarian conflict;
- Proliferation of dangerous weapons and materials;
- Failed and failing states;
- Nations discontented with their role in the international order; and
- Rising and resurgent powers whose future paths are uncertain.

In light of this strategic environment, we must make the choices and investments necessary to protect the security, prosperity, and freedom of Americans for the next generation.

The investment in our military being presented to this committee is $491 billion out of a total Department of Defense request of $515.4 billion.[1] The total defense request is about 3.4 percent of our Gross Domestic Product and represents a 7.5 percent increase – or $35.9 billion – over last year's enacted level. When accounting for inflation, this translates into a real increase of about five and a half percent.

[1] Does not include $24.4 billion that is under the jurisdiction of the Subcommittee for Military Construction, Veterans Administration, and Related Agencies.

I also strongly support Secretary Rice's request for the international affairs funding. This request is vital to the Department of Defense; in the current strategic landscape, we need civilian expertise and robust engagement around the world to build goodwill, represent United States values and commitment to our partners, complement the contributions of our military, and set the long-term conditions for peace, prosperity, and an environment inhospitable to extremism.

Strategic Modernization – Future Combat Capabilities

The FY 2009 budget request provides $183.8 billion in strategic modernization to meet future threats, a 4.7 percent increase over the previously enacted level. This category includes more than $104 billon for procurement.

Joint Combat Capabilities

The base budget provides $9.2 billion for ground capabilities, including more than 5,000 Humvees and 4,000 tactical vehicles. This request provides $3.6 billion to continue development of the Future Combat System, the Army's major modernization program.

A total of $16.9 billion is allotted for maritime capabilities, with $14.2 billion for ship-building, including:

- The DDG-1000, the next generation surface combatant;
- Two littoral combat ships;
- Two joint high speed vessels;
- Two logistics ships; and
- One Virginia-class submarine.

The ships being built today must provide the capability and capacity to maintain the Navy's global presence and influence in the future. A fleet sized at 313 ships offers the agility required to meet a broadening array of operations and requirements with allies around the globe.

To improve air capabilities, the budget includes $45.6 billion, a $4.9 billion increase over last year's enacted levels.

This includes:

- F/A 18 Hornet and E/A-18G Growler fighters;
- F-35 Joint Strike Fighters;
- F-22 Raptors
- V-22 Ospreys;
- Unmanned Aerial Vehicles; and
- Recapitalization of various missiles and other weapons.

The Air Force's number one acquisition and recapitalization priority is the tanker fleet, specifically the KC-135, which is an average of 47 years old. This aircraft is increasingly expensive to maintain and less reliable to fly every day. The Air Force is proceeding with a traditional acquisition program for the KC-X, which will be able to refuel Air Force, Navy, and allied aircraft.

Retirement of aging aircraft is a vital component of recapitalizing our air assets. I urge Congress to continue to authorize aircraft retirements, lifting restrictions from previous years to help the Air Force maintain readiness and perform missions more safely.

Space

This request provides $10.7 billion to strengthen joint space-based capabilities in several categories, including:

- Space-based infrared systems; and
- Communications, environmental, Global Positioning System, and Advanced Extremely High Frequency satellites.

The Department's heavy reliance on space capabilities is clear to potential adversaries, some of whom are developing anti-satellite weapons. Protecting our assets in space is, therefore, a high priority. In the past, the Department has been slow to address this vulnerability, but we are ramping up to properly address this problem.

Research and Development

As changes in this century's threat environment create strategic challenges – irregular warfare, weapons of mass destruction, disruptive technologies – this request places greater emphasis on basic research, which in recent years has not kept pace with other parts of the budget.

This request for $11.5 billion will sustain ongoing science and technology research. Within this category, the FY 2009 budget includes $1.7 billion for basic research initiatives. In total, I have directed an increase of about $1 billion over the next five years for fundamental, peer-reviewed basic research – a two percent increase in real annual growth.

Missile Defense

The 2009 base budget provides $10.4 billion to continue developing, testing, and fielding a multi-layered system to protect the U.S. and its allies from tactical and strategic ballistic missile attack.

The Missile Defense Agency has successfully fielded elements of the ballistic missile defense system since 2004. Today, for the first time in history, our nation has an initial missile defense capability. In coming years, the Department seeks to grow this capability by testing

against more complex and realistic scenarios, and by negotiating with like-minded nations. Since becoming the Secretary of Defense, I have been personally involved in on-going discussions with Poland and the Czech Republic on hosting U.S. missile defense assets. I will continue to press for increased cooperation with our partners.

Readiness, Operations and Support

The FY 2009 request provides $158.3 billion, a 10.4 percent increase over last year's enacted level, for operations and training, as well as facilities and base support. $68 billion of the request will maintain combat readiness, focused on next-to-deploy units. The budget invests in readiness measured in terms of tank miles driven per month, ship steaming days underway per quarter, and flying hours per month. Additionally, this request includes:

- $33.1 billion for logistical, intelligence, and service-wide support;
- $32.6 billion for facility and base support;
- $11.8 billion for equipment maintenance to accommodate increased requirements, expanded scopes of work for repair and refurbishment of equipment, and the transition of systems from development to sustainment in the field;
- $10.7 billion for training, recruiting, and retention to ensure that the all-volunteer force has the right people with the right skills; and
- $2.2 billion for sealift efforts and commissary support.

The Department will continue investing in a number of critical initiatives that will have long-term implications for the readiness of our forces and the nation's ability to meet future threats.

Global Train and Equip

The global train and equip authority provides commanders a means to fill longstanding gaps in our ability to build the capacity and capabilities of partner nations. It allows the State and Defense Departments to act in months, rather than years, to help other countries build and sustain capable security forces. The program focuses on places where we are not at war, but where there are emerging threats and opportunities. It creates the opportunity to reduce stress on U.S. forces by decreasing the likelihood that troops will be used in the future. Combatant Commanders consider this a vital tool in the war on terror beyond Afghanistan and Iraq. It has become a model of interagency cooperation between State and Defense – both in the field and in Washington, D.C. Secretary Rice and I both fully support this authority. Its benefits will accrue to our successors in future administrations. The FY 2009 base budget requests $500 million, along with a request for $750 million in authority. I urge Congress to provide funding and permanent authority to meet enduring requirements.

Security and Stabilization Assistance

The FY 2009 budget invests $200 million in security and stabilization assistance along with a corresponding request to increase the authority. This authority will allow the Department to transfer up to $200 million to the State Department to facilitate whole-of-government responses to stability and security missions – bringing civilian expertise to bear alongside our military. This would give Secretary Rice additional resources to address security challenges and defuse potential crises that might otherwise require the U.S. military to intervene.

Africa Command

This request includes $389 million, or $246 million above previously enacted funds, to launch the new Africa Command, allowing the Department to have a more integrated approach

than the existing arrangement dividing the continent up among three different regional commands. This new command will help:

- Strengthen U.S. security cooperation with African countries;
- Train and equip our partners;
- Improve health, education, and economic development; and
- Promote peace and stability.

Foreign Languages

The FY 2009 budget includes $586 million for the Defense Language Program, a $52.3 million increase from last year. Thus far, our approach to improving language skills is having an impact. Proficiency in Arabic has increased 82 percent since September 2001. Although the value of foreign languages and cultural proficiency is recognized by our Special Forces, these capabilities are essential for all forces preparing for irregular warfare, training and advising missions, humanitarian efforts, and security and stabilization operations.

Quality of Life

The FY 2009 request includes $149.4 billion in military pay, health care, housing, and quality of life for service personnel and their families.

The request provides for $107.8 billion in pay and benefits an increase of 9.8 percent over the FY 2008 enacted level. This includes a pay raise of 3.4 percent for the military. Since 2001, military pay has increased by an average of 37 percent. For example, in FY 2009, the average enlisted E-6 (Army Staff Sergeant) will see a pay increase of $1,289. The pay of the average O-3 (Army Captain or Navy Lieutenant) increases by $1,943 in FY 2009.

Wounded Warriors

We have a moral obligation to see that the superb life-saving care that the wounded receive initially is matched by quality out-patient treatment. To provide world-class health care to all who are wounded, ill, or injured serving the nation, the Department is taking action on the recommendations made by the President's Commission on Care for America's Returning Wounded Warriors. To do so, we have formed a senior oversight committee – chaired by the Deputy Secretaries of Defense and Veterans Affairs – to examine several key areas:

- Case Management – integrate care management throughout the life of the wounded, ill, or injured service member to ensure they receive, as the President made clear, the "right care and benefits at the right time in the right place from the right person";
- Disability and Compensation Systems – streamline the disability evaluation system making it a single, supportive, and transparent process;
- DoD and VA Data Sharing – ensure appropriate information is accessible and understandable between departments; and
- Traumatic Brain Injury (TBI)/Psychological Health Issues – improve access and quality of care by reducing the stigma associated with mental health care and establishing new programs, such as a TBI registry.

The Department has already approved new standards for all facilities housing the wounded and we have placed pay management teams at numerous sites to better educate troops and their families about pay, entitlements, and benefits.

Future Health Care Issues

In FY 2009, DoD military healthcare costs are projected to be $42.8 billion (of which $0.5 billion is for military construction and outside this committee's purview) to maintain benefits for 9.2 million eligible military members and their families as well as retirees – more

than double the level in 2001. By 2015, the Department's health care costs are projected to reach $64 billion, or 11.3 percent of the budget.

Because of these concerns, the Department must also seek legislation to increase out-of-pocket health care expenses for retirees under age 65. The Department continues to believe that modest increases to TRICARE out-of-pocket costs for working-age military retirees are essential to make military health benefits affordable and sustainable for current and future retired service members.

Increase Ground Forces

Increasing the size of the Army and Marine Corps will relieve stress on the force and enable the nation to meet its commitments at home and abroad. This growth in end strength is a continuation of growth that began last year and is expected to continue through FY 2013.

U.S. Army

The FY 2009 base budget provides $15.5 billion (of which $4.3 billion is for military construction) to increase Army active end strength to 532,400, which includes an increase of 7,000 over the FY 2008 request. The Army request includes the cumulative cost of personnel added as part of a temporary increase in end strength after September 11, 2001 – an increase which had previously been paid for in supplemental appropriations.

The Army plans to grow its active ranks to 547,400 by FY 2012. In FY 2009, the number of active Army Brigade Combat Teams (BCT) will increase by two BCTs, from 40 to 42, with a goal of 48 BCTs by 2012.

I am concerned that the percentage of new Army recruits with high school diplomas has declined in recent years. While still above the minimum standard established by Congress, we

are watching these numbers closely, and are determined to grow the Army in a way that does not sacrifice the quality we have come to expect in the all-volunteer force.

U.S. Marine Corps

The base budget seeks $5 billion (of which $1.4 billion is for military construction) to grow the Marine Corps' end strength to 194,000, an increase of 5,000 over the FY 2008 request. As with the Army, the Marine Corps' request includes the cumulative cost of personnel added after September 11, 2001. The Marine Corps' plans to increase end strength to 202,000 by FY 2011, in order to achieve three balanced Marine Expeditionary Force units and to increase time at home station between deployments. This will enable the Corps to continue to be, as it has historically been a "two-fisted" expeditionary force excelling at conventional warfare and counter-insurgency.

War Funding

In addition to the base budget, our request includes $70 billion in emergency bridge funding that would cover war costs into the next calendar year. A more detailed request will be submitted later this year when the Department has a better picture of what level of funding will be needed.

The 2007 NDAA requires the Department of Defense to provide an estimate of costs for the Global War on Terror. We would like to be responsive to this request. The challenge facing us is that a realistic estimate requires answers the Department does not currently have to several key questions, such as:

- When and if the Department will receive the balance of the FY 2008 supplemental war request, and for how much; and

- What, if any, adjustments to troop levels in Iraq will result from the upcoming recommendations of General Petraeus.

We should also keep in mind that nearly three quarters of the FY 2009 supplemental request will likely be spent in the next administration, thus making it even more difficult to make an accurate projection.

In short, while I would like to be in a position to give you a realistic estimate of what the Department will need for FY 2009 supplemental funds, I simply cannot at this point. There are too many significant variables in play.

As I mentioned earlier, Congress has yet to appropriate the remaining balance of the FY 2008 war funding request, $102.5 billion. Delay is degrading our ability to operate and sustain the force at home and in theater, and is making it difficult to manage this Department in a way that is fiscally sound. The Department of Defense is like the world's biggest supertanker. It cannot turn on a dime and cannot be steered like a skiff. The consequences of not receiving the balance of this request may include:

- Retarding daily efforts in support of Iraqi and Afghan national security forces, to include training and equipping efforts;
- Halting our ability to pay military personnel and continue operations; and
- Limiting reset of equipment lost and damaged by ongoing operations.

I urge approval of the FY 2008 GWOT request as quickly as possible.

Conclusion

At this, my second and also last opportunity to present a budget before this committee, I thank the members of this Committee for all you have done to support our troops as well as their

families. In visits to the combat theaters, in military hospitals, and in bases and posts at home and around the world, I continue to be amazed by their decency, resiliency, and courage. Through the support of the Congress and our nation, these young men and women will prevail in the current conflicts and be prepared to confront the threats that they, their children, and our nation may face in the future.

###

Mr. MURTHA. Admiral Mullen.

SUMMARY STATEMENT OF ADMIRAL MULLEN

Admiral MULLEN. Good morning, Chairman, Representative Young, distinguished members of this Committee. Thank you for the opportunity to appear before you today. And I, like Secretary England, want to just express my great appreciation for all you have done and the constancy of your oversight, passion, concern and support. It means an awful lot and it has made a big difference.

I am honored to join—and actually my prepared script here says Secretary Gates, who couldn't be here—but Secretary England and two individuals whom I greatly admire and appreciate more than words can capture, serving with them in these very, very challenging times and discussing with you the President's fiscal year 2009 budget submission, and more broadly, the state of our Armed Forces.

Let me speak for just a moment about the latter. The United States military remains the most powerful and most capable military on the face of the Earth. No other nation has or can field or put to sea the superb combat capabilities resonant in our Army, Navy, Air Force, Marine Corps, and, I would add, our Coast Guard. This stands as a testament, of course, to the brave and talented women and men who serve—Active, Reserve, Guard and civilian, as well as their families.

I have been on record as saying they are the finest I have ever seen. I meant it then and I mean it now. Each trip to the field, each visit to a base and each hospital bed I stand beside only reaffirms that for me. I know many of you have also made such visits and can attest to the same. And so I also believe our enormous strength speaks well of the hard work of this committee and the Congress as a whole, as it does of the American people who through you, their elected Representatives, have invested heavily and wisely in our national defense.

We are grateful. We will continue to need that support. For however powerful our Armed Forces may be today, that power is not assured for tomorrow. That is why the budget we submitted last week contains more than $180 billion for strategic modernization, including $3.6 billion for the Army to continue developing the future combat system and $3.4 billion to procure 20 more F–22 fighters and $6.5 billion to fully fund continued development and testing, as well as production of the 16 F–35 joint strike fighters.

That is why it calls for money to continue building the next generation aircraft carrier and guided missile destroyer, increased spending on missile defense as well as the funding to complete the stand up of AFRICOM. And it is why we asked for more than $20 billion to increase the size of the Army and the Marine Corps.

There are those who say that there isn't much new in this budget, no big surprises. Maybe so. Quite frankly, we ought to take a little bit of pride in that, because it says to me that we looked pragmatically at all of our requirements, we did our homework and that from a fiscal prospective we have a good handle on where we want to go.

You know, a reporter recently reminded me, as investments, budgets are really a type of strategy. If that is so—and I believe it is—this budget reveals great balance in our strategy for the future; a realization that as we continue fighting in this long war and developing our counterinsurgency warfare capabilities, we must also prepare for, build for, and train for a broad spectrum of traditional warfighting missions.

A few weeks ago I was called to testify before the House Armed Services Committee about our progress in Afghanistan. I told them then that we were seeing only mixed progress and that Afghanistan was, by design, an economy of force operation. I told them we do what we can there.

I stand by those comments, even as more than 3,000 Marines prepare to deploy there and even as Secretary Gates continues to press our NATO allies for more support.

In Iraq things are going well, no question. Violence is down, business is up. Al-Qaeda is clearly on the run, and the political progress is beginning to move forward. Ambassador Crocker and General Petraeus deserve a lot of credit for their leadership and their results. So do all those men and women who have made a difference. The surge of forces we sent them and their innovative applications of counterinsurgency tactics have markedly improved the security on the ground and created the opportunity for progress in the economy and on the political front. As both men have made clear, this progress is tenuous and must be very carefully watched.

And I am sensitive to their concerns as we continue bringing the surge brigades home. Conditions on the ground count. But tenuous too, sir, are the long-term risks we take with our security commitments elsewhere in the world if we do not address the toll ongoing combat operations is taking on our forces, our gear, our people and their families. The well is deep, but not infinitely so. We must get Army deployments down to 12 months as soon as possible. People are tired. We must restore our Marine Corps expeditionary capabilities. They are dangerously on the wing. We must stay dominant at sea, in space, as well as cyberspace.

Others are beginning to pace us in the speed of war; likewise, they are beginning to pace us in the technology that is being fielded. We must do a better job identifying and treating not only the wounds we see, but also the wounds we do not see. Too many of our returning warriors suffer in silence. This budget, by the way, allocates $41.6 billion to enhance quality of life and provide world-class health care for the entire force.

We must honor military families by enhancing GI bill benefits' transferability, broadening Federal hiring preferences for military spouses, and expanding child care benefits in appreciation for their many sacrifices. And we must remain persistently engaged around the globe, building partnership capacity, improving international and interagency cooperation and fostering both security and stability.

That is why I urge Congress to enact the authorities in the Joint State Department/Defense Department Building Global Partnerships Act. And that is why I urge this committee to appropriate the remaining $102.5 billion of the 2008 GWOT supplemental as soon as possible.

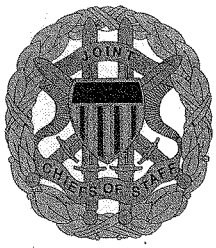
The art of war, not unlike the business of governing, is about choices. Military leaders must make hard choices every single day. Choices that affect the outcome of major battles, the well-being of whole nations, and the lives of potentially millions of people.

As we head into this new year with fresh assessments of our progress in Iraq, a new push in Afghanistan, and our continued fight in the long war against violent extremists, as we consider the depth and the breadth of traditional capabilities we must improve, please know that I and the Joint Chiefs remain committed to making informed decisions, careful choices, and choices which will preserve at all times and in all ways our ability to defend the American people.

Thank you Mr. Chairman, and I look forward to your questions.

[The statement of Admiral Mullen follows:]

House Appropriations
Committee Defense
Subcommittee



POSTURE STATEMENT OF ADMIRAL MICHAEL G. MULLEN, USN CHAIRMAN OF THE JOINT CHIEFS OF STAFF

BEFORE THE 110TH CONGRESS

HOUSE APPROPRIATIONS COMMITTEE DEFENSE SUBCOMMITTEE

13 FEBRUARY 2008

House Appropriations
Committee Defense
Subcommittee

Posture Statement of
Admiral Michael G. Mullen, USN
Chairman of the Joint Chiefs of Staff
Before the 110th Congress
House Appropriations Committee – Defense Subcommittee

Chairman Murtha, Representative Young, distinguished members of the committee, I am privileged to appear before you and report to you on the posture of the U.S. Armed Forces.

Let me begin by recognizing and thanking our Service members and their families. The brave men and women who answer the noble call to defend our Nation and the spouses, children and parents who support them are our most valuable national asset.

Your Armed Forces, and their families, have faced the challenges of continuous combat for more than six years. Our men and women in uniform serve our Nation, accepting unwelcome separation from their loved ones, long hard work under difficult circumstances, and in some cases making the ultimate sacrifice.

Military families are equally deserving of our gratitude. They bear the brunt of the loneliness, the uncertainty, and the grief that too often comes home when our Armed Forces are at war. Acknowledging the importance of their support, we must consider new initiatives such as transferring GI bill benefits to military spouses and children, military spouse employment support, expanded childcare and youth programs, and long-term comprehensive support of Wounded Warrior families.

We must provide our Service members and their families with the leadership, the resources and the support required to defend the homeland, win the Long War, promote security, deter conflict, and win our Nation's wars.

Introduction

Over the past year your Armed Forces have done much to improve the security environment. Operating globally alongside allies and partners, often in concert with the interagency and non-governmental organizations, they have successfully protected our Nation's vital interests: a homeland secure from catastrophic attack, assured access to strategic resources, a strong national and global economy, sustained military superiority and strategic endurance, and sustained global influence, leadership, and freedom of action.

A diverse set of perils threaten those interests and demand sustained action. Those threats include the proliferation of nuclear weapons and technology, transnational terrorism and rising regional instability. Today, these challenges manifest themselves most clearly in the Middle East.

We face additional challenges in other areas: a number of state actors who appear intent on undermining U.S. interests and regional stability, a growing global competition for scarce natural resources, the constant threat of natural disasters and pandemics, as well as increasing cyber and Space threats. Our military is capable of responding to all threats to our vital national interests, but is significantly stressed while conducting combat operations in Iraq and Afghanistan and other operations worldwide as part of this multigenerational conflict against violent extremism. A decline in our strength or a gap in readiness will undermine the U.S. Armed Forces capability to complete its range of missions from combat overseas to providing civil support at home. That is why I believe we must reset, reconstitute, and revitalize our Armed Forces while balancing global risk.

We do not—and should not—face these challenges alone. Today, more nations are free, peaceful, and prosperous than at almost any point

in history. While each has its own heritage and interests, most share our desire for security and stability. Increasing free trade, regional security partnerships, treaties, international institutions, and military-to-military engagements and capacity building strengthen the bonds between us and other nations. Our engagement with allies and friends demonstrates our leadership and resolve to fulfill security commitments, and works toward the common good. Most often, it is by taking collective action—and not going it alone—that we increase our ability to protect our vital interests.

With this context in mind, and in consultation with the Secretary of Defense, I have set three strategic priorities for our military. First, we need to increase stability and defend our vital national interests in the broader Middle East. Second, we must reset, reconstitute, and revitalize our Armed Forces. Third, we need to deter conflict and be prepared to defeat foes globally by rebalancing our strategic risk. Finally, to achieve our objectives in each of these areas we need to place increased emphasis not only on development of our own capabilities and the capacity of other agencies (State, USAID, Agriculture, Treasury, and Commerce and so forth), but also on building the capacity of our foreign partners to counter threats including terrorism and to promote regional stability.

Defend Our Vital National Interests in the broader Middle East

Although our vital national interests are clearly global in nature, the broader Middle East is the epicenter of violent extremism. Too many countries suffer from burgeoning populations and stagnant economies, which have increased radicalization. State and non-state actors alike foment instability. Terrorists and insurgents are at war with

governments in the region. The confrontational posture of Iranian leaders with respect to nuclear proliferation, the Israeli-Palestinian conflict, Sunni-Shia rivalries, the threat of terrorism, tensions in Pakistan, Hezbollah in Lebanon, political instability in the Maghreb, and the existence of Al-Qaeda and like-minded groups, all threaten regional stability and, ultimately, our vital national interests.

My near-term focus remains combat operations in Iraq and Afghanistan. The surge of U.S. forces to Iraq, a well executed counter-insurgency strategy and an Iraqi population increasingly weary of violence, and willing to do something about it, have all combined to improve security conditions throughout much of the country. Violent activities against our forces and against the Iraqi people have substantially decreased. These reductions have come about because of the hard work of Coalition and Iraqi Security Forces and the decisions of the Iraqi people and their leaders. Insurgent activity is down and Al Qaeda in Iraq is on the run—although both remain dangerous. Much hard fighting remains for Iraqi and Coalition forces before the job is done. Increased security has promoted reconciliation in some key provinces and the beginnings of national level reconciliation. We are working to secure a long-term security relationship with Iraq that will serve the mutual interests of both countries. As we continue to progress forward, Congressional support of future war funding will remain critical to success. An important component of that funding will go to building the capacity of increasingly capable Iraqi security forces.

Security is a necessary condition but is not sufficient for achieving our strategic end-state in Iraq. Political, diplomatic and economic development together with expanded governance and the rule of law form the foundations that will underpin long term stability and security in Iraq. We are making solid progress, but we still have a long way to go. I ask that Congress continue its support for increased interagency

participation in Provincial Reconstruction Teams, stability and reconstruction initiatives, U.S. business investment, DoD business transformation efforts, and good governance initiatives. I encourage your continued emphasis on the importance of achieving political and economic goals. Your visits with the Iraqi government and other Iraqi political leaders support the efforts of American, Coalition, and Iraqi forces.

In Afghanistan we are seeing a growing insurgency, increasing violence, and a burgeoning drug trade fueled by widespread poppy cultivation. In response, more U.S. forces will deploy to Afghanistan. At the same time, the Afghan National Army and Police have increased in numbers and capability. The Afghan Provincial Reconstruction Teams continue to aid the local populations, and President Hamid Karzai is reaching out to support the provinces. In the U.S. section of RC East, access to basic health care has more than doubled and provincial councils have become functioning entities active in development. NATO forces provide a credible fighting force, but the alliance still faces difficulty meeting its force level commitments and some nations' forces in theater must be more operationally flexible. These challenges emphasize the importance of retaining U.S. freedom of action on a global scale. Just as in Iraq, your continued support for funding U.S. operations and efforts there, including PRTs, Afghanistan National Security Force development, and infrastructure development, is needed.

In short, a stable Iraq and Afghanistan that are long-term partners and share our commitment to peace will be critical to achieving regional stability and security. This will require years, not months, and will require the support of the American people, our regional allies, and concerted action by the Iraqi and Afghan people and their leaders.

I see daily reminders of other challenges in this part of the world. Recent irresponsible actions by Iran's Islamic Revolutionary Guard Corps

in the Strait of Hormuz could have led to a crisis between our nations. Restraint in our response does not signal lack of resolve or capability to defend ourselves against threats. Much more worrisome in the long term, however, is Iran's hegemonic intent, their continued refusal to verifiably suspend uranium enrichment, their continued support of terrorism and the resultant instability these actions foster throughout the region.

Al Qaeda safe havens in the under-governed regions of Pakistan, combined with the recent assassination of Benazir Bhutto, also contribute to regional instability. In my judgment, the most likely near term attack on the United States will come from Al Qaeda via these safe havens. Continued Congressional support for the legitimate government of Pakistan braces this bulwark in the long war against violent extremism.

Despite—or maybe because of—these diverse challenges, we are fortunate to enjoy the cooperation of many courageous partner nations in the region. A recent regional commitment to work toward an Israeli-Palestinian peace accord is one example. We should not inadvertently signal ingratitude toward any of these nations. Foreign Military Financing (FMF) and International Military Education and Training (IMET) are programs that have the potential to have significant strategic repercussions. I therefore seek Congressional support to ensure the Department of State's FMF and IMET programs remains fully funded.

After three visits to the Middle East since becoming Chairman, I am more convinced than ever that we will not achieve regional security and stability unless we strengthen all instruments of international cooperation, regional partnerships, and national power. We need to ensure our plans sustain current gains and chart a course that both capitalize on lessons learned while focusing on future demands and dynamic conditions on the ground. Our forces must remain in theater as

long as necessary to secure our vital interests and those of our partner nations, and they must operate with the full confidence and support of the American people and the Congress.

Reset, Reconstitute, and Revitalize our Forces

To be successful in defeating our enemies and deterring potential foes, U.S. Armed Forces require talented people who are fully trained in their specialties and well equipped with warfighting systems. The pace of ongoing operations has prevented our forces from fully training for the full-spectrum of operations and impacts our ability to be ready to counter future threats. This lack of balance is unsustainable in the long-term. We must restore the balance and strategic depth required for national security. Continued operations without the requisite increase in national resources will further degrade our equipment, platforms and people.

Our Nation's servicemen and women—and their families—are the primary focus of my efforts to reset, reconstitute, and revitalize our forces. Caring for them is a critical consideration in every decision I make. Our All-Volunteer Force continues to meet the requirements and demands of national security, but with great sacrifice. This is the longest time that our All-Volunteer Force has been at war. Our Service members, in particular our ground forces and their families, are under significant strain. However, they remain dedicated, they are resilient and combat hardened, and they are taking the fight to our enemies. I do not take their service for granted and recognize that their resilience has limits. I am extremely concerned about the toll the current pace of operations is taking on them and on their families, on our equipment,

and on our ability to respond to crises and contingencies beyond ongoing operations in Iraq and Afghanistan.

The Secretary of Defense fixed and limited deployment cycles at fifteen months deployed/twelve months home for the Army, seven months deployed/seven months home for the Marines, and one year mobilization with five years back for the National Guard and Reserves. I strongly support his decision as it stabilized rotations and provided predictability. However, at our current force levels, we cannot sustain these cycles. Fifteen month deployments are too long. To preserve personal, operational, and family readiness, we must shift the Army's deployment cycle to twelve months deployed followed by twelve months at home and then as quickly as possible to twelve months deployed followed by twenty-four months at home. We must do the same for the Marine Corps by moving to fourteen months at home for each seven month deployment. Therefore, the most important investment in the President's fiscal year 2009 budget is the commitment to expand our Army, Marine Corps, and Special Operations Forces. This continuation of the "Grow the Force" initiative is a long-term plan to restore the broad range of capabilities necessary to meet future challenges and restore a capacity for sustained action. This commitment encompasses nearly 33 percent of the total real growth of the DoD budget from fiscal year 2008 to 2009.

Recruiters have a tough job during peacetime and it is made even more difficult now given the expansion of both the Army and the Marine Corps and the decrease in the propensity of key influencers to encourage potential recruits to enlist during this period of war. In spite of these challenges, our recruiters are doing exceptional work. The military departments met their recruiting goals for fiscal year 2007 and remain on track for fiscal year 2008. We are also making sure we retain the people and the skills we need. The Services are using the full range of

authorities given to them by Congress in the form of retention incentives, and I ask your continued support for these programs to sustain our combat-experienced force. Last year, the Army and Navy employed the Critical Skills Retention Bonus to retain mid-career active duty officers who fill key positions. Likewise, the Services have offered bonuses to senior enlisted members of our Special Operations Forces. Investment in our people as our most important resource is vital. The cost of people continues to grow and we need to recognize this as we debate the right level of investment in defense.

Retention challenges impact more than just our active duty forces. Though they met their recruiting and retention goals this last year, the Army Reserve and National Guard have experienced some shortages in company grade officers and mid-grade non-commissioned officers who lead our troops. We are overcoming these personnel shortfalls through enhanced incentives for Reserve and National Guard service, flexibility in terms of service requirements, competitive pay, and enhanced retirement benefits. These initiatives are important steps towards transitioning the Reserve Components from a "strategic reserve" role to part of the "operational reserve," creating the depth and staying power to respond to multiple global requirements, and maintaining our professional Guard and Reserve force.

Maintaining our professional Armed Forces, however, takes more than talented recruiters, attractive incentives, and competitive pay. We must understand our next generation of Soldiers, Sailors, Marines, and Airmen. Their affinity for technology and collaboration may revolutionize the way we fight. The willingness of future generations of Americans to serve is directly related to how they, and their role models, perceive the veterans of today are treated and appreciated. The All-Volunteer Force depends upon the trust and confidence of the American people in our institution; it depends on trust and confidence in our leaders; and, it

depends upon trust and confidence that America's sons and daughters will be well-trained, well-equipped, and well-cared for in peace and in war.

While all our service members and their families have done their duty with great discipline and honor, one group in particular stands out: our returning Wounded Warriors and the parents, spouses and family members who care for them when they come home. As a Nation, we have an obligation to care for those who have borne the battle and who bear both the seen and unseen scars of war. Their sacrifices will not end following completion of their initial treatment. We should strive to provide only the finest medical and rehabilitative care for them and their families for the remainder of their lives.

As leaders, we must ensure all our Wounded Warriors and their families receive the appropriate level of care, training, and financial support they need to become as self-sufficient and lead as normal a life as possible. Our support can mean the difference not just between life and death, but between a life of severe disability and one of manageable limitations. To the degree that we fail to care for them and their families, and enable their return to as normal a life as possible, we undermine the trust and confidence of the American people and ultimately put at risk the preservation of our professional All-Volunteer Force.

It is also imperative that we retain the experience of our combat hardened leaders. We live in a dangerous and unpredictable world and in a time of incredible change. I believe this change will accelerate, not slow down. Today's combat veterans are the ones that will take our military into the future. Their experience in fighting terrorists and insurgents as well as caring for those wounded on the fields of battle will enable us to better prepare for the challenges of tomorrow, but we cannot afford to lose their hard earned experience today.

In addition to taking care of our people, we must repair, rebuild, and replace the equipment that has been destroyed, damaged, stressed, and worn out beyond economic repair after years of combat operations. As you are well aware, Service equipment has been used at higher rates and in harsher conditions than anticipated. In addition to the wear and tear experienced by our ground vehicles in Iraq and Afghanistan, our airframes and ships are aging beyond their intended service lives. Indeed since Desert Storm, seventeen years ago, the U.S. Air Force and U.S. Navy have flown near continuous combat missions over the Middle East and the Balkans. The impact of this usage is illustrated in the recent groundings of the oldest F-15 Eagle fighters, our repeated request to retire some of our C-130 Hercules and KC-135 Stratotankers, and the strains placed on our twenty-nine year old P-3 Orion reconnaissance aircraft.

Despite usage levels sometimes five to six times above peacetime rates, and in the midst of extremely demanding environments, equipment readiness in theater remains high, well above the peacetime goals. Your support has been helpful in accomplishing this mark. However, this high in-theater equipment readiness comes with a price—namely the impact on the remainder of the Service equipment. For example, our ground forces borrow equipment from non-deploying units in order to equip deploying units. While our deploying units are fully resourced to meet the challenges of the fight that they are in, we must get ahead of this challenge.

Our forces are relying upon the balance of funds requested in the fiscal year 2008 Global War on Terror request to accomplish equipment reset and to address readiness shortfalls. I urge the Congress to quickly appropriate the remaining GWOT request for fiscal year 2008, as it is essential to have continued, predictable, and adequate funding for the repair and replacement of both operational and training equipment. I

also ask for your continued support for our upcoming fiscal year 2009 Global War on Terror funding request.

Revitalization includes force recapitalization, modernization, transformation, re-stationing, and repositioning, along with personnel and family support programs. A revitalized force creates a vital deterrent effect. Preventing future wars is as important as winning wars. Such prevention requires global presence and persistent engagement. A revitalized force provides the means to expand cooperative relationships with other nations and contribute to a global capacity to promote security and stability for the benefit of all. A revitalized force will also ensure that we remain prepared to meet our global responsibilities.

Finally, a revitalized force is central to balancing global strategic risk. A revitalized force is a balanced total joint force, capable of operating across the spectrum of conflict. A balanced force possesses the capability and capacity to successfully conduct multiple simultaneous missions, in all domains, and at the required levels of organization, across the full range of military operations. A modernized, balanced total joint force is necessary if we are to successfully answer enduring and emerging challenges, and win our Nation's wars.

Properly Balanced Global Strategic Risk

Beyond the Middle East, and in addition to revitalizing our forces, we must take a worldwide and long term view of our posture and its implications for global strategic risk. We have global security responsibilities across the range of military operations. The challenges in Asia to the vital interests of the U.S. and our allies are an example.

We must be sized, shaped, and postured globally to leverage the opportunities for international cooperation and build the capacity of

partners for stability, while at the same time, deterring, confronting and preparing for profound dangers of the future. I am concerned, as are the Combatant Commanders, that we do not have sufficient resources to meet all the needs. By working with other growing powers, and by helping emerging powers become constructive actors, we can ensure today's dynamic environment does not devolve into a prolonged state of conflict and disorder.

The imbalance between our readiness for future global missions and the wars we are fighting today limits our capacity to respond to future contingencies, and offers potential adversaries, both state and non-state, incentives to act. We must not allow the challenges of today to keep us from being prepared for the realities of tomorrow. There is risk that we will be unable to rapidly respond to future threats to our vital national interests.

Funding by the Congress is critical to restoring balance in the long term. But resources alone are not enough. We must think more creatively, more deeply, and more systematically about how to best use our resources. We have learned a great deal about how to leverage modern technology and interagency participation to counter terrorism—those lessons can be shared with our partner nations, and applied to other security threats such as our Nation's counter narcotics efforts. Similarly, our new maritime strategy emphasizes the importance of leveraging other nation's capabilities. The growing interdependency of the community of nations will continue to offer similar opportunities. I support the United States' accession to the United Nations Law of the Sea Convention, and I believe that joining the Convention will strengthen our military's ability to conduct operations.

Our enduring alliances and partnerships promote stability and security. The twenty-six nation North Atlantic Treaty Organization leads the effort to help extend security and stability inside Afghanistan.

Australia and Japan have also made key contributions to operations in Afghanistan and Iraq. Another key ally, the Republic of Korea, has supported Operation Iraqi Freedom for the past three years—and continues to maintain a robust national commitment to security in Northeast Asia. Singapore and the Philippines work with us to counter international terrorist threats in Southeast Asia. Colombia's highly successful counterinsurgency struggle promotes stability in a critical region of South America. Our military to military relationships with Mexico and Canada are laying the ground work for greater Homeland Security. Enhancing our teamwork with our allies and partners is essential if we are to protect our shared interests.

Persistent engagement and capacity building with allies and international partners is a key means of properly balancing global strategic risk. Persistent engagement consists of those cooperative activities that build partner capacity, provide humanitarian assistance, counter common threats, and safeguard the global commons. As I noted earlier, we need to fully fund our Foreign Military Finance and International Military Education and Training programs and streamline the process for executing these and similar funds. Fostering and sustaining cooperative relationships with friends around the world contributes significantly to our shared security and global prosperity. Relationships take time to grow—and they require investment to stay strong.

In many cases, other countries have significant competencies, relationships, and resources that can promote security and stability. One way to build relationships with other nations is to help them accomplish the goals they cannot achieve alone. Helping other nations overcome security problems within their borders by increasing stability and eliminating terrorist safe havens bolsters our security as it boosts theirs. Our Theater Security Cooperation programs also form a

foundation for shared and interoperable response to contingencies. Regional Combatant Commands—such as U.S. Northern Command, U.S. Southern Command, and U.S. Africa Command—are being structured with interagency and international relationships in mind to boost our security and humanitarian assistance capabilities, and to foster long-term U.S. military relationships with regional nations and security institutions.

Legislation that increases the expeditionary capacity of civilian U.S. government agencies is critical to rebalancing global strategic risk. Increasing the ability of the U.S. government, as a whole, to deal with crises reduces the strain on our military forces. We need to empower the State Department to help other countries prevent and recover from conflict. I also fully endorse increased support for our intelligence agencies' global activities – upon which our Armed Forces depend. We additionally need to look at increasing the capacity of other U.S. government agencies—such as the Justice and Agriculture Departments, which are otherwise oriented on domestic missions—to help contribute civil expertise that the military lacks in stabilization and capacity building missions overseas.

Rebalancing strategic risk also means addressing capability gaps. The technology advantage that we have long enjoyed has eroded, with significant ramifications. Interruption of our access to cyberspace could substantively damage our national defense and civil society. Addressing this threat, the President's budget for fiscal year 2009 includes funds to reduce our cyber vulnerabilities. Likewise, freedom of action in Space is vital to our economic, civil, and military well being. We need to increase our capacity to defend our access to that domain. We must also address shortfalls identified by our Combatant Commanders in our Intelligence Surveillance and Reconnaissance sensors and processing infrastructure.

Fighting and winning wars is the main mission, but deterring them is always preferable. This is even more the case in deterring nuclear threats. We now face the prospect that nuclear weapons will be employed against us and our allies by non-state actors and rogue states. To defend our Nation and assure our allies, we must enhance our capability to rapidly locate and destroy targets globally. We seek to improve conventional prompt global strike capability, further develop global missile defense systems, and modernize our strategic weapons systems and infrastructure, to include developing a Reliable Replacement Warhead and a conventional ballistic missile. These components of our "New Triad," together with improved intelligence and planning systems, will help to ensure credible deterrence across a range of threats in the twenty-first century strategic environment.

Building Partnership Capacity

Building partnership capacity underpins all three of my strategic objectives and is an area that requires additional Congressional support. Unfortunately, there are serious shortfalls in the U.S. Government's ability to build the capacity of foreign partners—both within and outside DoD. The Departments of State and Defense conducted a systematic review of gaps in authority and developed an omnibus bill called the Building Global Partnerships Act which was personally brokered by the Secretaries of State and Defense. I strongly urge Congress to enact all of these authorities.

Foremost, DoD requires extension and expansion of its Global Train and Equip authority. Every single combatant commander cites this as DoD's most important authority to counter terrorism and to promote regional stability by building the capacity of partner military forces. These programs will not get funded or executed properly unless

DoD funds them and collaborates with State on implementation. Over the past three years, all Combatant Commanders, the former Chairman of the Joint Chiefs of Staff, the Commandant of the Coast Guard, the Secretary of Defense, and the Secretary of State have requested extension, expansion, and funding for these programs. Now is the time to make Global Train and Equip authority permanent, to increase the ceiling, and to provide annual baseline funding.

The Commander's Emergency Response Program has been enormously successful in Iraq and Afghanistan, and other Combatant Commanders have requested this same authority to enhance prospects for mission success in other regions of the world. Our commanders in the field view this as a critical force protection tool that allows them to shape the operational environment so force is not required.

Building the security capacity of our partners is important, but partners often need additional assistance to promote stability. Stabilization and reconstruction assistance authority allows DoD to transfer funds to the Department of State to provide assistance to aid foreign police forces, to improve governance, rule of law, economic development or essential services, and for humanitarian assistance. Stabilization and reconstruction assistance authority recently allowed DoD and State to enhance stability in Haiti, Somalia, Nepal, Trans-Saharan Africa, Yemen, and Southeast Asia.

We are in a new national security era that requires building new institutional capacity that does not currently exist. Most authorities to provide other broader forms of assistance reside at the Department of State, where patriotic foreign service officers and development professionals are doing everything they can with the force they have. But that force is woefully small relative to need. I support Secretary Rice's request for the Civilian Response Corps and ask Congress to enact quickly legislation authorizing its creation. I also strongly support the significant plus-up in people that the State Department and U.S. Agency

for International Development are seeking in the President's 2009 budget as well as its request for increased foreign assistance funding. The increases that Secretary Rice is seeking in 2009 are crucial to supporting our foreign policy goals; under-funding these activities undermine our national security. I would also support the reconstitution of the U.S. Information Agency or an equivalent functional entity to more effectively counter extremist ideology. Finally, I appreciate the Congress' direction to study the national security interagency system, and will strongly support that effort.

Conclusion

The past year saw America's men and women in uniform continue to engage in combat in Iraq and Afghanistan, while they also provided humanitarian assistance, worked with partner nations, and stood guard around the globe. Our Soldiers, Sailors, Airmen, Marines, and our Nation's Coast Guardsmen are making a positive difference. They do so willingly and unflinchingly. Their valor and dedication are inspiring and they serve this nation superbly. It is an honor to serve alongside them and my most solemn responsibility to represent them.

The American Armed Forces have evolved throughout our Nation's history. During the nineteenth century, while our country was an emerging power, the norm for our military included service at either small army posts on the Nation's Western frontier or single ship patrols off whaling stations in the Pacific. Throughout the twentieth century, our military fought—and deterred—large scale conflicts against powerful competitor nation-states, or their proxies, around the world. Today and for the foreseeable future, we are embarked on something new.

Our military challenge is to protect and preserve the American way of life by promoting greater global security, stability, and trust—building up the strength of our friends, defeating violent extremists, and deterring regional conflicts. Our strategic environment requires that we have a force that is ready for operations across the range of military missions.

We have yet to fully institutionalize the lessons learned particularly as it applies to building the capacity of partners and reforming the interagency. America has undertaken a staggering array of tasks in the past six years: securing the homeland, fighting global terrorism, applying a new counterinsurgency doctrine, expanding governance and rebuilding armed forces in shattered countries, and increasing our capability and capacity to assist other nations through a variety of material aid programs and expeditionary teams. All of these efforts have seen successes and setbacks. They have come at considerable cost to our Nation's sons and daughters, and to the treasure of the American people. We must do more than just document our lessons learned. We must accept that the future will likely require sustained engagement and continued operations that will focus on interagency and international participation. We must go beyond pondering and push to embed these lessons into a truly reformed interagency. We need continued Congressional support to make this imperative a reality.

As for your Armed Forces, we need a total, joint, expeditionary force that is suited to irregular warfare against asymmetric threats as well as supporting civil authorities at home and abroad. We also need a large-scale total force capable of major combat operations against traditional nation-state foes. We cannot do it alone; our forces must be part of a more encompassing team that includes other federal departments and partner nations. We must also recognize building international and interagency capability will take time. In the interim,

our superb military men and women, and their families, will fill the leadership role demanded of them.

All this takes sustained, robust investment and partnership. With your continuing help, our military will be ready for the challenges and opportunities ahead. Thank you for your unwavering support in time of war.

Ms. JONAS. No statement.

SUPPLEMENTAL FUNDING

Mr. MURTHA. Well, I appreciate the comments by the Secretary and the Chief. We hope we will have the supplemental ready for leadership's consideration by the end of March at the very latest. Well, by the end of February actually. So we hope that—we don't know what consideration it will be because that is a leadership decision, but it will be ready. We are looking at it now. We are working with the Department, trying to come up with what we feel is a balanced program for next year. It used to be it was only O&M, but now we have gotten into procurement. So it is a little bit different today and it will be a little bit different than you requested.

Mr. ENGLAND. That would be most helpful, Mr. Chairman. I appreciate your speedy action here because this would be most, most helpful to the Department.

Mr. MURTHA. Well, we know how important it is because we know from a planning perspective you need the money in place so you can fulfill contracts and so forth.

Mr. ENGLAND. Yes, sir.

Mr. MURTHA. But you mentioned taking care of the troops; 39 percent less for the programs which we added last year; taking care of counseling, taking care of children in the schools and so forth. What do we call that program? Family advocacy.

These troops not only suffer themselves, but the thing they talk about—and when I was in Afghanistan just last weekend, the commander said, We worry about the families. And, as you know, that is the major concern of these troops: Are their families being taken care of?

I go down to Bragg, Stewart and some of those places, and they tell me the kids are suffering, the hospitals weren't paying as much attention to the families as they should have been. The administrator says they were. Then I went to the wives club, who happened to be meeting, and they said, no, we can't get in as quickly as we would like. So we worked it out with the president of the club to call us periodically to make sure we got that worked out.

So we keep putting money in, trying to make sure they have what they need. And we hope the Department will understand that those are a priority with us. Not only the troops in the field, but the families themselves. And we will add that money back, or at least I will make that recommendation to the subcommittee.

With that I will ask, Mr. Young, any questions?

WOUNDED WARRIORS

Mr. YOUNG. Mr. Chairman, thank you very much. The last 20 years Mr. Murtha was Chairman of this subcommittee, then I was Chairman of the subcommittee, then Mr. Lewis was Chairman of the subcommittee, and then I was Chairman of the subcommittee again. And now Mr. Murtha is Chairman again. But in that time, I don't believe that the Defense Department could tell the difference, because we all worked together to provide what our Nation needed and what the members of our military needed, without any regard to politics, partisanship or anything like that.

And I am satisfied that we will do the same thing again this year, working with you, Mr. Secretary, and Mr. Chairman, working with you to determine what the needs really are and to provide them.

Last year we did have, as Mr. Murtha pointed out, we had some policy differences. We may have those policy differences again this year. I am not sure of that. But we did have policy disagreements. But it did not affect the ability of this Committee to provide what, working with you, we determined was needed for the security of the country. And we will do that again. The hardware that you need, the equipment that you need, training and training facilities that you need, we are going to do that.

But one thing that continues to weigh on my mind, and Admiral Mullen made the statement, that our people are tired. A lot of our folks have been hurt in Iraq and Afghanistan. And military medicine is really good. We have taken some hits, we have taken some complaints about the fact that maybe we didn't do enough, maybe we didn't do it right. But military medicine is pretty good. And Mr. Murtha and I and most of the members of this Committee have visited our wounded warriors at the military hospitals, especially here at Walter Reed-Bethesda. My wife, I know she bothers you all the time about problems that she finds at the hospitals, but she spent a lot of time there and she is really committed to these young kids and their families.

And I wanted to just mention, last week Beverly and I both went to Camp Pendleton and we visited the Wounded Warrior Battalion at Camp Pendleton. And it was quite an emotional time because we found Marines there who were in that battalion that we had worked with them and their families when they were in the hospitals here in Washington. And I will tell you, that was quite an emotional time.

But at Walter Reed-Bethesda, the Wounded Warrior Battalions and all of this is just really the first step, because when they go into the follow-on system, VA system, I am not so sure that the VA system was prepared, frankly, to handle the tremendous seriousness of some of these cases. So what I would ask you to do, Mr. Secretary, or Mr. Chairman, what about the wounded warriors? Tell us—the equipment is worn out, it is going to be fixed, it is going to be replaced or reconstituted or reset, as the admiral's statement says. What about resetting and reconstituting the human beings who wore the uniform, who made the sacrifices and who got hurt? And I know in your heart your commitment. But tell us something about what we should expect to hear from you to work with you to take care of these wounded warriors.

Mr. MURTHA. Will the gentleman yield? We have a vote on right now. If some of the members will go and vote, we will try to continue the hearing without a pause. But you folks go vote, and then I will go over later on. Mr. Young.

Mr. ENGLAND. Mr. Young, if I could just try first, then I will turn it over to the Chairman. Last year we put together, myself and Gordon Mansfield put together a group called the Senior Oversight Council. We brought in all the senior military people, civilians from DoD and also VA. We met literally every week. At that time last year, there were eight studies, including Dole-Shalala, which was

in the process of coming out. We examined every single recommendation of every single study. And, for example, in the area of PTSD and TBI, there were over 300 composite recommendations which we went through every single one in detail and used that to craft the way forward for both DoD and for VA, so that we would have seamless care between the two departments and to make sure that we had the right level of care for the departments.

And this Committee was extraordinarily generous, as I recall, had $900 million they put forward for PTSD and TBI. And Dr. Casscells, I know, came up and personally met a number of times with Members, et cetera. So I will tell you that this is at the highest level of attention of the Department of Defense and also the VA.

And we have put together programs, care coordinators, for example. Everything recommended by Dole-Shalala, everything that we could do ourselves we have implemented or are in the process of implementing. So we have worked to have individual care people. Of course, we have improved a number of case managers, a number of people who take care of everyone.

We have already started the Center of Excellence for PTSD and TBI. And as you know, that will eventually move to the new campus facility. It will be at the Walter Reed-Bethesda new facility.

Ninety million dollars is being spent by the Fisher Foundation because, frankly, we want other investment, we want the American people involved. And that will be a center to literally link all the VA and all the DoD centers of research and universities and hospitals across the country so that we get the absolute best care the Nation can deliver. Not just within DoD, not just within VA, but literally across the Nation.

So we are reaching out to everyone who has worked in this area so that we can do the very best the Nation can do for our men and women in uniform. Whatever their problem, whether it is physical, mental, whatever, I mean we are trying to bring all those resources together.

So I mean, a lot of this started with this Committee a year, 2 years ago. And I believe that we have responded very positively in this regard. And this will be a long-term effort, literally, between the Congress, between the best America can provide in terms of medical and psychological help, and the VA and DoD. So I believe this has the senior attention and we are making significant progress for our people. And I will have the Chairman make a comment.

Admiral MULLEN. Thank you, sir.

Mr. Young, Secretary Gates has pretty clear guidance. The first priority is get the best people, the right people, to the fight. The second priority is take care of everybody that is wounded and the families. And it has been both within that guidance that an awful lot has been—and quite frankly, a view that was expressed by this Committee many years ago. I can remember when this war first started, actually. And so we have done an extraordinary amount.

But to me that is a beginning. And this is a long-term, very difficult challenge. And if I were going to lay it out, my view is that we need to figure out as a country how to take care of these young people whose lives have changed forever in a way that takes care

of them for the rest of their lives. These are people who have sacrificed enormously and are looking at decades of challenges in many cases. And while it isn't inexpensive to do this, it is within the resources of this great Nation to take care of these people who sacrificed so much.

My concern is as an Active Duty officer, I both know and have learned a great deal about our medicine and what happens internal to the medical side. But these people I cherish, when they get discharged I pass to another institution, and that is the VA. And I am not very knowledgeable about the VA. And then when they pass through the VA, they pass back out into our society. And to me the connection between when they are fighting and injured and what changes they go through when that happens—and again it is certainly those who are injured, but also the families, through the military care system into the VA care system and back into our society.

We won't have this right until the people of America reach all these young people in their community that they care about a lot and make sure that their future is as good as it can possibly be. When I interact with the injured and their family, they want to be the best they can be, they want to be as normal as they can be, they want to contribute to society, those that are physically injured and those that are challenged because of the psychological trauma that they go through.

So how do we connect from their sacrifice to put them in place, in a good place for the rest of their lives? And we have got a long way to go in that regard. I as Chairman am very committed to that, could care not one wit that they are no longer attached to the Active Duty side. And I worry a great deal about the system that is to take care of them well beyond my reach. So anything you can do to support that, I would greatly appreciate.

FOLLOW-ON CARE

Mr. YOUNG. Mr. Chairman, if I can, just one further. Admiral, you and I have discussed this particular case numerous times, and I am going to mention the Marine's name, with his approval and with approval of the family. But it was a Marine that my wife and I met. He is from our area in Florida. And we met him when he first came into the hospital at Bethesda as a result of gunshot wounds. And he was pretty much in a vegetative state. He really had no comprehension at all. And there was a real question whether he was going to survive. But the medical folks made him survive. He lived.

He went to the end of the VA system and they took good care of him, but they decided that he would never get any better and they were just going to take care of him for the rest of his life. The family wasn't satisfied with that and they moved him to a private facility that you know of in California. And this young Marine now is walking, he is talking, he has appeared in court on several important issues to himself and his family, he has made decisions, and he is, frankly, living a life.

He is injured. He will never be as well as he was before he was shot. But this is a case—I am not sure that we can do this with every similar injury—but this is a case where he was given up, but

his family wouldn't allow him to be given up and he is back among the living again. And it is a real miracle.

What do we have to do to get these kids that kind of care when it appears they are at the end of the road?

Admiral MULLEN. Actually, this is Sergeant Cooley.

Mr. YOUNG. Yes.

Admiral MULLEN. And he is one of five Marines that were at this facility and who had been in the same kind of state. And it is a facility in Pomona, California. And I was told about this from a mother who had been living with her very badly injured son for a year and a half. And her name is Nalita Bagley, and she is a mother of Jose Pacino, who is a Guard and Marine, former Marine, who is a Guard out of—National Guard soldier out of Massachusetts. And first of all, we need to talk to the mothers and the spouses. They know a lot about our system. And we need to be connected to them. Because they—and they don't mince words either. And so we work hard to try get that feedback. And Deborah travels with me a lot to talk with spouses.

I believe the vision is we need to be able to—we need to reach to the incredible capabilities that this country has and connect again with the local communities who, I think if they know, they will reach out. How do we do that becomes a question. I spoke a month and a half ago with a group of orthopedic surgeons from all over the country here, who were working the physical aspects of the injuries, because it is leading-edge stuff with these injuries right now. And I asked them to go back and figure out how to reach those who are injured in their communities and figure out how they can push in as we push out.

I think it is in that connection that some of this can be solved. But mothers and spouses know a great deal about our system. Mrs. Pacino knows as much about our system Active, Army, Guard, Marine Corps, VA, as any person that I have met.

HEALTH CARE CENTERS OF EXCELLENCE

Mr. MURTHA. Let me say that I met yesterday with your top medical people. And in line with what Bill Young is asking, I said to them, in the psychological side and emotional side we just can't hire enough people to take care of them. And we have so many people that are from the countryside in the individual areas. What we need, as much as I dislike contractors, we need to look at what we do with TRICARE and have a separate thing for people who are in this situation. And they are looking at it. In other words, a case worker who knows the same as the mothers and wives know, and can direct them to the right place.

And when you look at the two correspondents that came back so well and then you look at the case that he is talking about and the cases I know about—well, all of us know about—if somebody pays attention they can get the right care. If we don't, sometimes they get lost in the system. That is what we don't want to happen.

So I think this new idea that we are promoting with the Center of Excellence and spreading it out throughout the country and then having case workers take care of the person not only through the fact they have been in the military hospital, but through the VA system. If they got a problem they can call that person. And they

only have maybe 14 or 15 cases, or whatever it is, but they have a network of physicians all over the country that they can call on to take care of them.

So I think we are moving in the right direction and I appreciate what you are saying and I can see great progress that will be made. We are not there yet, but we are making it.

Mr. ENGLAND. Mr. Chairman, that is the approach that you describe. We now have case workers. They come into our system while they are with us in DoD. They are literally assigned for life. They know about private institutions, they know about care facilities, they know about VA specialized care, they know about DoD. And their role is to work with the families, the person, within the system.

They know about educational opportunities, all the benefit programs in the Federal Government, Labor Department, everything. And their role in life is to be one on one and to stay with that person and always be able to provide expert counsel and advice to both the wounded warrior and the families so they can provide the best care wherever that may be.

And it transcends DoD. I mean it goes across VA into their community. So they stay with them, I mean, literally, quote, lifetime commitment, hopefully the same person, at least for a long time, until people change out. So that is it, but we have a test case now. I believe we have like 20-some care managers assigned as we expand that this year.

But that is the approach that we are doing. And by the way, that was a Dole-Shalala recommendation, by the way, was to have this sort of top-level care case manager for every single person.

Mr. MURTHA. Well, we appreciate that. Mr. Lewis.

EARMARKS

Mr. LEWIS. Thank you very much, Mr. Chairman. We have an adjournment motion on the floor. There is about a minute and a half left. Members are beginning to come back. Frankly, I have missed an adjournment resolution before. What that has to do with I will mention in a moment.

But as I look at—first off, I miss the Secretary, but I would like to have you share with him our concern about his arm and also share with him the fact that I came within a fraction, on my patio last night, of slipping on the ice as well, and these are dangerous times, you know.

But Secretary England and Admiral Mullen, I can't help but notice that the Defense Department is very clever in the way they get their work done. You have, over time, stolen two of our very, very fine women to help care for your work. Tina Jonas is sitting with you. Valerie Baldwin was with the Army for a while and has now come back to the private sector.

But it does take talent, and ofttimes these ladies are among our best. We don't like you stealing our good people, however. And so I put you on notice, we are going to watch with great care as we go forward.

Having said that, the adjournment resolution involves some of the games that sometimes take place in the House when there is confrontation between the two sides. But the issue at hand involves

the vote, up or down, on FISA, whether we can continue the opportunities we have to protect America by way of intelligence channels. And it is being suggested that the next step will be a motion to extend the current law by 21 days. The President has indicated that he will veto that. And our people are trying to send a signal that we are going to support that veto.

Frankly, it is really unnecessary in my judgment, but a very, very important item. Making sure that you all have the information, in a timely fashion, that comes by way of telephone activity in a foreign country, some of it coming through our country, is a critical issue. And it is a shame to me that we are wasting our time doing this today, but I think it will be settled very shortly.

Having said that, the work that our men and women are doing in the Middle East and around the world is fantastically accelerated by the expansion of the values of two facilities that are very near and dear to my heart. The National Training Center for the Army, NTC has been in my district up until this last election from the time it was organized. The Marine Corps facility, 29 Palms, is one of the most important training facilities of the entire country, but especially of the Marine Corps. Fabulous advancement has taken place there. Much of that advancement has taken place by way of a controversial item that is around these days that I would hope the Secretary, as well as you gentlemen, would pay attention to.

We have improved money flows available for activity that the Department wasn't quite ready for by way of a thing called earmarks, that dramatically impacted the activities at both the 29 Palms Marine Corps Base and also at NTC. But speaking to what the Chairman had to say earlier, sometimes those kinds of deposits of funds do other things that are important to families on those bases.

For example, for the longest time the first two-thirds of the existence of NTC elementary school children had to be bussed 35 miles one way to go to school, and then later in the day come back, obviously putting pressure on those families. It was absolutely beyond what should have been reasonably considered okay. It was an earmark that built an elementary school facility at the NTC. And the Congress responded by saying this is a family matter that helps us attract and keep these families in our service.

So I just wanted to mention to you, as I run off to try to make this vote, that sometimes within your budget priorities you can't do everything that maybe even you would like to do. And sometimes people on this committee recognize that even special funding—namely, something that the President didn't ask for or even the DoD budget didn't ask for—can make a big difference in the lives of our people.

So, remember, earmarks have a role to play. It is not just the earmark that caused the Predator to be available in Bosnia, not just the earmark that affected up-armored Humvees, et cetera, but, rather, sometimes for families as well. So maybe you ought to whisper in the ear of some of those people at the highest level that, from time to time, the committee actually tries to help in special ways.

So I am going to wander off, Mr. Chairman, and try to make that vote and I appreciate you letting me take the time.

MISSILE DEFENSE

Mr. CRAMER [presiding]. Thank you. Thank you for your comments. Welcome, all three of you, before the subcommittee. You know we take our business, our relationship, with you very seriously. And please pass on to the Secretary our concern about him and our regrets that he couldn't be here with us this morning.

I am going to ask a few questions and then we will go back to the regular order of events here. Also, tell the Secretary that I personally appreciate his comments, I believe in Munich, in the last few days about NATO particularly. And a number of us have made trips to Europe and are trying to interface with the European Parliamentarians, the governments there, to let them know that our concern about Afghanistan and NATO's participation in Afghanistan is so "harem scarem"—those are my words—and so unstructured, and it needs to be looked at in light of the current threat and the current problem there in Afghanistan.

But Secretary England, I would like to bring you back to missile defense, ground-based missile defense, and ask you a series of questions. Would you say that the threat to the United States from missile attack has increased or decreased in the last 10 years?

Mr. ENGLAND. I would say it has dramatically increased, Mr. Chairman.

Mr. CRAMER. And I want you now to address the issue of the third site.

Mr. ENGLAND. I am sorry; address what, please?

Mr. CRAMER. The third site in Europe that can enhance our capability to defend our Nation. There are doubters in the United States Congress about that third site. Could you offer information to us about that?

Mr. ENGLAND. Well, I can just comment that it is an important site, it is a defensive site, so it is important for Europe in terms of defense capability, also important for the United States. So there has been continuous dialog with European countries about installing a third site and radar to support that site, because it is important from the total context of missile defense, particularly for threats that might originate in that arena.

So the Department continues to pursue that. It is important as part of the total, quote, laydown of the whole missile defense. And so it is important, and we do continue to pursue it. It is important to America, it is important to our friends and allies.

Mr. CRAMER. Speaking of MDA, they recently issued an RFI on the GMD system. And an MDA spokesman told Jane's Defence Weekly on January 16th of this year, that the Agency was considering breaking the GMD system into as many as eight different parts. Why would the Agency try to break apart a system that is not broken? If you, Secretary England, can't answer that, I would like information back about that.

Mr. ENGLAND. Unless the Chairman has some information, that is one I would have to get back with you, but I would be delighted to do so and will make an appointment to do it with you, Mr. Chairman.

[The information follows:]

The Missile Defense Agency (MDA) sent out a Request for Information (RFI) to industry on November 19, 2007, in which they identify eight potential acquisition risk areas associated wtih potential competition as well as potential breakout of various system components. However, the intent of the RFI is not to break the Ground-based Midcourse Defense (GMD) system into eight different parts, rather to gauge what, if any, strategies might be available to mitigate those known risks. Further, MDA intends to gather sufficient information to determine what, if any, impacts, such as unacceptable schedule delays, may result by breaking out activities or components into competitive acquisitions.

MDA's current acquisition alternatives include segregating the program into distinct contracts with periods of performance starting in January 2009: (1) Continued Spiral Development, System Evolution, and Integration within GMD and into the Ballistic Missile Defense System (BMDS); and (2) Performance Based Logistics (PBL) in support of the fielded GMD system. [Note: Each of these contracts will serve as follow-ons to the current Boeing GMD contract.] RFI respondents were asked to assume these activities are performed as separate contract vehicles. The information gained from this exchange of information with industry will better inform the government on the best way forward on spiral development, test, fielding, sustainment of the GMD element, and the integration of GMD into the BMDS. The government may even consider other acquisition alternatives and suggestions offered by industry.

No decisions have been made at this time, including the number and types of contract vehicles. Anticipated decision for the agency will occur prior to the contract end, December 31, 2008.

Mr. CRAMER. And then, continuing on to missile defense. Does the SECDEF believe the existing inventory of tactical missiles that we have are sufficient to address an emerging threat, or emerging threats, around the world, such as in North Korea, that continues to get a little more sophisticated and antagonistic, and in China and Russia as well?

Mr. ENGLAND. So, again, I will get back to you. We do have 24 ground-based intercepters. We also have sea-based intercepters in terms of what his ultimate number is. And, again, Mr. Chairman, I will get back with you on that subject.

[The information follows:]

The Department of Defense does not believe the existing inventory of ballistic missile defense interceptors is sufficient to counter the future ballistic missile threat. To date, MDA will have fielded 24 Ground-Based Interceptors in Alaska and California; 25 Standard Missiles-3 (SM–3) interceptors on 12 Aegis engagement cruisers and destroyers; and 21 SM–2 Block IV sea-based terminal interceptors. This interceptor inventory provides an initial defensive capability to defend the U.S. homeland and provides very limited protection for deployed forces and friends and allies.

MDA has programmed funding to increase the size and capability of its ballistic defense interceptor inventory. By 2013, MDA will have fielded 54 Ground-Based Interceptors in Alaska, California and Europe; 133 SM–3 interceptors on 18 Aegis engagement cruisers and destroyers; 96 Terminal High Altitude Area Defense interceptors in 4 fire units; and 100 SM–2 Block IV sea-based terminal interceptors. This interceptor inventory will complete the defense of the U.S. homeland but will be insufficient to fully protect deployed forces and friends and allies from emerging short-to-intermediate range ballistic missile threats.

The Joint Staff recently completed a comprehensive analysis on the projected ballistic missile threat to determine whether the current planned inventory was sufficient. This analysis called the Joint Capability Mix II (JCM II) found that the Department's planned ballistic missile inventory was inadequate to meet the future threat and recommended the acquisition of additional ballistic missile defense interceptors in the near future. The Department of Defense plans, during the POM 10 budgetary process, to address the future shortfalls in the ballistic missile defense interceptor inventory.

Mr. CRAMER. Those are my issues, and I thank you for your participation here today.

Mr. ENGLAND. So, Mr. Chairman, we will make an appointment with your office and we will follow up in detail on this topic with you.

Mr. CRAMER. Thank you. Mr. Hobson.

NUCLEAR WEAPONS POLICY

Mr. HOBSON. If my Chairman, Mr. Visclosky, is ready, he has a series of questions. You are not? Apparently not. Okay.

I am going to go ahead and ask a question that I had hoped to follow in tandem to him, but I am going to ask it now, and then I will follow up with Afghanistan later. Mr. Visclosky is Chairman now of the Energy and Water Appropriations Subcommittee, I am the Ranking Member on Energy and Water. And I think it is incumbent upon the administration to develop an overall strategy for nuclear weapons. It must be formed cooperatively with this Congress. And the sooner you do that, the sooner we will be able to make the hard decisions about what steps we must take to ensure a safe, reliable appropriately sized stockpile of weapons.

U.S. military strategists and financial people, Tina, have to know that our nuclear weapons are going to work. If we accept that confidence drops as our weapons get older, we have to pick a path. And I see only three realistic options: maintain a larger stockpile. You all know I think we should be able to reduce our current stockpile weapons, and I really don't like this option, but it is there.

Secondly, pursue a technological option that improves the reliability of the weapons. And that is what RRW was intended to do, as I understand it, but we all have problems with the way the administration has pursued this option. And three, restart nuclear testing.

Right now, our confidence in the current stockpile is based on years of test data. But as our weapons get older and older, the test data becomes less relevant. Now, I don't like that option, and we have some machines that may be able to do that. Unattractive as these choices are, they may be the only ones we can think of.

Mr. Secretary, are there options that you are considering? Do you see a trade-off between stockpile size, nuclear testing, and pursuing the technological option? And, third, will you see any need to both maintain the current stockpile and build a stockpile of RRWs?

Mr. ENGLAND. We have pursued the RRW. I am not familiar with your comment about all the problems with RRW. I know we have not received all the funding we have requested. But obviously, going forward, our desires are to develop an RRW, much more reliable warhead. With that, then, I think there are some options about potentially reducing the stockpile. But first we need to move forward with the RRW.

So, Mr. Hobson, at least my understanding of this is around the RRW as the way forward.

Mr. HOBSON. You will find a lot of differences within Congress in the manner in which both NNSA and the Defense Department approached RRW and that is why there is pushback on RRW as you see it today.

But let me ask another question too, because the RRW is really not probably something you have worked on, but it is something

that really needs to be looked at. What we do with the stockpile in the future and how we handle it?

Over a quarter of the Department of Energy's budget is focused on nuclear weapons activities or dismantling them, monitoring them, and extending their lives. I have often wondered if this arrangement made sense. What I mean by that is your Department develops the strategy for using these weapons for what their operational requirements are, how many are needed and that sort of thing. The Energy and Water Subcommittee is left in the position of having to come up with the money to pay for them, often taking funding away from energy programs or funding for levees. I have heard some complaints that Defense asked for the pie in the sky sometimes because they don't have to pay for them; it doesn't come out of your budget, so ask for everything.

Do you think this current arrangement makes sense or what, if anything, would be lost by requiring the Defense Department actually to pay for what they are requiring? Will we get more bang—a kind of bad word—more bang for our buck if we looked at it that way rather than having Energy—you guys just say, "Oh, we want this" and the guys over at NNSA just kind of bow and scrape and say, "Yeah, because it doesn't come out of your budget, it comes out of their budget," which comes to Energy and Water.

Mr. ENGLAND. Mr. Hobson, I was not aware that we were not paying for these programs with Department of Energy because—Okay. I guess that is a surprise to me. I always thought we were funding those development programs and funding the DOE labs to do work for us. So I thought there was a money transfer to DOE to do this. I guess I am surprised.

Mr. HOBSON. There may be some minor moneys, but the majority of money comes out of Energy and Water accounts. You build the delivery systems, the weapons. And the weapons development is funded by Energy and Water. And those labs are basically funded out of Energy and Water.

Mr. VISCLOSKY. If the gentleman will yield. It is a Defense function, but Energy picks up the tab.

Mr. ENGLAND. So, Mr. Hobson, we will look into that, sir. I wasn't aware of that.

[The information follows:]

The question of whether or not the funding responsibility for the Department of Energy (DOE) nuclear weapons activities should be transferred to the Department of Defense (DoD) has arisen in the past. The National Defense Authorization Act for Fiscal Year 1985 (Public Law 98–525) directed the President establish a Blue Ribbon Task Group to examine this very subject. The 1985 President's Blue Ribbon Task Group on Nuclear Weapons Program Management concluded that "the advantages of the current arrangement include checks and balances for nuclear weapon safety, security, and control; excellence and vitality of the national laboratories; . . ." and "the present relationship between DoD and DOE for managing the nuclear weapon program is sound." Congress subsequently created the Nuclear Weapons Council (NWC) in 1986 to strengthen the management oversight between DoD and DOE on nuclear weapons matters.

The NWC is a senior-level, interagency body responsible for the oversight and management of all matters relating to nuclear weapons. This is the forum where requirements from both Departments are discussed, reviewed and endorsed. It is also the forum for resolving differences in priorities and reaching consensus on nuclear weapons issues, including questions of budget and program priorities. The NWC is also responsible for developing reports associated with management of the nuclear weapons stockpile, including the Nuclear Weapons Stockpile Memorandum (NWSM) that specifies the size and composition of the stockpile. This annual plan

specifies out-year requirements and is coordinated and agreed to by both DoD and DOE and provided to the President. Through the NWC, DOE plays an active role in nuclear stockpile decisions.

Mr. HOBSON. Okay. If I have any time left—do I have any time left?

Mr. CRAMER. One more question.

AFGHANISTAN POLICY

Mr. HOBSON. Okay. Mr. Murtha and I went to Afghanistan. We went about a week or so ago. And we may differ on some things about Afghanistan, but I think we are pretty close on most things.

But I came away very disturbed about Afghanistan. I think Afghanistan is winnable, but the Europeans, in my opinion, are not doing their part. Some of them are not. But a number are. The Dutch, the Poles, our continent. There are a number of people fighting. There are other people with caveats that aren't fighting. And we are spread thin. And we need about 3,000 more people over there to make sure that we can get in the humanitarian aid which is needed. Because everybody I talked to, including your commander, sir, tell me that beyond the military side, we need more people in there doing agriculture types of things.

For example, they grow vegetables there. Fruits like pomegranates have to be sent to Pakistan to be processed because they don't have the warehouses and the facilities there. We could help them.

We have a great program going to train the police. The Army is about 80,000. And every person I talk to says they will fight, especially if we are around. But the police, they have had some problems with. They have got a new program that is working with the police.

The problem is that the European members of NATO, many of them will have such caveats on their troops, or have a different mission in their mind, that we can't seem to get it coordinated.

Now, the Afghan Government turned down Lord somebody, to come in and try to be the czar to get this working together. What are we going to do? This is a basic managerial problem. General McNeal, I think, did a good job. He is frustrated because he couldn't get it all done that he wanted to get done.

Then the second thing we ran into was the procurement of equipment. We are out there watching some contractors working with the police force, and they have got a pistol that everybody says doesn't work. It has got a firing-pin problem, was just one of the problems. But we bought it. It is U.S.-made. It was supposed to be a copy of something but it doesn't work right. And we asked, How did we buy this? And nobody knows how we bought it, but we have thousands of them.

And if Mr. Murtha comes back, he may get into that question, because we were very upset to find out that we are procuring weapons that don't work and giving them to the Afghan police, who are trying to change.

So I would like you to tell me, one, how are we going to solve this problem to get more troops in there? How are we going to get more people to do the kind of work that they need to build their economy back up, which they seem to be willing to do, with help?

And thirdly, what are we going to do about procurements on weapons?

Mr. CRAMER. Before you proceed to answer, we are in the middle of a vote now on the floor, 15-minute vote, motion to adjourn, another motion to adjourn. We will keep the hearing going. After the answer to this question, Mr. Moran, you will be the next questioner. So if the members could rotate, we will just keep the hearing going.

Mr. ENGLAND. Sir, nobody has worked harder to try to press the NATO allies to provide more capability against what we believe the requirements are. We are at least 3,000 short. As you indicated, we are going to send 3,200 Marines there. That is a temporary deployment.

Mr. HOBSON. Seven months.

Mr. ENGLAND. Yes, sir. It is a combination of both fighting capability as well as training capability. We have got 25 provincial reconstruction teams that do the kind of development work that I think we need to do more of. If I were going to pick the center of gravity, it would be to train the police and this—I think you are talking about this focus district development program.

Mr. HOBSON. They take the guys out, the whole group out, put a new group in. And some of the mayors are saying, Leave me the new group. They don't want their guys back.

Admiral MULLEN. And we have big challenges there, but we are early. This program is fairly new. We are cautiously optimistic, although that program comes by way of a shortfall of not being able to get police trainers. So it is a creative, innovative program that, quite frankly, Major General Bob Cone put together, who is responsible for that.

I think the center of gravity is the police. It is two things. It is the development piece, as well as the development—the police, right—the maturity of the police. As you indicated, this is a country that—this is a country that has been at war for 30-plus years. The Afghan Army is a good fighting army. And so the training that we are doing with them, we are seeing them produce more and more capable both leaders and units, companies, battalions, to fight. And I think that is a very positive indicator.

At the same time, overall, I have called the results mixed because we have got to have more capability across the board. I was a NATO commander in 2004–2005. So I understand the frustration. Generating forces is a big challenge. And as Secretary Gates has pointed out, many times these countries are coalition governments.

The comment earlier that was made about dealing with their Parliamentarians, I think, is a very positive one. And I don't know how NATO is going to produce more until that connection is made. And what I worry about, quite frankly, is more and more of that burden just coming our way.

Mr. HOBSON. But do we have the capability of handling that burden in a timely fashion? Because many people will say that in the next 6 months to a year, this is either won or lost. These people are going to decide whether it is worth sticking with the new way, which is our way—I am talking about the Afghanis—or are they

going to slide back to the people they think are going to be there later on? Especially if the Europeans don't step up.

Admiral MULLEN. First of all, I think to Lord Ashton's position, I think that needs to be filled as rapidly as possible. We need somebody to coordinate all the other aspects of the requirements over there. I am not one who believes that in 6 to 12 months this is going to be either won or lost. The challenges that are there are obviously longstanding. I don't think we are on a critical edge where it goes one way or another.

That said, as I indicated in my opening comments, this is an economy of force. It has been an economy of force. That, by definition, says we need more forces. We don't need several hundred thousand there, but we need more than we have in order to make a difference. And we need to have a unity of command that gives—I mean, General McNeal is the ISAF commander—a unity of both vision and sort of a strategic end state that we are all reaching for. And there are disagreements on that right now across NATO and all the countries—many countries view it differently. And I think bringing that together from the leadership standpoint is equally important.

Mr. HOBSON. The British general told us—who was McNeal's predecessor—that one country sent him tree huggers. He didn't need tree huggers. He needed people who were willing to go out at night and do the job. And that was a British general saying that. That wasn't our general.

Admiral MULLEN. Yes, sir, I understand. I think many of the NATO countries went into this looking at this from a stabilization aspect as opposed to a security aspect from the standpoint of counterinsurgency. We have got a counterinsurgency there. We have got to basically eliminate their effects in order to provide the kind of environment that will allow economic and political development and maturity to occur.

PROCUREMENT OF PISTOLS FOR AFGHANISTAN

Mr. HOBSON. Does anybody know anything about the pistols?

Admiral MULLEN. The only thing I would say, I don't know anything about the pistols, sir, except we are focusing actually much more—and Secretary England specifically leads this—we are focusing much more on the FMS program through which all of—a significant amount of equipment, certainly, that we buy passes. And this would be an example of one of the reasons we need the focus.

But I specifically don't know how—I can get back to you—how we got these pistols, how many we bought or what the problem is.

Mr. HOBSON. Thousands.

Admiral MULLEN. Yes, sir. But I don't know how we got there and we obviously need to fix that.

Mr. HOBSON. But nobody else there in country knew either and that was a problem. But anyway, I share your optimism about Afghanistan. But I don't think the Europeans really understand at all this dope that comes out over there winds up in their countries, not our countries, and more people die in Europe from that dope than that they are having killed in Afghanistan where we could do something about it. And I think that is something that the administration needs to work on more in getting that done.

But Jack and I were both there and it is actually different than—I have been there a couple of times, and it is actually different in different ways. But the one thing that is there that you do sense, there is a willingness to want to do—which is refreshing to see, because I have talked to people who have both been in Iraq and are there. And the guys that are here have a different perspective about this country than they had about Iraq when they were in Iraq. And they think they can get it done.

So, you know, that is a positive. Thank you very much.

Mr. CRAMER. Mr. Moran.

TROOP SURGE IN IRAQ

Mr. MORAN. Thanks, Mr. Chairman, and Mr. Under Secretary and Madam Controller. I am sorry for all the disruption, but those things happen. It is too bad because you have got a lot to share with us.

I want to get back to Iraq for a moment—because I share Mr. Hobson's view that Afghanistan might be winnable, although I think it is becoming less so, and largely because of the political considerations in Europe. We have lost, really, the support for military commitment on the part of NATO in Europe, and I understand Secretary Gates trying to renew that. But I don't think it is working with the European people. And we are going to have to—what I would expect that the subcommittee would be prepared to send more troops over to Afghanistan.

But that raises the issue of Iraq again. We have now provided $525 billion. The Secretary says there is going to be another $170 billion necessary. And that brings us up to $700 billion. A lot of money, when we were told originally that this was going to be—what did they say, $25, $50 billion or something, and that oil would pay for it all. I know the Chairman remembers those original numbers. They seem quaint today.

But this is really serious stuff. Now, Chairman, do you agree with what General Petraeus has told us, that a military victory is not what we are necessarily seeking nor is it possible in Iraq?

Admiral MULLEN. Completely.

Mr. MORAN. So we are not looking for a military victory.

Admiral MULLEN. No, sir.

Mr. MORAN. So, given that, the surge has quelled the violence. But the real question is, has it achieved the political reconciliation that does constitute the victory that we are looking for? I don't see it. I don't see this Shiite government making the real substantive, genuine efforts that are necessary to create an inclusive, stable government in Iraq, bringing in the Kurds who are now doing their only thing in the north and all they care—they still can't fly the flag up in Kurdistan. And this government doesn't seem to be reaching out to the Sunnis in any truly meaningful way, or even releasing the Sunnis that are kept in jail, thousands of them, for largely political purposes. So do you see us making real, substantive, political progress, Chairman?

Admiral MULLEN. Sir, actually over the last year—and I went to Iraq—I mean, I have been a number of times, and I went to Iraq right after I took over the job in October. And I was back over over the holidays, and I go back soon. And what I have seen—and I

think this was largely well known—is a fair amount of progress in the provinces; in other words, what I would call provincial reconciliation. And that is not going to solve the whole problem, but we have been very encouraged by that. And with the space that the surge security—the additional security that the surge has provided, the development of this concerned local citizens, this 70- to 80,000 who now are going to provide for their own security and the beginnings of the connection between the provinces politically and the central government, which is heretofore—or at least for the last 3–12 decades had not existed. Certainly a lot of hard work.

And in my view, Ambassador Crocker and his team, as well as General Petraeus, but particularly Ambassador Crocker working on the political aspects. And if we don't get it reconciled politically, nationally, then I don't think there is a solution.

As I indicated, this isn't about a military victory. They recently passed a deBaathification law that will go into effect here within a month; literally this morning as I showed up, I was told that the national government passed the amnesty law, their budget, as well as a Provincial Powers Act. Now, that to me is a lot of progress nationally, given the challenges that they have across the competition at that level. So I am actually very encouraged by that. I have watched it. They have been working this process very, very hard. It is obviously still a new government. Great challenges.

But the political process appeared to me to be evolving painfully slow at times. But literally in the last 24 hours, these three big major laws were passed, which I think is clearly a big deal, a big step, and made in great part possible by the security that they have had in order to be able to do that.

FUTURE OF IRAQ

Mr. MORAN. Well, Mr. Chairman, I know that your commanders are reporting back to you on a regular basis and the decision was made to arm the Sunni warlords because they are the ones that are making the real progress against al Qaeda in Iraq, because the al Qaeda, Sunnis, they live in the Sunni neighborhoods. And it is the Sunnis that have paid the worst price for their viciousness.

So the Sunni warlords are now armed. So they are shooting the al Qaeda instead of Americans. The problem is once those thousands, or however many al Qaeda leaders have gone, killed, captured or banished, what are they going to do with those arms? They are going to turn it back on us? Are they going to turn them on the Shi'a government to take back the government? Are they just going to foment a more violent civil war?

Can you address that because it seems to me that ought to be a serious concern in the long run.

Admiral MULLEN. I think it is a serious concern, and in this whole counterinsurgency—in the counterinsurgency and what we are trying to do, the center of gravity really is the Iraqi people. And they will eventually drive the governmental outcome.

I understand your concerns, sir. But I don't get that from the commanders on the ground, that that is an immediate concern. That it would be a possibility? I certainly suppose so, and one we would certainly be concerned about. We have made a huge difference with respect to al Qaeda and Iraq and they are very much

on the run. Not done. Very violent. You have seen that just again recently. So clearly that is going to continue to evolve.

But I have gotten no feedback from General Petraeus or Admiral Fallon that we think that is immediately on the horizon. Is it a possibility? I certainly think that is out there as well. But by and large, we are optimistic that we are moving in the right direction there. To guarantee it will never happen again, I don't——

Mr. MURTHA [presiding]. I am going to interrupt the gentleman. We are going to adjourn after—if the next vote is called.

So, Mr. Frelinghuysen, if you will keep your question to about 5 minutes, and then we'll get to Mr. Dicks. And if there is another vote, we will adjourn until a future time.

Mr. ENGLAND. Can I make one comment, Mr. Chairman, just because I think it is really important in this discussion with Mr. Moran.

Mr. Moran, the military is not going to win, but these are counterinsurgency, two sides of the same coin. One side is security and the other side is economic development. So you do have to have economic development, long term, for security. You need security, short term, for economic development.

I think what is very encouraging is that there is economic development. In the last 2 months, for the very first time, we have foreign direct investment in Iraq. There are now outside companies, not countries but companies, that have decided a security bond—the security environment is such that they are willing to commit their capital. And there are now a lot of companies that are in Iraq actually, literally, looking for opportunities for investment.

For the CLCs, that is very important, these concerned local folks, the Sunnis you talked about, because we do have programs to reintegrate them, to train and reintegrate into, literally, the economic system. And ultimately that is the most important thing, is developing an economic system that can support democratic——

Mr. MURTHA. I hate to interrupt you, Mr. Secretary. Because of the time constraints—you know, we have been over this. I said the most important part of this was economic development. As a matter of fact, you can look at Afghanistan where the economic investment has been reduced in half, from a billion to 500 million. So it is a combination of things, as you know.

Mr. Frelinghuysen.

ROLE OF THE NATIONAL GUARD

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman. I will be brief. But I would like to focus a few minutes, if I may, on our National Guard role. We have about 3,200 New Jerseyans that are about to deploy to Iraq. They are undergoing training, preparing to deploy in June. It's the single largest deployment of the New Jersey National Guard since World War II. It means half of our Guard will be over there, and the rest will be back in New Jersey to get ready for whatever might come their way.

For many of these men and well, these are not the youngest soldiers, but certainly like other members here, I thank all of those who serve, all of you for your leadership, all those who are volunteer Guard, Reserve, regular military.

What should those soldiers see when they get there? And what can you say about the issue of predictability, if there is any, about the potential for future requirements on their part? I guess that would be directed to you, Admiral.

Admiral MULLEN. Sir, I think for any of them that have been there before individually, I think they will see a dramatically different landscape than what they saw the last time.

Clearly, as was expressed by the Chairman, I am very concerned—and in my remarks—very concerned about the stress on the force. We are trying to work the National Guard and Reserve rotation back to 1 year deployed and 5 years at home. We are not there right now but we are working in that direction.

I want to commend the National Guard and the Reserve for what they have done since this war started, since we were attacked, has been truly enormous and we could not be who we are without their participation. And in terms of the overall Guard and Reserve posture, I think that is an issue.

And Mr. Pinero issued a report recently. I felt this way for years, that part of what is going to change as a result of this is our posture in the Guard and Reserve for the foreseeable future. We are moving so fast, sometimes it is difficult to predict exactly what it will look like. But these soldier citizens have made a huge difference and I think will in the future.

Mr. FRELINGHUYSEN. Would you comment further on the Pinero report? Marine general, obviously. Fantastic credentials. I mean, the headlines were that we have appalling gaps, we wouldn't be able to—back home—I come from a 9/11 state. So when I go to town meetings, a lot of people, obviously, have angst and anger and concern and apprehension about the war, the deployments of Regular and Guard and Reserve. But they are also concerned about what is going to be ready as part of our military arsenal in the case of natural disasters, or, for that matter, God forbid, some sort of a catastrophic event.

Admiral MULLEN. We have made a lot of improvements. I don't agree that everything that Mr. Pinero put in his report. For me it represents the kind of transformational message that I think we are going through with our National Guard and Reserve. How that exactly is going to come out in the long run, I don't know.

Clearly we are concerned about that relationship in terms of providing the capability for the Guard in each State. We have invested there some $32 billion over the next—since 2007, I think it is about $46½ billion in the Guard. We are coming up in terms of percentage of equipment on hand. We are not where we need to be. For the first time, though, that equipment will be the same equipment that our Active Duty army has. It will be frontline equipment, so they will be able to respond.

Recently, if I looked at the California fires, there was the team, it was the Guard, Reserve, there were Active, led by NORTHCOM, and also the entire Homeland Security team that responded very well. So certainly there are concerns.

I think this report should serve as a catalyst for us to have a national debate about what we should do for the future.

Mr. FRELINGHUYSEN. Let me credit both Chairman Murtha and Mr. Young on the resource issue. This is one where substantial in-

vestments have been made. It is the question of where they are all going to be sent. And I thank you, Mr. Chairman. Thank you, Admiral.

Mr. MURTHA. Mr. Dicks. And, Mr. Dicks, I have said that the next vote, we will go to the very end but then we are going to adjourn the committee. So if you would keep it as concise as possible, as you always do.

F–22 RAPTOR

Mr. DICKS. I will do my best, Mr. Chairman.

Admiral Mullen, Secretary England, it is good to see you both. Tell us what happened on the F–22? What we are concerned about—did the Air Force request advance procurement for additional F–22s be included in the 2009 budget request when it is sent to your controller? If so, why did you remove the funding? What happened here? Or is there going to be money for four planes? There is a lot of confusion.

Mr. ENGLAND. No. That is not what happened. In the fiscal year 2009 budget, we had $400-and-some million to shut down the line. That was the plan.

Mr. DICKS. What happened to that? That didn't show up either.

Mr. ENGLAND. So there was $400-some million to shut down the line, was what had been in the program, and there are no airplanes in the outyears. And so the decision was to convert that, to take that out and not to put the shutdown money in the budget this year. So we took that money out and we put it in the O&M account so the Air Force would have money to better address the F–15 issue. So then at that point, the line does not shut down because we took the shutdown money out. So it doesn't shut the line down.

The Air Force would have liked to have converted that money, Mr. Dicks, to a long-lead procurement. On the other hand, there are no future airplanes in the budget, so that would have been difficult to do.

Mr. DICKS. Didn't you have to do one or the other? Didn't you have to either put in the advance procurement or put in the money to shut down the line?

Mr. ENGLAND. So, instead, what we decided to do was——

Mr. DICKS. I like giving the money to the F–15.

Mr. ENGLAND. So the decision was, instead, that in the past, the Congress had not allowed the Air Force to buy replacement airplanes where they wanted to buy F–35s because they were not in production. So they have some airplanes that, because of either damage or wear-out or whatever, that have been denied. So the decision was this year, since the F–22 was in production, they could ask for those replacement airplanes in GWOT because in the past, again, they have been denying GWOT because the airplane is not in production. This airplane would be in production. That is probably about four airplanes. That would basically keep the line open at some very low rate, but it keeps the line open. And, frankly, then it defers the decision on the F–22. I mean, basically that is what it does; it defers the decision.

My view was, and I think the Secretary certainly will agree with this, is that at this point in time we should not preempt the next administration by just literally shutting the line down at this time.

So that was the decision, that we would not shut the line down. We do not have any airplanes in the future years, so this is something that will have to be reexamined. Frankly, my own recommendation is—I mean, my strong feeling is that we have enough F–22s and they are designed for a specific mission. We have enough to do that mission. And we need to go on with the joint strike fighter program, which is the next fifth-generation airplane.

So the question is, do we continue to buy F–22s for the next administration, or do they do the commitment where we have a lot of investment in the joint strike fighter. But, again, it is now a deferred decision.

I believe it was the right decision to let that on the table and let the next administration decide, rather than preempt that at this time.

Mr. DICKS. Admiral Mullen, do you have any comment on that?

Admiral MULLEN. No, sir. I mean, I am familiar with what happened. Certainly you know, probably better than I, we have certainly had this coming together for years. It is a huge challenge just because of all three variants. This isn't a surprise. We have got to have fifth-generation aircraft for the future. I think the question that is out there is how many? This is 183, I think, plus an additional 4. And I think this decision needs to be—needs to take in effect that we are down 162 F–15s right now. And that was a surprise.

So I think there needs to be a balance here. But I also think the future fifth-generation aircraft is the JSF in all three versions. And we have got to get that right. That is also a new program. New programs sometimes struggle.

Mr. DICKS. Slip.

Admiral MULLEN. I mean, that is not uncommon. I think we need to approach this from a balanced perspective.

PROCUREMENT RATES

Mr. MURTHA. If the gentleman would yield, let me add something to this. The maintenance costs have gone up for the F–15, 236 percent. The flying hour costs have gone up 87 percent—the F–15, I am talking about. And the manhours per depot maintenance per airplane has gone up 800. My concern is that we are buying such small quantities. And what the Secretary said is absolutely true—and I have challenged the Air Force. Tell me what the threat is so that we can make a decision about whether we need it. And Secretary Gates and I talked about this very thing.

The problem I see, though, and I worry about, we produced 86,000 aircraft in 1943. We produced 30,000 tanks more than Germany produced in the whole 5, 6 years of the war. We are buying 400 aircraft this year. And we are buying at such a low rate, it costs us so much more. So we have got to keep that in the equation at the same time. We are trying to come up with an agreement between you folks and us about, okay, what can we buy? How can we buy it at a better rate and get rid of some of these? Can we get rid of the 15s and put the F–22s, if they can show us what the threat is?

Mr. ENGLAND. Mr. Chairman, I mean, look, I agree completely on this. We do have to get the rate up. The economic order decline is

the joint strike fighter was one airplane for three services with a lot of commonality. If we start eating in the joint strike fighter procurement, we will find ourselves in the same position again, even with joint strike fighter.

Mr. MURTHA. Yeah, well, I understand that concern. But when you talk about the number of airplanes we can produce with the industrial base we have, this is a concern—past Iraq, I am talking about. I am not talking about in Iraq. I am talking about past Iraq. But we will talk a number of times about this with the Air Force and with the Defense Department.

Mr. Dicks.

Mr. YOUNG. Mr. Chairman, let me ask the gentleman to yield.

Mr. DICKS. I yield.

Mr. YOUNG. Someone listening to this conversation would almost get the impression that the joint strike fighter, the F–35, would be a replacement for the F–22. That is not the case. The F–22 and the joint strike fighter have two different missions. They are two different aircraft. And I just wanted to make sure that there is no misunderstanding that when we talk about the fifth generation, it is not replacing the F–22. That is a correct statement, isn't it, Mr. Secretary?

Mr. ENGLAND. It is correct, with a proviso, Mr. Young. The proviso is that the joint strike fighter performance and the F–22 performance is extraordinarily close. So the F–22, of course, was designed many years ago. It goes back to the 1980s in my career, goes way back. The joint strike fighter is a much newer airplane, so it also has very similar, if not in some cases better performance with other attributes. So I believe this is something that is very important that we look at carefully, Mr. Chairman, because it will affect the future ofairpower for all of our services.

AIRLIFT AIRCRAFT

Mr. DICKS. One additional question. Secretary England, is your office conducting an analysis to determine the cost/benefit of modernizing the engines on the C–5 versus procuring additional C–17s? We have been through a number of these big battles. And over the years, the cost of operating the C–5 has been very expensive compared to the C–17. So where are we on that one?

Mr. ENGLAND. Sir, we are in a Nunn-McCurdy, Mr. Dicks. And part of that is to look at costs——

Mr. DICKS. This is on the C–5?

Mr. ENGLAND. C–5. So we are looking at the C–5 in terms of Nunn-McCurdy and decisions on C–5 could indeed affect C–17. So that is still in the works, but I believe that is within a week of coming out. So very soon that recommendation will be coming out from Mr. Young, AT&L. So that will be the result of that study.

AGING AIRCRAFT

Mr. DICKS. Just one final comment. Again, the aging of the aircraft, all of our aircraft, except for like the F–22 and the C–17s, is getting older and older and older. These planes now are 25 years old.

I think we have to worry about the Navy in the same situation. They have got—with the F–18, it is a little newer. But aren't you concerned about this aging aircraft issue across the board?

Mr. ENGLAND. I am. But I will make a very blunt statement here. In the case of the Air Force, they have an aging fighter fleet, but on the other hand they will spend $65 billion, and we have 183 F–22s. So I mean, at some point we have to decide not to buy the very costly high-end airplane and buy the quantity. And so that—and by the way—

Mr. MURTHA. Mr. Secretary, we are going to be looking at this. And the development costs and the development time is also a concern: 5 years for the 16; 5 years for the 15; 19 years for the 22; and I don't know how many years for the JSF. And these are the kinds of things that we will debate and work out.

Mr. Tiahrt.

PROCUREMENT REFORM

Mr. TIAHRT. Thank you, Mr. Chairman. I understand you are trying to wrap this up. I would just have two requests, that Secretary England or somebody get back on.

Number one, I would like to appoint a contact for your current procurement reform. I know you have assigned somebody to do that. And we have some ideas that I would like to share with you, and perhaps change because of that.

[The information follows:]

Mr. Shay Assad, the Director of Defense Procurement and Acquisition Policy (DPAP), is responsible for procurement reform. Representative Tiahrt's office has been notified with this information. A meeting between them to discuss the issues of concern to Representative Tiahrt will be scheduled based on availability in the upcoming months.

MILITARY ASSISTANCE TO FIREFIGHTERS

The second thing is that we have been talking to the Forest Service, Mr. Dicks and I, in our Interior Subcommittee. And under the fire that was fought in Southern California, we have heard some reports that when the Marines were involved with—they brought in their light utility helicopters, the new ones, and they were unable to assist the Forest Service because of underperformance. For some reason it couldn't get off the ground. I wonder if there was some report that was done at that point in time about the performance of the light utility helicopter during what was called the "witch fire" in Southern California. And I would like to know if there is something that we could read about that.

Mr. ENGLAND. We will get you data, Mr. Tiahrt. I don't know. At one point there was a question about did we have problems with the helicopters. I think it was determined that was not the case, but we will get you that data.

Mr. TIAHRT. All right. Thank you. Thank you very much, Mr. Chairman.

[The information follows:]

Marine Aviation units based in Southern California supported fire fighting efforts during the October 2007 wildfires with fire suppression, VIP lift, and surveillance. Fire suppression was provided by the CH–53E Super Stallion while VIP delegation lift and aerial surveillance was provided by the UH–IN Huey. As a light utility aircraft, the UH–1 does not carry a significant payload and would not have been an

effective fire suppression asset. Neither aircraft performance nor maintenance was a factor for Marine Aviation in support of the Southern California firefighting effort. The Marine Corps' newest light utility aircraft, the UH–1Y model or "Yankee", did not participate in the wildfires. The UH–1Y has not been operationally fielded and currently has only limited numbers used for training and operational test.

Mr. MURTHA. Mr. Visclosky.

RELIABLE REPLACEMENT WARHEAD

Mr. VISCLOSKY. Thank you, Mr. Chairman.

Mr. Secretary, thank you very much for your appearance today. And Mr. Hobson alluded to my line of questioning earlier. On Energy and Water, we have responsibilities for funding the nuclear complex, if you would. And in last year's budget request, the administration had $88.8 million set aside for the reliable replacement warhead in the Energy and Water bill. They had a request for $30 million in the Defense appropriations bill. In the end, there were no moneys provided in the Energy and Water bill. There were $15 million provided in the Defense appropriations bill.

And not so much a question, although I have a question as to why the administration continues to pursue the policy when there was pretty clear language last year exhibited in the omnibus as to the RRW. My upset, I must tell you, is several-fold. One is that over the last year, the progress that I have seen made on behalf of the administration—and I use that term generically across the board, whether it be Defense, whether it be Energy, whether it be State, whether it be the Intelligence Community—the progress we made here is on the complex 2030, the whole rationalization of downsizing of a nuclear complex. The only progress we made was that they took off the 2030 because now they don't have any time frame at all as to when they are going to downsize the complex.

And the point I would make and that I have been making for the last year, Mr. Hobson has been making, and the members of the Committee, if we as a Nation—not the Bush administration—if the United States of America does not have a policy that has been formulated as to how you are going to use these weapons in the future, how we are going to protect ourselves from these weapons in the future and what are we going to have as far as our nonproliferation issue? Why should you proceed with the next generation of weapons?

I would take the time, if I could, Mr. Chairman, for a couple of minutes. The American Association for the Advancement of Science—and I would just set the stage with this from their report relative to the RRW—said that a panel observes that there have been several plants redo the nuclear weapons complex over the years, and none have reached fruition, in part because of their scope and long time scale. The panel believes that any plan for the nuclear weapons enterprise must have a clear rationale and bipartisan basis if it is to be sustained over 25 years, over a generation; because once it is in place, obviously conditions change, but administrations and congresses are going to have to live with it.

There was very clear language in the House report on Energy and Water this past year for the fiscal year 2008 bill that the Committee directs the Secretary—and, of course, in this case it is the Secretary of Energy—in consultation with the Department of De-

fense and Intelligence Community to submit to the Appropriations committees a comprehensive nuclear security plan.

And if I could for the record, Mr. Chairman, I would like to have the contents of that report language included. And the fact is that report language was then also referenced in the omnibus language in December in which it was stated that Congress agrees to the direction contained in the House and Senate reports requiring the administration, in consultation with the Secretary of Energy, the Administrator of the NNSA, the Department of Defense—including the Joint Chiefs of Staff and Strategic Command and the Intelligence Community and other appropriate independent, nongovernment science and security advisory organizations—to develop and submit to the Congress a comprehensive nuclear weapons strategy for the 21st century.

Besides the NNSA, which is not within your particular bailiwick, but you happen to be sitting here today and are a part of the issue because you are the customer so to speak—besides dropping 2030 from the nomenclature as far as downsizing the nuclear complex, is there any sense on your part that the administration is going to follow through on this and begin to look at a long-term national strategy so we know what we need a new weapon for?

And I would also go on, if I could, as long as I have raised that issue, with submitting for the record, Mr. Chairman, about six or seven quotes from House and Energy Appropriation Committee reports, Senate Energy and Water Committee reports, Senate Armed Services Committee report, the Defense Threat Reduction Agency report that says that we need a wider analytic and public debate on big nuclear questions, the future role of nuclear weapons, the limits of deterrence in the early 21st century; and, finally, Senator Nunn, who before our subcommittee, said that on the RRW itself, if Congress gives the green light to this program in our current world environment, I believe that this will be misunderstood by our allies, exploited by our adversaries and complicate our work to prevent the spread and use of nuclear weapons.

So to your knowledge, is there any work being done on such a strategy so we know why we need a new nuclear warhead?

Mr. ENGLAND. Mr. Visclosky, I mean, this is sort of a long question here. I think this is going to a take longer answer and one that I, frankly, can't provide to you. So we are going to have to get back to you on the subject and talk about it in more detail.

Mr. MURTHA. Let me make sure I understand. Do you want to put this in the record, Mr. Visclosky, the reports? I just want to make sure——

Mr. VISCLOSKY. I would just say sections of the report that deal specifically with the congressional direction to the administration as to what they are going to do. My upset, Mr. Chairman, being that after we zero this and add specific directive language, that we need a comprehensive, bipartisan generation look at this issue as to how are we going to use these. How does this play in——

Mr. MURTHA. What I am asking, though, Mr. Visclosky, what do you want us to put in the record? I want to make sure they understand what needs to go in the record.

Mr. VISCLOSKY. Okay. I would like to know what, in this case, the Department of Defense is doing in conjunction with developing

and submitting to Congress a comprehensive nuclear weapons strategy for the 21st century, which was in the—that was language in the omnibus package.

Mr. MURTHA. Without objection, that will be part of the record.

Mr. VISCLOSKY. Thank you, Mr. Chairman.

[CLERK'S NOTE.—The Department did not provide a response for the record.]

Mr. DICKS. If you would yield just for a second. Who at the Department would answer a question like that about nuclear warheads?

Mr. ENGLAND. It would be our policy department. I mean, our policy would pull together all the aspects with the Department of Energy and State and work across the administration with the Congress. It would be our policy department, Mr. Dicks.

Admiral MULLEN. The other thing I would say, Mr. Dicks, is I know General Cartwright has spent an extraordinary amount of time on this as well, so he would clearly be a participant.

Mr. DICKS. Okay. Good.

Mr. VISCLOSKY. And I would, as long as the general's name is mentioned, testified before a subcommittee and indicated after an extensive dialogue that there was not such a strategy last year.

Mr. MURTHA. Ms. Kaptur.

GLOBAL WAR ON TERROR

Ms. KAPTUR. Thank you, Mr. Chairman. Welcome, gentlemen.

Admiral Mullen, today who stands a better chance of making it through Basra? An Iranian patrol or an American patrol?

Admiral MULLEN. I was in Basra over the holidays. It has been turned over, by and large, by the British. And I think I guess one of the metrics that is very important to me is since the British started to do that, the level of violence with respect to them has gone down dramatically. Clearly there are challenges there locally with respect to how security is going to be maintained in the future.

The strategy, we believe is, it was time to do that. Certainly the British felt that way. And by and large, I think it has worked in that direction. That doesn't mean that we are not going to have significant challenges down the road there.

You know, we are concerned about the Iranian influence coming—you know, the Iranian Shi'a influence in the south. Clearly I think, from that standpoint and the violence that they oftentimes both support and foment, and their influence on the jam specifically. And I think that will continue to be a challenge.

I am not sure I can answer your question from the standpoint of specifically who would stand a better chance of survival. The violence down there has also gone down. It is a safer place than it was a year ago. But it is certainly not eliminated. And it can be—it can still be a very dangerous place.

Ms. KAPTUR. Some would say that Iraq is a failed state, sir. The Sunni, Shi'a and Kurds don't want to live together, they don't get along. We are asking our military to fill the political gap, and our military is doing a phenomenal job of doing what they are trained to do. But how long do you think we are going to be required to

remain in Iraq with our military serving as the glue that holds the place together?

I believe one of our Senators said 100 years. What is your estimate? Five years, 10 years? What are we talking about here? 20, 50?

Admiral MULLEN. I think I have said before, ma'am, it is years, not months. Exactly how many, I don't know. In fact, I am encouraged by the fact that in the last 24 hours that the Iraq Central Government has passed three laws that have been a big challenge that—I am sorry—their parliamentary body has passed three laws. That is a lot of progress, and it has been a challenge.

I think the security has been—the security environment having gotten better put them in a position to be able to do that. The economic development, which has gotten better, needs to continue as well. As far as a specific length of time, I couldn't—I wouldn't want to predict exactly. But I think it will be for a significant period of time.

TECHNOLOGY ADVANCES

Ms. KAPTUR. Could I ask you, Secretary England, there is an author, Clyde Prestowitz, who has written a book, Three Billion New Capitalists: The Great Shift of Wealth and Power to the East. And in this book he talks about the advanced technologies in the United States. Their development has slipped.

In fact, in 2003, Thomas S. Hartwig, the former scientist at TRW and chairman of the Department of Defense Advisory Group on Electronic Devices, told Congress that the structure of the U.S. high-tech industry is coming unglued, with innovation and design losing their tie to prototype fabrication and manufacturing, and that advanced semiconductor production needed for a new generation of weapons was migrating to Asia.

He goes on to say the following: My question really is, who at the Department is concerned about this and how are you addressing it?

Prestowitz makes the point that our country needs to use Russian, Chinese and European rockets to launch space satellites; that Boeing's decisions to outsource production of the wings on its 787 dreamliner had to be done abroad; The lack of U.S. Firms that had the capacity to manufacture the advance systems for military night vision capacity; French licensees have sold equipment to China; and finally, the U.S. dependence on China for a large number of strategic metals, including tungsten, yttrium, magnesium, and timonium and indium. They talk about this whole issue of R&D and whether we are able to keep up.

Who at the Department focuses on this? What are your comments on his statements? And how can we best address these concerns?

Mr. ENGLAND. Also, Ms. Kaptur, a couple of comments. First of all, just the day before yesterday, we had a whole briefing dealing with technology in the United States, what we call, quote, future shocks. I mean, what is going to happen in terms of energy and weather? What are the things that can happen, disruptive things that can affect us?

One of them, of course, is this whole area of technology, which is a concern of the Department because we rely on advanced tech-

nology. Obviously, that is what is important to our Nation. It is a concern to us—keep in mind that we are a very, very tiny part of both our national—it used to be we were dominant in this area. We are no longer dominant. Compared to our U.S. economy, we are a very small part of the U.S. economy, certainly a small part of the world economy, and indeed, as part of globalization, goods and services move around the world.

And so it is of interest and concern to us, and we do try to make sure that we have the capabilities we need here in the United States. We do have an office within AT&L that looks at this and worries about this all the time. And, of course, we also have our own institutions like DARPA, who work the front end of this. They give us a leading indicator of what is going on in all of these high-tech areas.

So we have our own DARPA, which is a couple of billion dollars a year. This year in the 2009 budget, by the way, you will see that we have recommended an increased level of R&D in terms of the basic sciences, because we feel like we need more work, and Secretary Gates personally asked that we increase those accounts. So 2009, you will see that we have increased our expenditures in basic science and technology; that is, research in important areas to the Department of Defense. So I am not sure there is an answer to this. I mean, there are huge global trends that we are a part of and that we try to work within and moderate to the extent we can.

But I would tell you, this is an area of great interest to me personally. I came out of industry and did a lot of this work. It is also of interest to Secretary Gates, who, of course, came out of the university environment where we do a lot of our S&T-type work in the country. And I know it is of interest to our military—I mean, we have regular discussions on this subject.

But, again, I will tell you that at one time we were dominant, say, in the semiconductor because we literally bought most of the semiconductors. We did a lot of the research. But now we are a very, very small part of those enterprises. I mean, we are probably 1 percent or less in many of those endeavors. So we no longer have the leverage we had in the past because of just the growth of the economy.

Mr. MURTHA. The time of the gentlewoman has expired, Mr. Boyd.

ACQUISITION COST ESTIMATING

Mr. BOYD. Thank you, Mr. Chairman. And, Mr. Chairman, I apologize for being late. Everybody has a hearing scheduled today. And, Mr. Secretary, I appreciate your service and you being here.

My question has to do with the Department's CAIG; that is, the Cost Analysis Improvement Group. Are you familiar with that group?

Mr. ENGLAND. Yes, sir, I am.

Mr. BOYD. That is the group who under the Department's policy is supposed to develop independent estimates for major acquisitions. And it appears to those of us in Congress that that group and those estimating procedures by that group are not being used and followed by the Department.

And it also appears that, as a result, many of the programs are underestimated and then cause budget problems down the road. Would you speak to that? And are these appearances that we have from the congressional level true or not?

Mr. ENGLAND. Mr. Boyd, I would say they are largely not true because we actually have—I won't say a rule—a policy within the Department. If we have a CAIG estimate when that goes forward, we go with the CAIG estimate. In terms of our funding profiles in the outyears, we use the CAIG estimate unless we decide for some overriding reason that we shouldn't use the CAIG. I mean, typically the CAIG estimate will be higher than the military estimate. And so we will in almost all cases go with the CAIG estimate unless there is some specific rationale why we believe there was some error or some change in circumstances; that is, the historical basis that they may use may no longer apply, et cetera.

So we do try to make this informed. We don't just follow every single recommendation of the CAIG. But by and large, we do rely on the CAIG estimates.

Mr. BOYD. When you don't use the CAIG estimates to rely on those, and you use some other estimate—by your own statement there, you said usually that is the lower estimate—do you find that those estimates pretty much hit the mark? Or are they low? Do you have any historical perspective on that?

Mr. ENGLAND. I am not sure I have a historical perspective. In almost every case, we actually go with the CAIG and in most cases, usually it would be long term. So, for example, if there was a whole new way of building an airplane—and I would say just take Boeing in the commercial sector with their new 787 composite airplane—I mean, you would expect that the aluminum airplane building in the past probably would not apply in terms of cost estimates to build that. Well, if we go to radical changes in our technology such that the historical trend may no longer apply, then we examine that. But I would say that is an exception and not the rule.

Mr. BOYD. How long has CAIG been in place, Mr. Secretary?

Mr. ENGLAND. A lot longer than I have been around.

Mr. BOYD. Is it part of the problem? I mean, we do have some problems, don't we?

Mr. ENGLAND. We do. And, look, it is a fair question, because here is the debate about the CAIG. If you put a higher in than the program manager estimates the program can cost—the program manager estimates a certain cost and the contractor—we end up with a cost of the program. If we then put in the CAIG estimates much higher and if we then program the higher money in the program, then you can be pretty certain that that money will be spent on the program. Right?

So to some extent, people will say it is a self-fulfilling prophecy. The CAIG is always right because indeed if you program that amount of money, that is what the program cost will be. I mean, it is a debatable point in terms of the CAIG. And therefore, I don't think we can just blindly go with the CAIG. I do think you have to look at this and at least question this, because otherwise you can end up actually spending more money than you would like on some of these programs.

Mr. BOYD. Secretary England, the disruption caused by faulty budgeting or estimating is greatly disruptive to your Department and the Congress in terms of how we appropriate our dollars, raise our dollars, spend them and so on.

Mr. ENGLAND. Can I make a recommendation? I will tell you that my experience is that the most disruptive thing is not knowing over a significant period of time what the level of investment will be. I mean, we get, by definition, yearly appropriations. You never know quite what they are going to be year to year. So contractors don't necessarily invest over a long period of time because they don't know what the outcome will be.

Multiyear contracts are very good. Stable funding over long periods of time is the best thing we can do to control costs or reduce costs. And that is within the Department across—I mean, in every enterprise, I think that is the case.

Mr. MURTHA. The time of the gentleman has expired.

You could also say that supplementals ought to be inside the regular budget, which gives us a better advantage. You can also say that the military estimates in many cases are lower so they can sell the program to Congress, and we have to pay the bill in the long run. So there are all kinds of ways of looking at this and we try to work it out between the committee.

And Mr. Young and I don't have any questions, but Mr. Dicks has a question.

DEFENSE CONTRACTOR PERFORMANCE

Mr. DICKS. Just one that Ms. Kaptur brought up that I don't think was fully talked about. And that is this question of the quality of the work that is being done out there. I get the impression that—I don't know if we have an aging workforce with these contractors, but we seem to see a lot more problems in terms of ordinary work that ought to be done pretty easily, winding up not getting done right. And delaying the programs and—especially in the classified arena. We have seen a number of examples in recent years of just shoddy performance.

Are you worried about this?

Mr. ENGLAND. I am. And I think it is a systemic issue, not necessarily shoddy workmanship. I think the issue is more of an opportunity to get a lot of experience. You know, again, if it was World War II and Mr. Chairman mentioned all—I mean, if you graduate as an aeronautical engineer in your lifetime going forward, you could have worked on, like, 100 different airplanes. And then in the 1970s it was 80. And now in your lifetime, you work on one or two airplanes.

So how do people get the experience, because literally the number of programs are large but small. So there is not the variety, I think, for engineers and managers and everyone else to gain experience along the way.

And so, yes, I believe that is a concern, Mr. Dicks, but I don't have an answer to that. But I——

Mr. DICKS. Is there also an aging workforce out there in these contractors? And I thought this point was raised, that we just seem to see so many programs in trouble now, and especially in the high-

technology area, where we used to be so good in our national technical means, the satellites in particular.

We seem to see failure, after failure, and it is across the board. It is everybody. It is all the big companies.

Mr. ENGLAND. We may be reaching too far too fast, Mr. Dicks. We always want the next technology, so we reach far and maybe that is something—and we do——

Mr. MURTHA. Mr. Secretary, we get estimates which we know very well are underestimated, and then they give you a figure of what they want to build. And in the end, the design is not completed, whether it is the Navy, the Air Force. And when you were the Secretary of the Navy, you got rid of thousands of people in order to build more ships. And those ships never got built because they stole the money and spent it someplace else.

We have got all kinds of problems we have got to work out. We have an opportunity here in this next budget to straighten out some more of these problems, and we appreciate your coming before the committee. We appreciate your dedication and look forward to working with you to come up with a budget we can all live with.

The meeting is adjourned until 2:00.

[CLERK'S NOTE.—Questions submitted by Mr. Murtha and the answers thereto follow:]

PERSONNEL—RECRUITING AND RETENTION

Question. A key principle of the U.S. Armed Forces is to attract and retain competent personnel to assure readiness and operational effectiveness. While the services have generally met their aggregate recruiting and retention goals, the GAO reports that the Army and Marine Corps have experienced shortages in mission-critical occupational specialties such as health care, human intelligence collection, and explosive ordnance disposal. There is growing concern within the department as to how the services can meet current operational demands with what appear to be chronic shortages in these occupational specialties. In addition, there is growing concern that recruitment standards may have been relaxed to meet numbers.

Secretary Gates, the Committee is very concerned regarding the recruitment and retention for mission-critical occupational specialties (MOS). For example there continues to be a shortage of nurses in the military and many billets remain vacant. Given the wartime environment that we are in, can you explain to the Committee what methods are currently available to recruiters to remedy this problem?

Answer. Each Service focuses on maximizing the effect of its respective recruiting programs, advertising campaigns, and retention programs to target critical or hard-to-fill skills. Health professional recruiting is especially critical, and the Services are placing increased emphasis in this area. We are very appreciative of the new authorities offered by Congress to help us meet these challenges, particularly the increases in bonus limits and the ability to reduce the military service obligation for health professionals in critical medical specialties. The Services use a variety of incentives—enlistment bonuses, educational benefits, and college loan repayment—to encourage youth to serve in critical military occupations. These incentives are also used by the Services to attract high quality youth, even-flow the training base through seasonal use, encourage enlistment for longer terms, and reward advanced education. Reenlistment and retention bonuses are used to encourage continued service while maintaining the desired force profile.

The Army is experimenting with new incentives under the "recruiting pilot" authorities granted in the Fiscal Year 2006 Defense Authorization Act to expand the recruiting market targeting high quality young men and women for service. Additionally, the Army has a special program designed to meet one of its most critically short and mission-essential needs—Arab Linguists. This "09L" program has been extremely successful in meeting this need, with over 1,000 native-speaking linguists recruited and available for the front lines in both Iraq and Afghanistan.

The young men and women that enter the armed forces stand among the best of American youth, above average in every facet—smart, fit, educated, moral, and re-

flective of the society they serve to protect. For over 20 years, the Services have met or exceeded the Department's quality benchmarks for Active duty recruits. Although the Army missed its high school diploma graduate benchmark in 2007, the Department of Defense (DoD) met its overall goal: 90 percent of Active duty new recruits were high school diploma graduates. This compares favorably to the national average in which about 70 percent to 80 percent graduate from high school with a diploma. In addition, DoD exceeded its aptitude quality benchmark, with 68 percent of new Active recruits scoring in the top half of the Armed Forces Qualification Test, well above the DoD benchmark of 60 percent.

Question. Secretary Gates, has the Army and Marine Corps analyzed how these occupational specialties have consistently been under-filled, and what is the operational impact of these shortages?

Answer. Personnel shortages have not, in my tenure, resulted in our failure to meet critical mission needs communicated to me by a Combatant Commander. The Department uses Joint solutions to address immediate shortfalls through "in lieu of taskings," in which all Services are called upon to meet immediate operational shortfalls. The Reserve components also have provided valuable contributions to address specialty shortfalls.

The Services evaluate their personnel readiness by analyzing how well they are matching the requirements of the billets to the Service members assigned to those billets—in terms of both skill and grade. Service members in skills that are in short supply, either because the qualifying standards are difficult to obtain or the skills are in high demand outside of the military, are often called upon to do more frequent rotations in order to ensure units are operationally ready.

To ensure that high operational readiness can be sustained, the Department, over the past five years, has developed a rebalancing effort in the Services that initially transitioned 89,000 billets in less-stressed career fields, for example, field artillery, to more heavily used specialties, such as Military Police, Civil Affairs, and others. As of this year, we have rebalanced about 106,000 billets, and the Services have planned and programmed an additional 99,000 billets for rebalancing between fiscal year 2008 and 2012. Although the amount and type of rebalancing varies by Service, key stressed capability areas include: Engineers, Intelligence, Special Operations, Military Police, Infantry, Aviation, Space and Combat Air Superiority. By 2012, we expect to have rebalanced about 205,000 billets. Rebalancing is a continuous and iterative process. The Department will continue to work closely with the Services as they review and refine their rebalancing plans to achieve the right mix of capabilities and alignment of force structure. This will greatly help reduce stress and support the Operational Reserve by providing a deeper bench for those skills that are in high demand.

For Service members who are deployed more frequently, compensation programs and the authorities provided by Congress give the Department the flexibility to package these authorities in the form of special incentive pays to ensure the compensation is fair and equitable. For example, the Department recently established the "Post Deployment Mobilization Respite Absence" program which provides administrative absence days for Active component Service members deployed more than 12 months in any 36-month period and to Reserve component Service members deployed more than 12 months in any 72-month period. The number of administrative absence days depends on how many months beyond 12 months the Service member is deployed. An administrative absence is the same as a day of non-chargeable leave. Additionally, Active and Reserve component members deployed to Iraq or Afghanistan and involuntarily extended beyond 12 consecutive months, or deployed for 12 months within a 15-month period, still qualify for the $1,000 per month compensation for any month or portion of a month served by involuntary extension. Administrative absence recognition is for additional respite and supplements the broader compensation mentioned above.

Question. Secretary Gates, are you concerned that the strain of multiple deployments will discourage good individuals from joining the Armed Forces or re-enlisting and staying in?

Answer. Recruiting: Today's military recruiting environment may be the most challenging to the all-volunteer force (AVF). Never in the history of the AVF, have our armed forces faced a recruiting environment as challenging as they have during the past several years. The global war on terror has placed unprecedented demands on the Services as our volunteer military is now into its seventh year of a protracted war in Iraq and Afghanistan. As such, youth willingness to serve, the heart of our AVF, is declining, and influencers of youth (e.g., parents and teachers) are less likely to recommend military service today than in recent years. Despite this, all Services met their numerical recruiting goals in Fiscal Year (FY) 2007, as well their Feb-

ruary 2008 year-to-date goals, and we project that all Services will meet their numerical goals in FY 2008.

Retention: We have studied the retention rates of those deployed—the Army's retention rates of initial term and mid-career soldiers in deploying units has remained between 120–140 percent of their goals since FY 2005.

As of February 2008, the Army and Marine Corps—our most heavily deployed Services—have exceeded their year-to-date retention goals; and the Navy met 98 percent of their aggregate year-to-date goal. The Air Force met 99 percent of their mid-career goal, but fell short in their initial (less than 6 years of service) and career (more than 10 years of service) goals. This was due to its force shaping efforts, coupled with its FY 2008 funding priorities.

However, the Army's increase in end strength, along with its reorganization into a modular concept, requires proportionally more mid-grade officers—and so we are closely monitoring retention in these grades to assess how much concern is warranted.

Question. Secretary Gates, please describe the standards by which candidates are measured. Have these standards been relaxed in any way to achieve the aggressive recruitment goals?

Answer. The Department has not relaxed enlistment standards. All new recruits are carefully screened and qualified for military service. The Department generally reports recruit quality along two dimensions—educational achievement and aptitude. Both are important, but for different reasons.

We value recruits with a high school diploma because years of research and experience tell us that those with a high school diploma are more likely to complete their initial three years of service. About 80 percent of recruits with a high school diploma will complete their first three years of service, whereas only about half of those who failed to complete high school will make it. Those holding an alternative credential (e.g., General Equivalency Diploma) fall between these statistics. The Department's benchmark for new recruits with a high school diploma is 90 percent and it has met or exceeded that benchmark since 1984.

Aptitude is a separate indicator of quality. All recruits take a written enlistment test, the Armed Services Vocational Aptitude Battery. Those who score at or above average on four of the subtests measuring verbal and mathematics skills (which comprise the Armed Forces Qualification Test (AFQT)) are in Categories I–IIIA. We value these higher-aptitude recruits because their trainability and job performance generally exceeds those in the lower aptitude categories. The Department's benchmark for new recruits is 60 percent scoring in AFQT Category I–IIIA, and it has met or exceeded that benchmark since 1986.

Question. Secretary Gates, DoD standards on qualification tests call for at least 60 percent Category 1 to 3 (the higher end of testing) and 4 percent Category 4, the lowest end. While the Departments of the Navy and Air Force have followed that standard, the active Army chose a higher standard of 67 percent in Categories 1 to 3, and 2 percent in Category 4. However, now the Army plans to revert to the lower standards of the DoD guidelines, which basically lowers the IQ standards for recruits. Do you believe that this will reduce the average effectiveness of Army units? Do you plan on lowering the DoD standards further to assist the Services in meeting their recruitment goals?

Answer. No, we do not believe this will reduce the average effectiveness of Army units. All new soldiers are not only qualified for military service, but meet the standards for training in their military occupational specialty. With regard to enlistment standards, the Department has not changed the recruit quality standards (benchmarks) since 1993, when those benchmarks were first established, and there are no plans to do so. The purpose of the recruit quality benchmarks is to ensure that recruit performance is sufficient to complete military missions. "Recruiting at the benchmarks" means that we are recruiting cost effectively for the desired level of force performance. The benchmarks were originally set to yield the performance levels of the force that fought in Desert Shield/Desert Storm. If economic conditions are such that recruiting can be conducted above the benchmarks (more Armed Forces Qualification Test Category I–IIIAs and more high school diploma graduates) at little or no additional cost, that is fine. However, recruiting at the benchmark is the target. Although the military recruiting environment is challenging, the Army met its numerical recruiting goals in fiscal year (FY) 2007, and in the first quarter of FY 2008. With regard to recruit quality, the Army achieved the Department of Defense (DoD) aptitude standard in FY 2007, and we expect it to meet that measure in FY 2008. Army fell short of the DoD high school diploma benchmark in FY 2007, and remains short through the first quarter of FY 2008. Since this educational benchmark is used to predict first-term attrition, the Army hopes to ameliorate the

effects of not meeting this benchmark by implementing other initiatives to reduce first-term attrition.

Question. Secretary Gates, recruiting and retention goals are often relayed to Congress in the aggregate, providing little or no visibility into how each occupational specialty is staffed. Will you provide the Committee with details on recruiting and retention by specialty code?

Answer. The Department examines recruitment and retention data for critical skill occupations. The Services use the following criteria in identifying approximately 10 percent of their occupational specialties as most critical for recruiting, and 10 percent of their specialties as most critical for retention.

For purposes of determining if a skill is *critical*, the following criteria are used:

- Be, have a history of being, or project to be, short;
- Requires high training and/or replacement costs;
- Is in high demand in the civilian sector;
- Is challenging to recruit into;
- Is crucial to combat readiness; and/or
- Is a low density/high demand skill.

See Tables 1 and 2 for the most recent information.

TABLE 1: CRITICAL SKILLS FOR RECRUITING ARMY, NAVY, MARINE CORPS, AND AIR FORCE

[December 2007]

Specialty	FY 2008 total accession requirement	FY 2008 accession mission to-date	FY 2008 accessions to-date	Percent of YTD accessions accomplished
Army Critical Recruiting Skills				
Infantryman	11362	1425	1479	104
Cannon Crewmember	1879	245	268	109
Field Artillery Computer Systems Specialist	683	117	110	94
Multiple Launch Rocket System Crewmember	280	19	16	84
PATRIOT Fire Control Enhanced Operator/Maintainer	419	44	23	52
Air Defense Command, Control, Communications, Computers and Intelligence Tactical Operations Center Enhanced Operator/Maintainer	297	38	31	82
PATRIOT Launching Station Enhanced Operator/Maintainer	666	81	73	90
M1 Armor Crewman	1388	100	118	118
Microwave Systems Operator-Maintainer	224	33	16	48
Multi-Channel Transmission Systems Operator-Maintainer	783	59	54	92
Signal Support Systems Specialist	2150	382	386	101
Military Police	3341	382	353	92
Intelligence Analyst	598	104	83	80
Human Intelligence Collector	910	129	131	102
Signals Intelligence Analyst	372	90	86	96
Light Wheeled Vehicle Mechanic	2623	435	444	102
Bradley Fighting Vehicle System Maintainer	267	26	25	96
Health Care Specialist	3659	489	483	99
Chemical, Biological, Radiological and Nuclear Specialist	787	98	94	96
Motor Transport Operator	3098	555	567	102
Explosive Ordnance Disposal	431	54	49	91
Petroleum Supply Specialist	2056	303	312	103
Food Service Operations Specialist	2143	145	141	97
Parachute Rigger	618	92	99	108
Electronic Devices Repairman	387	72	42	58
Total	41,421	5,517	5,483	99

TABLE 1: CRITICAL SKILLS FOR RECRUITING ARMY, NAVY, MARINE CORPS, AND AIR FORCE—Continued

[December 2007]

Specialty	FY 2008 total accession requirement	FY 2008 accession mission to-date	FY 2008 accessions to-date	Percent of YTD accessions accomplished
Navy Critical Recruiting Skills				
Nuclear Field	2520	610	614	101
Sea, Air and Land (SEAL) forces	1089	237	252	106
Special Warfare Combat Crewman	285	55	63	115
Second Class Diver	200	39	48	123
Basic Explosive Ordnance Tech	213	28	28	100
Cryptologic Technician Interpretive	462	96	63	66
Enlisted Aircrew	613	116	121	104
Enlisted Aircrew Rescue Swimmer	636	88	63	72
Total	6,018	1,269	1,252	99
Marine Corps Critical Recruiting Skills				
Aviation Support	688	126	123	98
Aircraft Mechanic	2297	421	554	132
Air Crew/Flight Mechanic/Navigator	379	69	86	125
Aviation Operations	331	61	76	125
Aviation Electronics Tech	1286	235	255	108
Electronics Maintenance	1095	200	122	61
Transportation	2043	374	276	74
Fire Direction/Control Specialist	338	62	38	61
Cryptologic Linguist	281	51	35	68
Intelligence	715	131	161	123
Infantry	6013	1100	1535	139
Marine Corps Security Forces	584	107	128	120
Marine Corps Security Forces (Personnel Reliability Program)	484	89	87	98
6 yr Infantry Bonus	300	55	71	129
5 yr Infantry Bonus	900	165	90	55
Reconnaissance Bonus	399	73	84	115
Military Police	966	177	217	123
Total	19,099	3,496	3,938	113
Air Force Critical Recruiting Skills				
Airborne Linguist	174	67	67	100
Combat Controller	222	56	56	100
Intel Applications	338	78	78	100
Imagery Analysis	171	29	29	100
Linguist	480	64	64	100
Network Intelligence Analysis	226	52	52	100
Survival, Evasion, Resistance, Escape	189	33	33	100
Pararescue	410	71	71	100
Internal Avionics System	326	66	66	100
Aircraft Structural Maintenance	334	73	73	100
Fuels	286	77	77	100
Explosive Ordnance Disposal	174	55	55	100
Security Forces	3786	714	714	100
Aerial gunner	51	8	8	100
Air Traffic Control	672	127	127	100
Tactical Air Command & Control	173	41	41	100
A–10, F–15 & U–2 Avionic Systems	62	20	20	100
Munitions Systems	695	149	149	100
Armament Systems	960	227	227	100
Special Vehicle Operations	23	11	11	100
Pavements & Construction Equipment	147	49	49	100
Structural Maintenance	173	62	62	100

TABLE 1: CRITICAL SKILLS FOR RECRUITING ARMY, NAVY, MARINE CORPS, AND AIR FORCE—Continued

[December 2007]

Specialty	FY 2008 total accession requirement	FY 2008 accession mission to-date	FY 2008 accessions to-date	Percent of YTD accessions accomplished
Utilities Systems	121	29	29	100
Engineering Assistant	152	28	28	100
Weather	197	52	52	100
Fire Protection	428	65	65	100
Aerospace Medical Service	636	132	132	100
Total	11,606	2,435	2,435	100

TABLE 2: CRITICAL SKILLS FOR RETENTION ARMY, NAVY, MARINE CORPS, AND AIR FORCE

[December 2007]

Active Army Critical Retention Skills							
Specialty (MOS)	Authorized/ assigned	Initial		Mid-Career		Career	
		YTD elig	YTD retained	YTD elig	YTD retained	YTD elig	YTD retained
Field Artillery Tactical Data Systems Specialist	2965/2772	59	49	38	36	11	10
Field Artillery Radar Operator	695/582	14	13	9	8	4	4
Signal Support Systems Specialist	7808/7386	190	152	109	94	45	41
Corrections	1212/1170	29	23	14	9	12	12
Intelligence Analyst	4860/5073	133	106	96	84	45	37
Combat Medic	18186/17647	349	262	348	335	161	148
Motor Transport Operator	16750/15702	341	295	212	201	107	102
Explosive Ordnance Disposal	1470/1133	24	18	13	11	7	7
Petroleum Supply Specialist	9956/9663	241	189	133	117	60	59
Parachute Rigger	1663/1426	45	40	59	54	17	17

Active Navy Critical Retention Skills							
Specialty (Rating)	Authorized/ assigned	Zone A		Zone B		Zone C	
		FY08 FYTD 1st QTR goal	FY08 FYTD 1st QTR reenlist	FY08 FYTD 1st QTR goal	FY08 FYTD 1st QTR reenlist	FY08 FYTD 1st QTR goal	FY08 FYTD 1st QTR reenlist
Nuclear Propulsion	10811/ 10996	168	183	100	87	38	41
Fleet Marine Force Reconnaissance Corpsman	138/67	2	2	1	3	0	0
Field Medical Service Technician	6772/ 7747	51	92	33	70	24	43
Medical Deep Sea Divine Technician	121/86	1	0	0	0	0	0
Fleet Marine Force Reconnaissance Independent	51/35	NA	NA	0	0	1	2
Navy Diver	1275/ 1002	14	15	6	13	5	6
Cryptologic Technicians Interpretive (Linguist NEC)	999/1757	13	34	11	16	4	9
Explosive Ordnance Disposal	1064/901	7	10	8	13	3	22
Fire Controlman AEGIS	2198/ 1933	19	46	16	48	3	9
Special Operations	2159/ 1896	34	41	19	31	21	24

Active Marine Corps Critical Retention Skills					
Specialty (MOS)	Authorized/ assigned	1st Term		Subsequent	
		YTD goal	YTD retained	YTD goal	YTD retained
Explosive Ordnance Disposal	568/431	23	64	15	60
Counter Intelligence	675/442	27	47	16	56
Reconnaissance Marine	1630/1215	49	52	19	70
Intelligence Specialist	1566/1258	32	71	22	94
Fire Support Man	627/508	12	22	6	24
Middle East Cryptologic Linguists	230/200	4	15	3	8
Asia-Pacific Cryptologic Linguists	169/97	4	9	2	2
Artillery Electronics Technician	82/65	2	4	1	0
Aviation Meteorological Equipment Technician	57/49	1	0	1	2
Light Armor Vehicle	984/992	18	29	8	22

Question. Secretary Gates, with the increases in reenlistment and enlistment bonuses, do you feel that the funding for recruiting and retention initiatives is sufficient?

Answer. Yes, we stand by the President's budget request for bonuses as sufficient to sustain strong recruiting and retention.

Question. Secretary Gates, how do the Army and Marine Corps recruiting commands plan to adapt to meet the new end-strength requirements. What are the short- and long-term implications associated with sustaining a heightened end-strength?

Answer. The Army and Marine Corps' end strength growth may require increases in both recruiting and retention goals. Achieving the higher strength levels will be driven by how quickly the Army and Marine Corps programs grow. Continued congressional support of recruiting and retention programs is essential to sustain the All Volunteer Force in the midst of its first protracted war. Sufficient resources must be committed to sustain military recruiting and retention programs.

PERSONNEL—DWELL TIME

Question. One essential element in maintaining troop morale during wartime is to provide some guarantees that there will be time to rest between deployments to combat zones. This rest is officially called "dwell time." At one point dwell time for the U.S. Army was a ratio of 1:2, 12 months in combat, 24 months at home. Due to the Global War on Terrorism (GWOT) Army dwell time has evolved to a 1:1 ratio. However, on April 11, 2007, Secretary Gates announced a new policy that active Army units now in the Central Command area of responsibility and those headed there will deploy for not more than 15 months and will return home for not less than 12 months. The Marine Corps sends its units to Iraq for seven months, with seven months intended at home station. However, because of mounting strain on our military from the war in Iraq, dwell time has been reduced.

Secretary Gates, there have been numerous articles regarding DoD consistently reducing 'dwell time' for our combat units. Do you expect that 'dwell-time' standards will be further relaxed or changed?

Answer. We do not expect to reduce our dwell time standards. In fact, our goal is to increase the dwell time for our ground forces by reducing the number of deployed Army Brigade Combat Teams by July of this year and increasing the size of the Army and Marine Corps. Even with these plans, we must recognize that the operational tempo of our forces is largely driven by the situation on the ground in Iraq and Afghanistan.

Question. Secretary Gates, the Army dwell time ratio at one point was 1:2, then 1:1, and now its 15 months in theater and 12 months at home, which equates to less than a 1:1 ratio. The Marine Corps dwell time is seven months in theater and seven months off. Has there been any evaluation as to whose system is better?

Answer. The various Services deployment paradigms are a function of the mission, culture, and needs of the individual Service. In that sense, the "best" way is that which works for each individual Service. These deployment patterns were developed over time to address many factors. For example, the Marine Corps deploys forces at and below the battalion/squadron level for seven months at a time, while units at higher command levels generally deploy for a year. This deployment pattern aligns with Marine Corps recruiting, retention, and skill training goals.

The Department-wide goal for all Services, regardless of deployment length, is that Active component forces are to attain a dwell ratio of 1:2 and Reserve component forces are to achieve a dwell ratio of 1:5.

Question. Secretary Gates, during dwell time it is our understanding that in addition to being home, our servicemen and women are also suppose to go through training. However, with dwell time being reduced, what steps are in place to ensure our forces get the proper training?

Answer. Regardless of dwell time, we continue to ensure our forces receive the proper training prior to deploying. Deploying organizations receive high quality training that is a combat multiplier for our forces. An important component of that high quality training for brigade combat teams, battalions, and some enabling units is the combat training center rotations at the National Training Center, Joint Readiness Training Center, and Marine Air-Ground Task Force Training Center. If deploying combat forces are unable to attend the training at the combat training centers due to deployment timelines, the combat training centers have conducted mission rehearsal exercises for the deploying forces at their home station utilizing local training areas. For those forces that do not routinely attend combat training centers, other training venues and capabilities are leveraged; but regardless of the training venue, the Army and Marine Corps chains of command validate the mental, physical, and cultural combat readiness of units prior to deployment. In addition to its Pre-Deployment Training Program, the Marine Corps is developing a standards-based Marine Air-Ground Task Force Exercise program to maintain proficiency in core war fighting functions for the future. For routine Navy employment, the Fleet Response Plan provides units trained and ready over a longer period of time irrespective of dwell. For Navy support to Operation Iraqi Freedom and Operation Enduring Freedom, Sailors receive training specified by the theater through the Joint Sourcing Training Oversight process administered by United States Joint Forces Command in Norfolk, Virginia. Dwell does not impact this training. The Air Force ensures similar training and, like the Navy, dwell time does not impact their training.

Question. Secretary Gates, is the training that the troops are receiving limited to the Global War on Terrorism (GWOT)?

Answer. No—The Armed Forces of the United States do train for executing a range of military operations. However, given current operational demands, the Army and Marine Corps major training venues, the National Training Center, Joint Readiness Training Center, and Marine Air-Ground Task Force Training Center, are primarily focusing their efforts on the training requirements to specifically prepare forces for the GWOT. The bulk of the Navy and Air Force major training programs support the broader range of military operations; however, Air Force and the Navy forces identified to support current operations also focus their efforts on specific training requirements in preparation for GWOT deployments. The Marine Corps has reported that heavy training for counterinsurgency, coupled with the short dwell time, does limit their ability to maintain proficiency in core competencies. However, they continue to train Marine Expeditionary Units to be proficient in specialized missions in support of their global employment.

Question. Secretary Gates, how much did last years "surge" effect 'dwell time' for the Services?

Answer. The answer depends on the Service. We have seen little, if any, affect on individual dwell time for Navy or Air Force personnel. In the Marine Corps, two battalions were extended by the surge and this had a small effect on overall Marine Corps dwell time. For the Army, we increased both the number of forces and the "Boots on the Ground" (BOG) time. These individuals are likely to have a BOG-to-Dwell ratio of less than 1:1.

Question. Secretary Gates, when dwell time is cut short what steps are in place to make sure that our servicemen and women are compensated?

Answer. On April 18, 2007, the Department established the Post Deployment Mobilization Respite Absence program which provides administrative absence days for Active component Service members deployed more than 12 months in any 36-month period and to Reserve component Service members deployed more than 12 months in any 72-month period. The number of administrative absence days depends on how many months beyond 12 months the Service member is deployed. An administrative absence is the same as a day of non-chargeable leave.

On May 24, 2007, the Department authorized the Secretaries of the Military Departments to pay Assignment Incentive Pay of $200 per day, not to exceed $3,000 monthly, in lieu of providing administrative absence, to those Reserve component members who are also government employees and cannot legally receive their civilian pay during days served on Active duty and who specifically elect the payment option.

Active and Reserve component members deployed to Iraq or Afghanistan and involuntarily extended beyond 12 consecutive months, or deployed for 12 months within a 15-month period, still qualify for the $1,000 per month compensation for any month or portion of a month served by involuntary extension. Administrative absence recognition is for additional respite and supplements the broader compensation mentioned above.

[CLERKS NOTE.—End of questions submitted by Mr. Murtha.]

WEDNESDAY, FEBRUARY 13, 2008.

U.S. MARINE CORPS READINESS

WITNESSES

LIEUTENANT GENERAL JAMES F. AMOS, DEPUTY COMMANDANT OF THE MARINE CORPS FOR COMBAT DEVELOPMENT AND INTEGRATION

LIEUTENANT GENERAL JOHN G. CASTELLAW, DEPUTY COMMANDANT OF THE MARINE CORPS FOR PROGRAMS AND RESOURCES

INTRODUCTION

Mr. MORAN. The Committee will come to order.

This afternoon we will hold a hearing on Marine Corps readiness. We will focus primarily on near-term readiness issues related to personnel training and equipment repair, reset and battle loss replacement.

We are very pleased to welcome two distinguished general officers as our witnesses. Lieutenant General Amos is currently the Deputy Commandant for Combat Development and Integration.

But I understand there is hot news out that you have very recently been nominated to be the number-two, the Assistant Commandant of the Marine Corps, which is a big deal. And congratulations, General Amos.

General AMOS. Thank you.

Mr. MORAN. Lieutenant General Castellaw, the Deputy Commandant for Programs and Resources is our other witness.

And both officers are well-qualified, obviously, to discuss these readiness areas and to answer the questions of the committee.

Gentlemen, we thank you for being here.

And the Committee is very much concerned about the readiness of the Marine Corps. Our Marines are performing magnificently in Iraq, Afghanistan and other difficult places around the globe. We are proud of their service, yet we realize the burden that repeated deployments places on them and their families.

In very short order, the committee will be reviewing the requests for the fiscal year 2008 supplemental while continuing to review the service's request for fiscal year 2009. So your responses today will better help the committee to determine whether adequate resources have been requested for the many programs that support the Corps. We look forward to your testimony and to a spirited and informative question-and-answer session.

Before we begin our testimony, though, I would like to call on our ranking member, our friend Bill Young, for any comments.

Mr. Young.

REMARKS OF MR. YOUNG

Mr. YOUNG. Well, Mr. Chairman, thank you very much.

And I want to add my welcome to our distinguished panel, Lieutenant General Amos and Lieutenant General Castellaw.

Congratulations on your nomination. I hope our brothers and sisters in the Senate will move quickly to confirm that appointment, and we look forward to working with you in that new capacity.

The Marine Corps, as usual, is being stretched pretty thin, and you are being asked to send some additional troops into Afghanistan to prepare for this anticipated spring offensive. At the same time, the Corps is trying to grow the force to 202,000 active-duty Marines by 2011—an aggressive goal by itself when you consider all of the challenges of infrastructure, training, resetting some of the old equipment that has been worn out, recapitalization. You have a big task ahead of you, and the Marine Corps, of course, is always ahead of the curve on taking care of their problems.

And if you can keep my constituent, General Mike Regner, under control, you will have really made a major accomplishment.

I want to welcome you both.

Welcome, Mike Regner, too—as I said, my constituent. Proud to have you here.

We are proud of the United States Marine Corps, and we look forward to your testimony.

Mr. MORAN. General Amos, if you would like to summarize your statement, we can put the entire statement in the record.

SUMMARY STATEMENT OF GENERAL AMOS

General AMOS. That would be great.

On behalf of General Castellaw and I, we want to thank you for the opportunity to tell a Marine Corps story. It is a good one.

We are here on a mission today, and the mission is on behalf of the Marines and our family members that are out there: 186,000-plus Marines and over 300,000 family members.

We want to say thank you to this Committee. We look back over the last several years, 4½ years, of really hard combat. This Committee and the members that have gone before you have supported us with gusto. And it has paid off. It is paying off in Iraq, it is paying off in Afghanistan, and it is paying off on the home front. So we want to thank you for that.

If you would take our statement, please, our joint statement, and put it into the record. And General Castellaw and I stand ready for your questions, Mr. Chairman.

[The joint statement of General Amos and General Castellaw follows:]

NOT FOR PUBLICATION
UNTIL RELEASED BY
THE HOUSE COMMITTEE ON
APPROPRIATIONS
SUBCOMMITTEE OF DEFENSE

JOINT STATEMENT OF

LIEUTENANT GENERAL JAMES F. AMOS
AND
LIEUTENANT GENERAL JOHN G. CASTELLAW

DEPUTY COMMANDANT OF THE MARINE CORPS
(COMBAT DEVELOPMENT AND INTEGRATION)
AND
DEPUTY COMMANDANT OF THE MARINE CORPS
(PROGRAMS AND RESOURCES)

BEFORE THE

HOUSE COMMITTEEE ON APPROPRIATIONS

SUBCOMMITTEE ON DEFENSE

CONCERNING

READINESS AND RESET

ON

FEBRUARY 13, 2008

NOT FOR PUBLICATION
UNTIL RELEASED BY
THE HOUSE COMMITTEE ON
APPROPRIATIONS
SUBCOMMITTEE OF DEFENSE

Lieutenant General James F. Amos

Deputy Commandant for Combat Development and Integration

Lieutenant General Amos graduated from the University of Idaho in 1970. He was designated a Naval Aviator in 1971, and has held a variety of operational and staff assignments since 1972.

Operational assignments include tours with Marine Fighter Attack Squadrons 212, 235, 232 and 122 where he flew the F-4 Phantom II. In 1985 Lieutenant General Amos assumed command of Marine Air Base Squadron 24/Marine Wing Support Squadron 173. Transitioning to the F/A-18 Hornet, he assumed command of Marine Fighter Attack Squadron 312 and subsequently joined Carrier Air Wing Eight onboard USS Theodore Roosevelt (CVN-71). Lieutenant General Amos took command of Marine Aircraft Group 31 Beaufort, SC in May 1996. In August 2002, he assumed command of the Third Marine Aircraft Wing and deployed with 3d MAW to Iraq for Operations Iraqi Freedom I and II. Lieutenant General Amos served as Commanding General of II Marine Expeditionary Force from July 2004 to August 2006.

Lieutenant General Amos' staff assignments include tours with Marine Aircraft Groups 15 and 31, the III Marine Amphibious Force, Training Squadron Seven, The Basic School, and with the MAGTF Staff Training Program. Promoted to Brigadier General in 1998 he was assigned to NATO as Deputy Commander, Naval Striking Forces, Southern Europe, and as the U.S. Deputy Commanding General, Fleet Marine Forces, Europe, Naples Italy. During this tour he commanded NATO's Kosovo Verification Coordination Center, and served as Chief of Staff, U.S. Joint Task Force Noble Anvil during the air campaign over Kosovo. Transferred in 2000 to the Pentagon, he was assigned as Assistant Deputy Commandant for Aviation. Reassigned in December 2001, Lieutenant General Amos served as the Assistant Deputy Commandant for Plans, Policies and Operations Department, Headquarters, Marine Corps. In August 2006, Lieutenant General Amos assumed command of the Marine Corps Combat Development Command (MCCDC).

Lieutenant General Amos is a graduate of the Armed Forces Staff College, Norfolk, VA and the Air War College, Maxwell AFB, AL. His personal decorations include the Distinguished Service Medal, Defense Superior Service Medal, the Legion of Merit (two awards), the Bronze Star, Meritorious Service Medal, Joint Service Commendation Medal, the Navy and Marine Corps Achievement Medal, as well as numerous campaign and service awards.

Lieutenant General John G. Castellaw

Deputy Commandant for Programs and Resources

Lieutenant General Castellaw is the Deputy Commandant for Programs and Resources (P&R).

A native of Crockett County, Tennessee, he was commissioned from the University of Tennessee, Martin in 1972. Following initial training, he was assigned overseas to the 3d Marine Division as a platoon commander in the 1st Amphibian Tractor Battalion. He transferred in 1974 to the Inspector and Instructor Staff, 4th Tank Battalion, 4th Marine Division in San Diego.

LtGen Castellaw, in 1976, received his wings and assignment to MCAS New River as a CH-46 pilot making two Mediterranean deployments with HMH-362. After completing the Amphibious Warfare School in 1980, he returned to New River joining HMM-365 and then HMM-264 for another Mediterranean cruise. Promoted to major in 1982, he served as the executive officer of H&MS-26. Following Armed Forces Staff College in 1984, LtGen Castellaw began his first tour in the Department of Aviation, Headquarters Marine Corps as the Helicopter and OV-10 Plans Officer. He returned to Okinawa in 1987 serving in MAG-36. Back to New River in 1988, he commanded HMM-264 for contingency operations in the Eastern Mediterranean and the Caribbean.

In 1991, LtGen Castellaw attended the NATO Defense College in Rome followed by a tour in the Operations Directorate, U. S. EUROPEAN COMMAND. There, he participated in the planning and execution of various humanitarian and security/stability operations in Africa, the Middle East and the former Soviet Union. In 1993, during the Balkans War, he was liaison officer to the UNITED NATIONS PROTECTION FORCE BOSNIA-HERZEGOVINA (UNPROFOR) coordinating American air support in the Siege of Sarajevo.

Returning to the United States, LtGen Castellaw served as the commanding officer of Marine Aviation Weapons and Tactics Squadron One (MAWTS-1) until transferred to the Pentagon in 1996 for a second time in the Department of Aviation. Selected for brigadier general in 1998, he returned to the Pacific as Deputy Commander, III MEF and Commanding General, 3d Marine Brigade. He commanded the U.S. component of the INTERNATIONAL FORCE EAST TIMOR (INTERFET) conducting security and stability operations in Timor during 1999-2000.

Ordered to Hawaii, he was Deputy Commander, Marine Forces Pacific until the 9/11 attacks. He then assumed duties as Deputy Commander, Marine Forces, U.S. CENTRAL COMMAND serving in Tampa and at the forward headquarters in Bahrain. Selected for Major General in 2002, LtGen Castellaw commanded the 2d Marine Aircraft Wing, MCAS Cherry Point. He returned to the U.S. CENTRAL COMMAND in 2004 as the Chief of Staff serving in Tampa and in Qatar. Prior to P&R, LtGen Castellaw completed a third tour in the Department of Aviation as Deputy Commandant.

LtGen Castellaw's personal decorations include the Defense Distinguished Service Medal. He was the 1990 Cunningham Award recipient as the Marine Aviator of the Year.

Introduction

Chairman Murtha, Congressman Young and distinguished Members of the Defense Appropriations Subcommittee; it is our privilege to report to you on Marine Corps readiness and resetting the force requirements.

We know these next few years will be challenging—not only in the immediate conflict in Iraq, but in subsequent campaigns of the Long War on Terror. This is a multi-faceted, generational struggle that will not be won in one battle, in one country, or by one method. Many of the underlying causes of the current conflict will persist in the coming decades and may be exacerbated by states and transnational actors who are unwilling or unable to integrate into the global community. In this environment, the Marine Corps must be able to rapidly adapt to broad strategic conditions and wide-ranging threats. We remain faithful to our enduring mission—to be wherever, whenever our country needs us and to prevail over whatever challenges we face. We have done this and will continue to do so by recruiting and retaining the best of our Nation's sons and daughters, training them in tough, realistic scenarios and providing them the best equipment available. We are confident that with your continued support, your Corps will remain the Nation's force in readiness and continue to fulfill its congressionally mandated mission of being *the most ready when the Nation is least ready.*

I. Stress on the Force—USMC Commitments in the Long War

Throughout this past year, the Marine Corps continued to be forward deployed across the globe on the front lines of the Long War. Approximately 24,000 Marines are currently deployed throughout the U.S. Central Command's area of responsibility, with the largest contingent continuing its support to Operation Iraqi Freedom (OIF). These forces have proven extremely effective in the disruption of insurgent activities in the Al Anbar province.

Additionally, we have deployed forces to participate in over sixty Theater Security Cooperation events around the globe, ranging from small Mobile Training Teams in Central America to Marine Expeditionary Unit exercises in Africa, the Middle East, and the Pacific. We also took part in civil-military and humanitarian assistance operations such as New Horizons

events in Nicaragua, land mine removal training in Azerbaijan, and disaster relief in Bangladesh after a devastating cyclone. In April of 2008, the Marine Corps will deploy approximately 3,200 Marines to Afghanistan with a two-fold mission to conduct combat operations against the Taliban and to build capacity within the Afghan National Security Forces in support of Operation Enduring Freedom (OEF).

Although Marines in the operating forces have been pushed hard by the tempo and frequency of operational deployments; their morale has never been higher — because they believe they are making a difference. Thanks to the Congress, your Marines know that the people of the United States and their Government are behind them. Your support has been exceptional — from the rapid fielding of life-saving equipment to the increase of Marine Corps end strength. With your support, your Marines will continue to succeed in their mission.

II. Right-sizing our Marine Corps

To meet the demands of the Long War, as well as to prepare for other contingencies for which the Marine Air Ground Task Force (MAGTF) is uniquely capable, our Corps must be sufficiently manned, well trained, and properly equipped. Like the Cold War, the Long War is a long-term struggle that will not be measured by the number of near-term deployments or rotations; it is this long-term view that informs our priorities and plan for growth. To fulfill our obligations to the Nation, the Marine Corps will grow its personnel end strength to 202,000 Active Component Marines. This increase will enable your Corps to train to the full spectrum of military operations and improve our ability to address future challenges of an uncertain environment. The development of Marine Corps force structure has been the result of a thorough and ongoing process that supports the Combatant Commanders and accomplishes our Title X responsibilities. The process addresses all pillars of combat development (Doctrine, Organization, Training, Materiel, Leadership and Education, Personnel, and Facilities) and identifies our required capabilities and the issues associated with fielding them. We are front-loading structure for recruiters and trainers to support our personnel growth and a phased introduction of units balanced across the MAGTF. The increase in capacity will be gradual, as we stand up new units and add end strength through Fiscal Year 2011, but also as we grow mid-grade enlisted and officer leadership—a vital part of our growth that cannot be developed

overnight. The additional end strength will result in three Marine Expeditionary Forces — balanced in capacity and capability.

While end strength growth will help relieve the current strain on our Marines, we must ensure that our personnel policies, organizational construct, and training enable our Marines to operate at a sustainable rate. Our growth to 202,000 Marines will significantly enhance our ability to increase dwell time, maintain adequate equipment for training, while providing our Marines and their families with the necessary resources to sustain their efforts over time. As we grow, we will develop all the elements of our MAGTF in a balanced manner to meet the diverse challenges of an uncertain future. In addition to personnel, this growth includes:

- Adequate expansions of our infrastructure to provide suitable housing and support facilities
- The right mix of equipment for the current and future fight

Growing to 202K: Marines

In Fiscal Year 2007, we stood up two infantry battalions: 1st Battalion, 9th Marines and 2nd Battalion, 9th Marines. We also added capacity to our combat engineer battalions and air naval gunfire liaison companies. Our plan will gradually improve the deployment-to-dwell ratio of some of our other habitually high operational tempo units — such as military police, unmanned aerial vehicle, helicopter, air command and control, combat service support, and explosive ordnance disposal units. Beginning in Fiscal Year 2008, we will systematically add approximately 5000 Marines per year resulting in attainment of our ultimate goal of 202,000 by Fiscal Year 2011. While the initial seed funding for the growth in 2007 was funded by supplemental appropriation, the growth in Fiscal Year 2009 is financed in our baseline budget. For Fiscal Years 2009-2013, all of the funding required to house, train, equip and sustain the "right sized" Corps of the future is addressed in our baseline budget. As this is a permanent change to our endstrength we will need continued Congressional support for our baseline budget request to sustain this force.

To avoid an adverse toll on our Marines and their families, and to prevent a decrease in readiness, we seek deployment-to-dwell ratios that allow our Marines *and their families* to operate at a "sustained rate of fire." This ratio relates to how long our forces are deployed versus how long they are at home — the current goal is for every seven months a Marine is deployed, he or she will be back at their home station for fourteen months. Our goal, during the Long War,

is to increase dwell time to achieve a 1:2 deployment-to-dwell ratio for all of our active forces and a 1:5 deployment to dwell ratio for our reserve forces. Our peacetime deployment-to-dwell ratio goal is 1:3 for our active forces.

Recruiting A vital factor in sustaining our force and meeting end strength goals is continuing to recruit qualified young men and women with the right character, commitment, and drive to become Marines. With over seventy percent of our end strength increase comprised of Marines on their first enlistment, our recruiting efforts are a critical part of our overall growth.

While exceeding Department of Defense quality standards, we continue to recruit the best of America into our ranks. In Fiscal Year 2007, the Marine Corps achieved over 100 percent of the Active Component accession goal necessary to grow the force. We reached this goal without reducing the high quality standards the American people expect of their Marines. We also achieved 100 percent of our Reserve recruiting goals, although meeting our Reserve company grade officer requirement has been challenging because our primary accession source is from officers who leave active duty after serving their initial obligation.

Retention Retention is the other integral part of building and sustaining the Marine Corps. As a strong indicator of our forces' morale, the Marine Corps has achieved unprecedented numbers of reenlistments in both the First Term and Career Force. The expanded reenlistment goal, in which we sought to reenlist over 3,700 additional Marines, resulted in the reenlistment of thirty-one percent of our eligible first term force and seventy percent of our eligible career force — compared to the twenty-two percent first term and sixty-five percent career force reenlistments in Fiscal Year 2006. This achievement was key to reaching the first milestone in our end strength increase – 184,000 Marines by the end of Fiscal Year 2007 — once again, we achieved this goal while maintaining our high quality standards.

For Fiscal Year 2008, our retention goals are even more aggressive, but we fully expect to meet them. Our continuing success will be largely attributable to several important enduring themes.

- First, Marines are motivated to "stay Marine" because they are doing what they signed up to do — fighting for and protecting our Nation. They have confidence in their leadership, and are dedicated to serving in an organization centered on our Core Values of Honor,

Courage, and Commitment. Service in an honorable profession resonates with both First Term and Career Force Marines.

- Second, they understand our culture is one that rewards proven performance — we are a merit-based organization that has designed our Selective Reenlistment Bonuses to retain top quality Marines with the most relevant skill sets.

There is no doubt that your Marines' leadership and technical skills have rendered them extremely marketable to lucrative civilian employment opportunities. To keep the most qualified Marines, we must maintain Selective Reenlistment Bonus (SRB) funding. In Fiscal Year 2007, the Marine Corps spent approximately $425 million in SRB and Assignment Incentive Pay (AIP) to help achieve our end strength increase. With a reenlistment mission of 19,002 in Fiscal Year 2008 — compared to an historical average of 12,000 — the Marine Corps expects to spend well over $500 million in reenlistment incentives during Fiscal Year 2008.

This aggressive SRB plan will allow us to retain the right grade and skill sets for our growing force — particularly among key military occupational specialties. The continued support of the Congress will ensure we have the necessary combat-trained Marines for the Long War and other contingency operations.

Reserve Component End Strength Our engagements thus far in Iraq and Afghanistan have been a Total Force effort — our Reserve forces continue to perform impressively. To minimize the operational tempo of the Reserve Component, our goal is to obtain a 1:5 deployment-to-dwell ratio. As our active force increases in size, our reliance on our Reserve forces should decrease — helping us achieve the desired deployment-to-dwell ratio. We believe our current authorized end strength of 39,600 Selected Marine Corps Reserves is the right level. As with every organization within the Marine Corps, we continue to review the make-up and structure of our Reserve in order to ensure the right capabilities reside within the Marine Forces Reserve units and our Individual Mobilization Augmentee program.

Military-to-Civilian Conversions Military-to-civilian conversions replace Marines in non-military-specific billets with qualified civilians, enabling the Corps to return those Marines to the operating forces. Since 2004, the Marine Corps has returned 3,096 Marines to the

operating force through military-to-civilian conversions. We will continue to pursue sensible conversions as this will aid in our deployment-to-dwell ratio goals for the force.

Growing to 202K: Equipment

Our assessment of the materiel requirements for our growth has been significantly enhanced through cooperation between the Marine Corps and industry partners. Through this effort, and redistribution of some of our strategic stocks, the units we created in Fiscal Year 2007 were provided the equipment necessary to enter their pre-deployment training cycle. With the Congress' continued support, the numerous equipment contracts required to support our growth were met during Fiscal Year 2007 and will be met through Fiscal Year 2008 and beyond. It should be noted that near term exigencies to stand up/equip new units require diversion of assets purchased to reset the force and address home station shortfalls. It will take three to four years to work through this challenge and return total force equipment readiness to the levels which preceded OIF/OEF.

MAGTF Table of Equipment Review As a result of the changing security environment and lessons learned by operations in Afghanistan and Iraq, many of our unit Tables of Equipment (T/E) have experienced major adjustments and do not necessarily reflect the way we intend to fight in the future. Consequently, the Commandant recently directed a comprehensive Marine Corps-wide MAGTF T/E review. The initial review is complete and the Approved Acquisition Objective validation is underway. It supports enhanced mobility, lethality and Command and Control across a dispersed battlefield for the entire operating force and will ensure that our 202,000 Marines remain a 'two-fisted' force capable of meeting future traditional and irregular warfighting requirements.

Growing to 202K: Infrastructure

Military Construction is one of our keys to success in increasing the Marine Corps to 202,000 Marines by Fiscal Year 2011. We have determined the optimal permanent locations for these new units and have generated estimates for the types and sizes of facilities needed to support these forces. Because our end strength will increase before final construction is complete, we are providing interim support facilities that will include lease, rental, and purchase of temporary facilities. Our plan will ensure adequate facilities are available to support the phase-in and Final Operating Capability of a 202,000 Marine Corps while meeting our environmental stewardship responsibilities. Grow the Force infrastructure requirements are more than just operational or housing areas. We also require improvements to our base infrastructure -- items such as utility upgrades and road network improvements.

Military Construction – Bachelor Enlisted Quarters Initiative Housing for our single Marines continues to be our top military construction focus. Barracks are a significant quality of life element in taking care of our single Marines. However due to operational requirements over the past decades, the priority to build new barracks has suffered. We are committed to providing adequate billeting for all our existing unmarried junior enlisted Marines and non-commissioned officers by 2012 — and for our increased end strength by 2014. To do that, we doubled the amount of our bachelor housing funding request from Fiscal Year 2007 to 2008; we will more than triple the 2008 amount to $1.2 billion in Fiscal Year 2009. We are also committed to funding replacement of barracks' furnishings on a seven-year cycle and prioritizing barracks repair projects to preempt a backlog of repairs.

Training Capacity As part of our holistic growth plan, we are increasing training capacity and reinvigorating our pre-deployment training program to provide support to all elements of the MAGTF across the full spectrum of potential missions. In accordance with the Secretary of Defense's Security Cooperation guidance, we are developing training and education programs to build the capacity of allied and partner nations. We are also developing the capability to conduct large-scale MAGTF exercises within a joint, coalition, and interagency context to maintain proficiency in core warfighting functions such as combined arms maneuver, amphibious operations, and maritime prepositioning operations. Finally, our budget request

supports our training and education programs and training ranges to accommodate the 27,000 Marine Corps endstrength increase.

III. Readiness: where we are today

Ground Equipment Readiness

Many weapon systems have been modified during this conflict; some of these modifications have led to further wear and tear due to additional weight — for example, armor plating has been added for protection against improvised explosive devices. The depot level maintenance requirements for the equipment that is repairable, will continue beyond the conclusion of hostilities in Iraq and Afghanistan.

Equipment age continues to be a top readiness challenge as well. As equipment ages, more time, dollars and effort are expended repairing legacy equipment. Maintaining optimal readiness, while continuing to support OIF, OEF, and other contingencies, will require additional resources and the expediting of replacement equipment to ensure future success.

The cost of our success has been a decrease in non-deployed unit readiness as well as an increase in the maintenance required per hour of operating time. Equipment across the Marine Corps is continuously redistributed to ensure that units preparing to deploy have sufficient equipment to conduct our rigorous pre-deployment training programs. Because the stateside priority of equipment distribution and readiness is focused on units preparing to deploy, there has been a trade-off in unit training for other types of contingencies. The timely delivery of replacement equipment, purchased with Fiscal Year 2006-2008 Supplemental appropriation funds, is crucial to sustaining the high readiness rates for the Marines in theater, as well as improving the rates for the forces here at home. While additional equipment has been purchased, long lead times and production rates often mean that much of this equipment is still many months away from delivery. In order to minimize equipment delivery lag time, the Marine Corps Systems Command is working with its defense industry partners to pursue options to accelerate replacement equipment deliveries.

Aviation Readiness

The operationally demanding and harsh environments of Iraq, Afghanistan, and Djibouti have highlighted the limitations of our aging fleet of aircraft. In order to support our Marines, sister Services, and coalition partners successfully, our aircraft have been flying at two to three times their planned utilization. Despite this, the efforts of our maintenance and support personnel have sustained an aviation mission capable rate for deployed Marine aircraft at seventy-nine percent over the past twelve months. The corresponding aviation mission capable rates for our units in garrison, who have either recently returned from deployment or are preparing to deploy again, have averaged seventy-five percent over the past twelve months. To maintain sufficient numbers of aircraft in deployed squadrons, our home squadrons have taken significant cuts in available aircraft and parts as they prepare for deployment. Reset funding is critical because we are simply running short of aircraft on our flight lines due to age, attrition, and wartime losses. Increased utilization rates over the past several years have resulted in aircraft more rapidly reaching depot level repair and inspection milestones. Reset funds will be used to revitalize our present fleet of aircraft and return them to the active duty squadrons. This revitalization is key to preserving the aircraft currently in our inventory and maintaining them until projected replacement. Maintaining the readiness of our aviation assets while preparing our aircrew for their next deployment is and will continue to be a monumental effort and a constant challenge for our Marines.

We have mitigated aircraft readiness degradation through specific aircraft modifications, proactive inspections, and additional maintenance actions enabled by reset programs. Sustaining aircraft material condition drives aircraft readiness and is the determining factor in combat aviation support provided to our Marines in harm's way. While these efforts have successfully bolstered aircraft reliability, sustainability, and survivability, additional requirements for depot level maintenance on airframes, engines, weapons, and support equipment will continue for many years.

Resetting Marine Aviation means not merely repairing and replacing damaged or destroyed aircraft, but getting more capable and reliable new production aircraft into the operational deployment cycle sooner. Your Marines rely on these aircraft on a daily basis to accomplish a wide array of missions including casualty evacuation for our wounded and timely close air support for troops in contact with the enemy. Most production lines to replace legacy aircraft lost in support of the Long War are no longer active; therefore, it is urgent and

imperative for the Marine Aviation Plan to remain fully funded and on schedule. Additionally, to ensure Marine aviation is postured to support the current needs of our country, we are restoring seven CH-53E war reserve aircraft for return to active service. We are asking for the restoration of two additional CH-53Ds and one CH-53E and acceleration of the upgrades of MV-22 pre-production aircraft to help maintain aircraft inventories at minimal acceptable operating levels. For example, the Marine Corps is modifying pre-production MV-22s to provide capable aircraft to meet transition schedule operational demands and deployment timelines. Resetting our aviation capabilities requires full support of current and future budget requests.

Pre-positioning Programs

Comprised of three Maritime Prepositioning Squadrons and other strategic reserves, the Marine Corps' prepositioning programs are a critical part of our ability to respond to current and future contingency operations and mitigate risk for the Nation. Targeted withdrawal of equipment from our strategic stocks has been a key element in supporting combat operations, growth of the Marine Corps, and other operational priorities; these withdrawals provided necessary equipment in the near term from the existing inventory while we wait for industry to catch up to our new requirements. Generous support from the Congress has enabled the long-term solution, and as a result, shortfalls within our strategic programs will be reset as equipment becomes available from the manufacturers.

Maritime Prepositioning Squadrons (MPSRON) Our MPSRONs will be reset with the most capable equipment possible. We have begun loading them with capabilities that support lower spectrum operations while still maintaining the ability to generate Marine Expeditionary Brigades capable of conducting major combat operations. Since 2007, all three squadrons have completed the Maritime Prepositioning Force (MPF) Maintenance Cycle eight (MMC-8). MPSRONs 1 and 3 were reconstituted to ninety-one percent and 100 percent respectively. The near-term reduction of MPSRON-1 was required to outfit new units standing up in Fiscal Year 2007 and Fiscal Year 2008 as part of our end strength increase. MPSRON-1 will complete MPF Maintenance Cycle-nine (MMC-9) in June 2008. We anticipate it will be loaded with roughly eighty percent of its full equipment set as a result of our requirement to support our current end strength increases.

MPSRON-2 is loaded at fifty-four percent of its equipment requirements, as much of MPSRON-2's equipment remains committed to OIF. With projected deliveries from industry, our intent is to fully reset and modernize MPSRON-2 and MPSRON-3 when they return for maintenance in May 2008 and April 2009 respectively.

We are actively working with the Navy and Transportation Command to incorporate newer, more flexible ship platforms from the existing Military Sealift Command fleet into our aging legacy Maritime Prepositioning Force program. As we reset MPF, these changes are necessary to ensure we incorporate the lessons learned from recent combat operations. Two decades of equipment modernization and recent armor initiatives have strained the capability and capacity of our present MPSRON fleet of ships which were designed to lift a Naval Force developed in the early 1980s.

We plan to incorporate three of Military Sealift Command's nineteen large, medium-speed, roll-on/roll-off ships (LMSR) as replacements for five of our older leased platforms. The LMSR significantly expands MPF flexibility and will allow us to reset and optimize MPF to meet current and emerging requirements.

Marine Corps Prepositioning Program- Norway The Marine Corps Prepositioning Program – Norway (MCPP-N) was also used in support of current operations, growth of the Marine Corps, and resetting other Marine Corps shortfalls with a higher operational priority. The equipment supply level of the assets stored in MCPP-N is listed at forty-six percent. We will continue to reset MCPP-N in concert with our operational priorities while exploring other geographic locations for prepositioning that will enable combat and theater security cooperation operations for forward deployed Naval Forces.

Depot Maintenance

The Marine Corps has aggressively worked to improve equipment readiness and availability by managing the conditions that affect our depot maintenance rework plans. These conditions include: the uncertainty in the timing of reset, asset availability, equipment condition, and evolving skill requirements. Triage assessments made in theater and relayed back to the sources of repair have helped to ensure efficient repair preparation time.

Currently, our depots are operating at a single shift plus selected additional shifts and are not constrained by capacity; the limiting factor is asset (carcass) availability. We can increase capacity to support surge requirements should it become necessary.

Equipment Retrograde Operations from CENTCOM AOR During 2006, in a continued effort to support the Commander, United States Marine Forces, Central Command, Marine Corps Logistics Command took the lead as the Service Executive Agent for the retrograde of equipment in theater determined to be excess. In addition to receiving, preparing, and shipping excess equipment within theater, Marine Corps Logistics Command (Forward) coordinates strategic lift requirements and manages the redistribution of principle end items in accordance with the Commandant of the Marine Corps' sourcing priorities. Since June 2006, over 14,000 principle end items have been processed at the retrograde lot in Al Taqaddum and approximately 11,500 items have been shipped back to Blount Island Command for disposition. To provide proper context however, the total estimated number of Marine Corps equipment items currently in theater is 111,872.

IV. Resetting the force and preparing for the future

For over five years, the Marine Corps has been involved in intense combat operations resulting in extreme use, and even loss of, our combat equipment. The exigencies of the conflict in Iraq and the greater Global War on Terror have increased our equipment maintenance and replacement costs far beyond what has been made available in our baseline budget. The challenge of restoring and maintaining traditional capabilities while fielding new capabilities to ensure success in the Long War has come to be known as "resetting the force."

Cost of Resetting the Force

It is important to clearly understand the terms we use to describe the concept of resetting the force. Reset funds replenish the equipment necessary to keep the Marine Corps responsive to emerging threats. Costs categorized as "reset" meet one of the following criteria: maintenance and supply activities to restore and enhance combat capability to unit and pre-positioned equipment; replace or repair equipment destroyed, damaged, stressed, or worn out beyond

economic repair; and enhance capabilities, where applicable, with the most up-to-date technology. As the nature of the Long War evolves, "reset the force" cost estimates evolve as well. We not only need to "Reset" the force to support current readiness, but we also need to "Reconstitute and Revitalize" the force in preparation for future challenges. We are coordinating with other Services and the Joint Staff to refine those estimates, and we are aggressively executing funding to ensure the Marines in the fight have the proper equipment in a timely manner.

We are mindful that the Corps cannot rely on supplemental appropriations for baseline operations. Even when we discount the cost of war incurred as a direct result of combat and combat support operations in Iraq and Afghanistan, resource requirements have significantly increased. The recruitment, training and sustainment of our primary asset – the individual Marine – is more costly. The equipment needed to succeed on the modern battlefield is both more expensive and more numerous. To sustain the capability that we have purchased with supplemental investments, we must ensure that our baseline maintenance accounts are properly resourced.

With Congress' help over the last three years we have begun to make significant progress in drawing down our reset requirements. To date Congress has provided $10.9 billion in supplemental funding towards our current total reset the force requirement of $15.6 billion. The timely appropriation of procurement funds in the Title IX funds in Fiscal Year 2007 allowed the Corps to get an early start on this year's procurement actions that will ultimately provide new and improved equipment to our Marines. In Fiscal Year 2008 the Congress, and this committee in particular, was instrumental in fully funding the Marine Corps Mine Resistant Ambush Protected (MRAP) vehicle requirement which have been proven to reduce casualties and remain essential in providing force protection for all U.S. forces operating in theater. We also requested $5.2 billion in Fiscal Year 2008 for funding required to support ongoing costs of war and to continue resetting the force, which was not included in the Fiscal Year 2008 Bridge Supplemental approved by the Congress in December. Prompt consideration of that request will allow us to return to a timely, predictable acquisition timetable necessary to maintain the uninterrupted flow of replacement equipment and depot repairs.

Preparing for the Next Contingency

Equipment Availability At one point approximately thirty percent of our ground equipment and nearly twenty percent of our tactical aviation inventories were deployed within the CENTCOM AOR. While those percentages fluctuate with each new deployment, the overall impact is that a sizeable portion of Marine Corps equipment remains dedicated to OIF/OEF use. Extended combat operations have severely tested our materiel. While the vast majority of our equipment has passed the test of sustained combat operations, it has been subjected to more than a lifetime's worth of wear stemming from increased vehicle mileage, operating hours, and harsh environmental conditions. This increased maintenance requirement is a consequence of not only operational tempo and operating environments, but also the sheer amount of equipment employed in operations. While some principal end items such as M1A1 Tanks have rotated out of theater for scheduled depot rework/overhaul, most of this equipment has not rotated out of theater at the conclusion of each deployment; it remains in combat, used on a near-continuous basis at an operating tempo that far exceeds normal peacetime usage. To address those realities, a more robust principal end item equipment rotation plan is now in place and detailed planning for the eventual retrograde of the remaining major elements of equipment currently supporting OIF is underway. Both efforts will be factored into future reset cost estimates as soon as the supporting details are developed.

The cost of our continuous combat deployments has been a decrease in non-deployed unit readiness as well as an increase in the maintenance required per hour of operating time. Equipment across the Marine Corps must be redistributed to ensure that units preparing to deploy have sufficient equipment to conduct our rigorous pre-deployment training programs. Because the stateside priority of equipment distribution and readiness is to units preparing to deploy, there have been trade-offs in unit training for other types of contingencies such as amphibious, jungle, mountain and combined arms operations. The timely delivery of new unit and reset equipment is crucial to sustaining the high readiness rates for the Marines in theater, as well as improving the rates for the forces here at home. Congress has responded to our need for funds, however, much of this equipment is still many months from delivery and as operations in Iraq and Afghanistan continue, our reset requirements will also continue to grow over time.

V. Modernizing our Marine Corps

While the Global War on Terror is "job one," we must maintain our essential modernization programs even in the face of the expense of the current fight. Modern weapons development programs sometimes take upwards of a decade or more from concept approval to initial production. An acknowledged and significant source of program cost growth occurs when developmental or production programs are stretched out in order to provide resources for near term operational requirements. Research and development funding provides a corollary. While we need robust research and development funding that is responsive to the highly adaptive nature of the evolving threats we currently face, we must maintain our long term investment in research and development for modernization. Borrowing from the long term for the immediate need poses a potential risk to future warfighting capability.

Urgent Universal Needs Statement (UUNS) Process The UUNS process enables deployed commanders to request equipment based on their recent experience. Designed to procure equipment more expediently than if submitted in the regular acquisition process, the process uses a secure, web-based system that provides full stakeholder visibility from submission through resolution. Through continuous process improvement, we have reduced our average processing time by 58.8 days and have transitioned over fifty emerging capabilities into programs of record. As a result of a Lean Six Sigma review, several improvements were implemented including standardization, on-line tracking, and streamlined approval. We continue to review the system for opportunities to increase efficiency and timeliness in order to deliver much needed capability to the warfighter as swiftly as possible.

Strategic Vision Group (SVG) The newly established SVG is designed to analyze the future security environments and identify future operational threats, challenges, opportunities, and risks for the Commandant. The group provides recommend requirements, capabilities and concepts, and identifies associated Doctrine, Organization, Training, Materiel, Leadership and Education needs. An overarching strategy and vision document will be published later this year. In addition to the Strategy and Vision document, we are continuously evolving all of our concepts and strategies to keep pace with the ever changing security environment.

Science & Technology Strategy Advances in Science and Technology provide an immediate, measurable advantage to our warfighters and provide for development and implementation of concepts only dreamed twenty years ago. In light of this importance the Secretary of the Navy, Chief of Naval Operations and the Commandant recently completed and published a combined *Naval Science & Technology (S&T) Strategic Plan* that establishes the objectives and provides direction to ensure our investments are focused on accomplishing the visions and goals for the Navy and Marine Corps. This plan identifies, as objectives, our most critically needed technology enhancements.

Force Protection We are providing the most capable force protection systems available. Our Family of Explosive Ordnance Disposal Equipment has undergone significant modernization through enhancement of technician tool kits and greater counter IED robotics capability and availability. We are upgrading our Counter Remote-controlled IED Electronic Warfare (CREW) systems to protect Marines outside the wire from Radio Controlled IEDs. We are also leveraging technology to provide a persistent point surveillance capability known as the Ground Based Operational Surveillance System (G-BOSS). GBOSS is a surveillance tool that enables twenty-four hour day/night detection, tracking, display, and recording and storing of video.

Infantry Weapons Based on combat experience and numerous studies, we are developing infantry weapons systems with the following goals: increased lethality, lighter weight, improved modularity, and integration with other infantry equipment. The Marine Corps and Army are co-leading joint service capabilities analysis for future developments.

Individual Weapons The M16A4 is our current service rifle and makes up the preponderance of our assigned individual weapons. It is supplemented by the M4 Carbine. We are participating in several Army tests which will evaluate the capabilities and limitations of our small arms inventory. In conjunction with the Army and Air Force, we will use these results to determine priorities for a future service rifle with focus on modularity, ergonomics, balance, and lethality. We have joined Air Force's efforts to analyze and develop joint capabilities documents

for a new pistol and are examining the Army's recent consideration of personal defense weapons.

Ground Combat Tactical Mobility

The Army and Marine Corps are leading the Services' efforts to develop tactical wheeled vehicle requirements for the joint force. Our goal is to provide the joint force an appropriate balance of survivability, mobility, payload, networking, transportability, and sustainability. The Army/Marine Corps Board has proven a valuable forum for coordination of development and fielding strategies; production of armoring kits and up-armored HMMWVs; and facilitating an expedited response to requests for Mine Resistant Ambush Protected (MRAP) vehicles. Our planned Ground Mobility Suite includes:

Expeditionary Fighting Vehicle (EFV) The EFV is specifically suited to maneuver operations conducted from the sea and sustained operations in the world's littoral regions. Its inherent capabilities provide utility across the spectrum of conflict. In January of this year, we conducted a comprehensive requirements review to ensure delivery of the required capability while reducing system complexity and weight where possible. Based upon this and an engineering design review, we will tailor final requirements and system design to support forcible entry concepts while ensuring the EFV is a safe, reliable, and effective combat vehicle.

Joint Light Tactical Vehicle (JLTV) The JLTV will provide protected, sustained, networked, and expeditionary mobility in the light tactical vehicle weight class. Throughout 2007, Army and Marine Corps combat and materiel developers coordinated with the Joint Staff in defining the requirements and acquisition strategy for replacement for the up-armored HMMWV. In December, the Defense Acquisition Board approved JLTV entry at Milestone A, designated the Army as lead Service and initiated competitive prototyping during the technology development phase. Prototypes will be evaluated to demonstrate industry's ability to meet the needed balance of survivability, mobility, payload, network enabling, transportability, and sustainability. We are on track for Milestone B in early 2010.

Marine Personnel Carrier (MPC) The MPC is an expeditionary armored personnel carrier — ideal for irregular warfare — yet effective across the full range of military operations. Increasing armor-protected mobility for infantry battalion maneuver task forces, the MPC program balances vehicle performance, protection, and payload attributes. The program is on track for a Milestone B decision in Fiscal Year 2010 and an Initial Operating Capability in the 2015 timeframe.

VI. Training and Education

To meet current Long War deployment requirements while remaining proficient and ready to launch robust forcible entry operations and succeed across the spectrum of conflict, Marines must now train to a broader range of skills within ever-decreasing timetables. To meet these demands, we are educating leaders for the future while maximizing limited training time with our standardized Pre-deployment Training Program. With Marine forces so heavily engaged in counterinsurgency operations, we will have to take extraordinary steps to retain the ability to serve as the Nation's shock troops in major conventional combat operations. Continued congressional support of our training and education programs will enable us to remain faithful to our enduring mission: To be the most ready when the nation is least ready.

Creating a World Class Marine Corps University (MCU) Our success in the Long War hinges on a multi-dimensional force that is well trained for the current fight, but educated for the next. Historically, our Corps has produced respected leaders who have demonstrated intellectual agility in warfighting; however our current deployment tempo places our Professional Military Education (PME) programs at risk. We must maintain the steady flow of thinkers, planners, and aggressive commanders who can execute effectively across the entire spectrum of operations.

Last year we conducted a comprehensive 'health of PME' assessment which identified six areas necessary for the creation of a world-class Marine Corps University: students, curriculum, educational programs, staff, policy, and infrastructure. We have world-class students and faculty as evidenced by Marines' performance on today's battlefields. We have made substantial improvements in our curricula by integrating irregular warfare instruction while maintaining a balance with conventional and amphibious warfare. Seeking to ensure readiness for the next challenge, this year we added Iran and a China faculty chairs. We must however,

correct significant infrastructure and information technology deficiencies. It is critical that resources to support our MCU master plan be committed and approved to support this critical effort. With proper investment and your support, MCU will become a world class educational institution to match its world class students.

Core Values and Ethics Training As part of our ethos, we continually seek ways to improve ethical decision-making at all levels. In 2007, we implemented the following initiatives to strengthen our Core Values training and prepare Marines for the mental rigors and challenges of Combat:

- Tripled the amount of time Drill Instructor and recruits conduct "foot locker talks" on values;
- Institutionalizing habits of thought for all Marines operating in counterinsurgencies, the message of the importance of ethical conduct in battle, and how to be an ethical warrior;
- Published pocket-sized *Law of War, Rules of Engagement, and Escalation of Force* guides;
- Increased instruction at our Commander's Course on command climate and the commander's role in cultivating battlefield ethics, accountability, and responsibility;
- Educated junior Marines on the "strategic corporal" and the positive or negative influence they can have;
- Re-invigorated the Values component of our Marine Corps Martial Arts Program, which teaches Core Values and presents ethical scenarios pertaining to restraint and proper escalation of force as the foundation of its curriculum.

We imbue our Marines with the mindset that "wherever we go, everyone is safer because a U.S. Marine is there."

Marine Corps Center for Lessons Learned Our Marine Corps Center for Lessons Learned applies lessons from operational experiences as well as those of the Joint Staff, other Services, and Joint Forces Command to guide efforts for "fine tuning" and transforming our force. This rapid, continuous process ensures the latest enemy and friendly tactics, techniques, and procedures are used in training and are part of the decision-making for institutional changes. In 2007, as result of these lessons learned, the Marine Corps implemented changes in pre-deployment training in such areas as detention operations; transition teams; interagency

coordination of stability, support, transition, and reconstruction operations; irregular warfare; and the role of forensics in counterinsurgency operations.

Center for Irregular Warfare In 2007, we established the Center for Irregular Warfare as the primary Marine Corps agency for identifying, coordinating, and implementing irregular warfare capability initiatives. The Center reaches out through the Center for Advanced Operational Culture Learning (CAOCL) and Security Cooperation Education and Training Center (SCETC) to other military and civilian agencies.

Last year, the CAOCL expanded beyond pre-deployment unit training by offering operational culture, regional studies, and limited language courses for officer PME programs. Thus far, approximately 2,100 new lieutenants have been assigned regions for career long-term study through the regional learning concept, which will be expanded this year to include sergeants, staff sergeants, and captains. Both officer and enlisted Marines will receive operational culture education throughout their careers.

Since early 2006, our SCETC has formalized our military advisor training curricula, and in Fiscal Year 2007 trained over thirty transition teams. In Fiscal Year 2008, the SCETC is scheduled to train over 100 teams (over 2,000 Marine advisors) and stand up a Marine Corps Training Advisory Group to manage the global sourcing of future transition and security cooperation teams.

Foreign Area Officers The Marine Corps has begun an expansion of its Foreign Area Officer (FAO) program, adding additional FAO positions to the staffs of Marine Component Commands and Marine Expeditionary Forces in response to the wide-spread demand for language and cultural expertise. In addition to our traditional emphasis on Arabic, Russian and Chinese, FAOs selected this year will learn more than a dozen different foreign languages, including Pashto, Hindi, Thai, French and Indonesian.

Marine Corps Tactics and Operations Group (MCTOG) We recently established the MCTOG to provide standardized training and instructor qualifications for ground combat elements, similar to our exceptionally successful Marine Aviation Weapons and Tactics Instructor Course in Yuma, Arizona. The MCTOG is developing and implementing a Ground

Combat Element Operations and Tactics Training Program to provide advanced training and certification in MAGTF operations, combined arms training, and unit training management and readiness at the battalion and regimental levels. Located at Twentynine Palms MAGTF Training Center, the MCOTG will reach an Initial Operating Capability by Spring 2008 and a Full Operating Capability by Spring 2009.

Conclusion

Our Nation rightfully has high expectations of her Corps—as she should. Your Marines are answering the call around the globe, performing with distinction in the face of great hardships. As they continue to serve in harm's way, our moral imperative is to fully support them—we owe them the full resources required to complete the tasks we have given them. Now more than ever they need the sustained support of the American people and the Congress to simultaneously maintain our readiness, reset the force during an extended war, and to modernize to face the challenges of the future. Again, we thank you for the opportunity to report to you on their behalf.

Mr. MORAN. Thanks, General. Thanks for supporting you with gusto, and that was it.

General AMOS. That was it, sir. I want to thank you, and we are ready to take your questions. We are looking forward to it.

Mr. MORAN. All right. That is fine.

Would you like to start off, Bill?

Mr. YOUNG. That would be fine.

Mr. MORAN. Go ahead.

BUDGETARY REQUIREMENTS

Mr. YOUNG. In the budget that has been presented now to us—and we had somewhat of an overview of that this morning with Secretary England and Admiral Mullen—are your needs being met? Is the request adequate? Are there things that you need that haven't been requested in the budget?

General CASTELLAW. Sir, he is getting promoted, and I get to do the answering.

Sir, again, I just want to echo General Amos's appreciation to the Congress, and particularly to this Committee, for the support that we have been given. We have had great opportunities within the Department in our relationship with the Congress to identify those things that we truly need.

The Marine Corps is proud of our history. And, in fact, what we try to do is be good stewards of the Nation's scarce resources. When we talk about that, we are not only talking about the appropriations that we get from the Congress, but we are talking about the great men and women who are truly, truly the number-one resource that we have in the Marine Corps.

We will continue to work within the Department and with you to identify those additional items, those additional things that we need to take to war with us. And as we identify them and we work with you, we will note them and we will appreciate the support that you, I am sure, will continue to give us.

Mr. YOUNG. But, General, with the additional Marines being sent to Afghanistan, there will be additional equipment required, personal equipment, body armor, weapons, other types of vehicles. Will they be fully equipped when they do deploy to Afghanistan?

General AMOS. Sir, they will be. As you know, one of the units is a Marine expeditionary unit coming off the East Coast. And they come with all their equipment anyway. In other words, they were already planning on deploying aboard naval shipping. So they are coming with everything that they have.

Now, there is no question they are going to be plussed up with what we call enablers. Some enablers are people and different kinds of capabilities. But there will also be some equipment: things from signals intelligence kind of things, counterintelligence, human intelligence, plus-ups and that kind of thing. So they are.

And the equipment that the battalion that is coming out of Twentynine Palms that will go into Afghanistan, we will move equipment both from in theater, mostly from in theater, over from Iraq, equipment that is not being used that we have forward in stores and that type of thing. But they will have everything that they need before they go in.

Mr. YOUNG. So they will take it with them? They will have it right with them as they deploy?

General AMOS. Absolutely, sir.

TRAINING

Mr. YOUNG. Will they have completed training that you would normally want a Marine to have completed before he is deployed?

General AMOS. They are, Mr. Young. They will leave next month, and they will have completed all of what they call Predeployment Training, PDT. The battalion was focused primarily into Iraq, and they were going to go at a later date, and they have been reoriented.

So, you know, the command down at Quantico has built a pretty rigorous training schedule. And using the model that we have in Iraq, but modifying it for Afghanistan with the kind of things they expect to be able to do and be required to do, both—not only that, training police, things that we don't typically do—we put that whole package together, to include hiring Afghan role-players.

And they are a Twentynine Palms-based unit, 3rd Battalion, 7th Marine. So they are already there, which makes it pretty fortuitous for us. We can put them up in the higher parts, the higher elevations of Twentynine Palms, and it is actually almost exactly the same elevation in the country that they would be going in, terrainwise.

WOUNDED WARRIOR BATTALION

Mr. YOUNG. General, a week before last, my wife and I visited the Wounded Warrior Battalion at Camp Pendleton, and we had a chance to see some of the Marines that we had actually met while they were at Bethesda in the intensive care, and worked with them and their families at the time. And that was quite an emotional reunion with some of them.

But I have to tell you, the United States of America is fortunate to have the type of Marine that we have, because their attitudes, despite their injuries, despite their sacrifices, their attitudes are just unbelievable. And you cannot visit with them and not come away with a tremendous inspiration and appreciation for the United States Marine Corps and the men and women that make up the Corps.

So thank you very much for the good job that you do, and all of our Marines, and thank you for being here today.

And, Mr. Chairman, thank you very much.

DWELL TIME

Mr. MORAN. Thank you, Mr. Young.

I would like to ask questions about another aspect of morale. Obviously, it is critical to be trained and fully equipped. But the amount of rest time between combat deployments is also critical to maintain morale. It is not in statute. This Committee has tried to put it in statute, because DOD has so changed what had been a traditional ratio. In fact, used to be a year in theater and then 2 years at home. The Corps is now deploying, we understand, for 7 months in combat and 7 months rest time. But we wouldn't have

gotten involved if there hadn't been such a radical departure from the norm to deal with the demands of the Iraq war.

We asked Admiral Mullen today—and Secretary Gates broke his arm, apparently, so he wasn't able to make the hearing. But we were told that DOD is going to try to get back to a more traditional dwell time.

I would like to ask you, either of you, if you think that the Corps is going to get back to a more traditional ratio of combat versus rest.

General AMOS. Mr. Chairman, we hope to get there. That is certainly the goal of our Commandant. And that is really one of the driving factors between the 202K growth, was to try to get us some dwell time.

As you know, our infantry battalions, we have 26 of them right now. We will grow to 27 later on this year. The good news story is that the two that we built last year down at Camp Lejeune, one deploys next month and the other one deploys in September. So having just stood both those battalions up, one of them leaves next month to go into combat. So that is designed to relieve some of the stress and increase the dwell time.

But there are other units besides our infantry battalions. Our EOD personnel, military personnel, our unmanned aerial vehicle squadrons, intelligence communications, our truck companies—almost every one of those units are on what we call a 1-to-1 dwell, gone 7 months, home 7 months. And even home 7 months, it is a little bit of a misnomer, because you have to leave early enough to relieve the unit that you are there with. So there is an overlap. So truth in lending, they are probably home 6½ months, maybe 6 months.

So the dwell is an issue with our Commandant. The forced growth will mitigate that and will give us the opportunity to get to a 1-to-2. And that is the goal in the long war. As long as our country is engaged in this long war, then our goal in the Marine Corps is to get to a 1-to-2. We appreciate your help with your approval of the 202K, the support of equipment and buying people. That is our solution, to get to a 1-to-2. Our long-range goal in peace time is to get to 1-to-3.

Mr. MORAN. Is there any compensation, General, for Marines that have had their dwell time cut short substantially? I am curious, in order to make this surge work, what is the shortest dwell time that a Marine combat unit might have experienced, for example?

General AMOS. I think, as I look back on the ones that have gone through this thing, I think the shortest ones are units like our unmanned aerial—what we call VMU, our unmanned aerial squadrons. They fly our UAVs. They are on about a 1-to-.85. And some of our communications battalions are that way, simply because we just don't have enough of them.

Within the unit—and that is just unit now. Within when you start talking individual personnel that have unique skills, we have some of those folks that are less than a 1-to-1 dwell as well.

So I think the average is, if you were to pin me down and say, writ large, across the Marine Corps what would it be, it would be

slightly better than 1-to-1. But the average combat units that you see going over there are about a 1-to-1.

RE-ENLISTMENT BONUSES

Mr. MORAN. In order to meet your recruitment and retention goals, you have had to offer substantial cash bonuses, we understand. Do you happen to know how much you have included in the budget for that, for the enlistment and re-enlistment bonuses?

General CASTELLAW. What we are doing—it has been growing each year. But we have had great success. We are maintaining, in terms of our enlistments, above 90 percent of high school graduates. The quality has not been impacted. We have continually met or exceeded the enlistment numbers.

And we are exceeding our re-enlistment numbers. In fact, we exceeded in this recent year, in 2007, the amount of accessions and the amount of re-enlistments by about a total of 2,500 people, more than what we had tagged. So we continue to be successful in doing that.

The numbers, the dollars that we have in bonuses now have grown from $200 million, in that neighborhood in 2007, they went to about $400 million here in 2008, and we are projecting in the neighborhood of about $600 million, a little over that, in 2009. So we are seeing an increase in the amount that we are putting into those things, monetarily, that encourage Marines to re-enlist.

What we do is we don't put a lot on the front end. People join the Marine Corps to be Marines. On the back end, we are a merit-based organization, and we look for those individuals who want to stay, and then that is where we put our bonus dollars.

Mr. MORAN. You must lose a number of them, though, to private security contractors, because they are certainly offering better benefits and much higher pay. Are you looking into competing with other means, obviously, but possibly expanding GI benefits, tuition credits, small business loans and so on when they get out, in order to keep the best people? Because we are not just talking about quantity, we are talking about quality, obviously.

General CASTELLAW. Sir, again, as I indicated to you, we are good stewards of the Nation's resources. We will continually look for those things that fit the Marine Corps and what we need to ensure that we keep those quality individuals. But as I indicated, the first-term re-enlistment has been up 10 percent over the last year.

Mr. MORAN. It has been up 10 percent?

General CASTELLAW. Yes, sir, first term.

If you look at the second term—and these are the careers, these are the people who have already made the decision to stay in—that is up 5 percent. So, with what we are doing and with the incentives that we are providing, we continue to meet and exceed what our goals are.

So, again, we will do what is necessary to make sure that our people get what they deserve and that we maintain the quality that the Nation expects of our Marine Corps.

Mr. MORAN. Mr. Lewis.

TWENTYNINE PALMS MARINE CORPS BASE

Mr. LEWIS. Thank you, Mr. Chairman.

Gentlemen, we very much appreciate your being here. The quality and capability and the importance of the Marine Corps to our national security is, I think, obvious to anybody who will look. But congratulations for the fabulous job you all are doing.

From time to time within the Marine Corps budget, after it gets through the DOD process and probably OMB process as well, it doesn't give you everything that you might want. So once in a while, there is a need for extra funding. Sometimes that extra funding is described as an earmark. And far be it from me to suggest that earmarks are important, but I would like to have you perhaps provide some testimony relative to the value of some earmarks that have affected, I think, directly affected the Marine Corps.

That which has happened in Twentynine Palms, that training facility, in recent years is almost entirely the result of earmarks, now in excess of something like $100 million over time, including the improvement of the ranges, including the creation of the village that the President visited not too long ago—a fabulous, fabulous training facility, competing very well with the NTC that is just down the road.

So I, frankly, would like to have you react to the money that this Committee has seen fit to put in that direction, specifically at the Twentynine Palms Marine base, but otherwise as well. The base happens to be in my district, so I have a small little prejudice, but otherwise.

General AMOS. Congressman, you are well-known at Twentynine Palms. And I would like to comment about that from the training perspective and the value added. And then General Castellaw can pile on, as our head money man and resource man.

I have watched that range at Twentynine Palms change from when John and I were Captains and we used to not want to go out there. In fact, we looked for reasons to miss deployments when our squadrons went out there, because it was just—it wasn't the austerity and it wasn't the hardness, but it was kind of a combination of everything.

And I will tell you, the training at Twentynine Palms now, in fact, it is my all-time favorite base to go visit and spend time with Marines out in the field, because it is a first-class—in fact, I think it is world quality. I was over in Israel not too long ago, visiting their ground forces, looking through training, and they have some great facilities, but they pale in comparison to Twentynine Palms.

And I would agree with you, I think it easily rivals NTC. It now has joint certification from Joint Forces Command; I think you know that. That gives us a lot of capabilities to tap into joint capabilities across this country, to include a T10 line which now allows data passing in virtual simulation all across America all tied into a single command post at Twentynine Palms, if that is where we want to put it.

But the villages, for those of you who haven't been there, the villages that have been built there, the money that has been given to the Marine Corps to hire Iraqi role-players, we have what we call a military operations in urban terrain, a MOUT facility, we have several of them, where we train our battalions. But we have one that is about half done up in the very northern part, as you

know. And that has been—we have been the beneficiary of that earmark. And that will be—I don't know what is the largest in our country, but I haven't seen any larger or any more capable than that will be.

So the entire facility at Twentynine Palms is becoming a gem in the Marine Corps. And to be honest with you, had it not been for this Committee and your strong support, Congressman Lewis, it could have just atrophied and been the way it was when General Castellaw and I were youngsters. So I think it has been a grand slam home run, and it is exciting to go out there. Thank you.

Mr. LEWIS. Thank you.

General CASTELLAW. Sir, I was in Iraq over the holidays, and I had the opportunity to go on a patrol with some Marines who had benefitted from the training out at Twentynine Palms. And I was in a MRAP as we were moving around. And they gave personal testimony—I am a Southern Baptist, so I put a lot into testimony—of the training, the use that they got out of that training there.

So that is what we need to continue to be successful, is to have those opportunities and those facilities that are world-class that allow us to be successful, just like those people, those Marines and Sailors I was with in Iraq. So thank you.

Mr. LEWIS. Thank you very much.

Mr. Chairman, we all know the role that the Marine Corps has played in theater. They are our point. But in the meantime, when it comes to budget time in DOD, oftentimes they end up with the short end of the stick. And there are very important items that ought to be funded that oftentimes are left off the table, things like housing and otherwise. I mean, the work that this Committee has done with that facility, beyond the ranges, beyond the village, but providing adequate housing, trying to satisfy some of the fundamental needs of the families that are out there really in the boondocks, the Committee has done a good job. So thank you, Mr. Chairman.

Mr. MORAN. Well, thank you, Mr. Lewis. And you make a very good point, that there wouldn't have to be some of these earmarks if the priorities were built into the budget in the first place. And this may be one of those case where it should have been.

Mr. LEWIS. More funding for defense all across the board.

Mr. MORAN. Thank you, Mr. Lewis.

Mr. Bishop.

PREPOSITIONED EQUIPMENT SETS

Mr. BISHOP. Yes, sir.

Gentlemen, welcome.

I have a couple of questions. I am interested in the prepositioned equipment sets. The Marine Corps drew upon the prepositioned equipment sets to sustain your operations in Iraq to outfit the new units that were standing up as a part of the end-strength increase. And just this past December, our staff visited the Marine prepositioning program and viewed the equipment there, and it was apparent that the set in Norway is not currently being rebuilt.

So my questions are, what is the readiness posture of the maritime prepositioning squadrons? What will be the impact of the proposed increase in end strength in the units on the plan to reset the

Marine Corps prepositioned equipment sets? What is the timeline to have all of the prepositioned sets returned to their desired readiness? And do you have sufficient depot and production capacity available? Do you have enough money to do it? And do you intend to add the MRAP vehicles to the prepositioned equipment sets?

General AMOS. Congressman, I will do my best to try to remember all that, but let me start with the ones right on the back side of it.

There is no attempt, there is no plan right now to put the MRAP vehicles on prepositioned ships. That doesn't mean it may not happen, but we are working through exactly what we are going to do with our MRAPs to be good stewards of them, where they will likely need to be used around the world. There will be other places that MRAPs, I promise you, that MRAPs will be the vehicle of choice, the same way they are on the major highways in Iraq right now in the very dangerous part. But right now, today, there is not a plan to put MRAPs on there. We have three——

Mr. BISHOP. Is there a reason why there isn't a plan for MRAPs?

General AMOS. Well, there is, sir, because they are very large, they take up an enormous amount of room. And when we have an MPS ship, that whole squadron, that five—some MPS waters are six ships; a couple of them are five—and that equipment is tailored for a Marine Expeditionary Brigade that is going to be employed coming across the beach in an assault echelon kind of operation, or, excuse me, a sustainment kind of operation.

It doesn't mean, again, we can't put it on there, but it does mean that we would probably take MRAPs, if I was guessing right now, put them on other naval shipping and get them into the theater if the theater-specific requirement was there for that. I mean, it is a great vehicle. We are very appreciative of it. To date, I don't believe we have lost a single Marine in any of the MRAPs that have been attacked. I don't think we have lost a single one. So it has been a huge success story, and we are very grateful.

The three MPS squadrons' worth of ships, each with a brigade's worth of sustainment vehicles, equipment, tanks, artillery, water, ammunition, engineering supplies, one of them even has Navy Seabees gear on it, we have hospitalization gear in some of them—we have three of those. MPS–3, the one in Diego Garcia, is 100 percent. MPS–1, which is sourced off the East Coast, normally in the Mediterranean, that is down, as of today, down to around 42 percent. A couple of ships are down at Blount Island right now. The remainder of those ships will come in by June, and we expect MPS–1 to be back up to about 80 percent of its principal end items.

So MPS–1 will get up to 80 percent. We would like to get it to 100 percent, but we are cross-loading equipment, much of which you bought for us.

Mr. BISHOP. Do you have enough money to get it up to 100?

General AMOS. I don't think—well, I am going to let John answer that.

Mr. BISHOP. That would help us, I mean, because we want you to be reset. And we don't want to be caught with the proverbial pants down in the future.

General CASTELLAW. Sir, we have benefitted and are benefitting and will benefit from approximately $10 billion in each of the last

2 years. And when we talk about in the baseline, the money that we got for grow-the-force and also the money that has been designated for reset.

The Marine Corps has a lot of wants and needs, and so what we do is we prioritize where we need it to go. So the guy and the gal who is in the gun fight gets the stuff first. We give them the best that they got. Anybody that goes to Afghanistan or Iraq or Africa or deploys with the 31st MEU and the WESTPAC have the best equipment that the Marine Corps can provide. Then we go down through the other priorities. And as the equipment comes in, then it goes to those priorities.

We stood up, as General Amos indicated, two battalions, infantry battalions, last year. And we had other units that stood up, as well. This year we will stand up another infantry battalion and other additional units. In the coming, as we grow the force, will, in 2009, 20 additional units, plus reinforcements.

Mr. BISHOP. Well, I guess my question really is, do you have the resources that you need to make all of those units meet the high standards of readiness at the time that they are stood up, or do we need to try to look at trying to give some additional resources, make some additional resources available for that?

General CASTELLAW. As we stand up these units, we are matching the equipment. Right now, what we have to look at, in addition to getting the money, is whether or not the industry and the others can actually provide the equipment. So, right now through 2007 and 2008 and going into 2009, we have the pipes full. It takes anywhere from 18 to 48 months to deliver equipment. So, right now, we are pretty well filled, in terms of the pipes.

Now, we will continue, as we see what goes on in Afghanistan, as we see what goes on in other parts of the world, as we look at what attrition we may have on the equipment we got, then we will identify those additional assets that we are going to require.

Mr. BISHOP. But, basically, what you are saying is you have the equipment for the deployed forces, and the nondeployed forces, though, are not at readiness in terms of equipment?

General CASTELLAW. We have not filled up all of the equipment sets here in CONUS, and we have not completed the reset. Again, as the stuff comes in, as I indicated, the guys going to the fight get it, and then we are putting it in as we can with the remaining priorities.

Mr. MORAN. Thank you, Mr. Bishop.

Mr. Frelinghuysen.

HOUSING CONDITIONS

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman.

First of all, let me compliment some of those who support you greatly. Your Marine Corps league in my State is second to none. And I have Pete Haas as one of my constituents. And some of those Marines may be 80 years old, but they would re-up if they could. They are enormously proud of their service.

And I know Congressman Young and Beverly have done some fantastic things with the Marines. But the way that you look after one another—we have had some losses in our State, and the way the Marines wrap themselves around the families of those who are

lost, I mean, I wish it could be emulated by some of the services, other services. I am not criticizing the other services, but it is truly remarkable.

A couple of questions, not in order of priority.

A couple of years ago, I was out at Camp Pendleton. Anything been done about those gang barracks? I know Marines never complain. I know you have other financial priorities. But some of those guys who come back, I was led to believe, and I saw it myself, some of those conditions were pretty deplorable. Any improvements that you can report? And have we been giving the means for you to take care of some of that.

General CASTELLAW. Sir, that it is a very good observation. In fact, even today we had some people praying that the fires out in California would take away some of those barracks earlier.

But the good news is this, is that by 2012 we will have achieved our initial goal of the BEQs. And what we are going at is a 2.0, we call it, which means that for every two individuals they share no more than one head facility. So that process is in work. $2 billion is what we are going to be spending on MILCON this coming year. We have projects at every location in the Marine Corps right now, in terms of——

Mr. FRELINGHUYSEN. I know you never complain.

General CASTELLAW. Yes, sir.

Mr. FRELINGHUYSEN. But, you know, having seen it firsthand, something needs to be done. I mean, they deserve better. If you are married and you have some sort of quarters, that is something else. But for some of these people, I mean, full speed ahead.

General CASTELLAW. Sir, we have 9,000 spots that we need to fill in family housing. After this coming year, we will be down to about 5,000. Our goal—and Commandant is beating us on the head just like you are to get the projects under contract and get to this 2.0 for the enlisted and to get the family housing deficits down to as low as possible.

TRAINING BASE IN GUAM

Mr. FRELINGHUYSEN. A brief comment. I don't think Guam will know what will happen when—was it 8,000 or 9,000 Marines are going to Guam? Could you tell us a little bit about that? They are going from Okinawa to Guam. Could you tell us a little bit about that move, how you are going to pay for it, you know, what those Marines are going to be doing?

General AMOS. Why don't I take the first part of that?

The final details on the plan are not that; they are not finalized. It appears that we have a force layout in the Pacific now moving a big chunk of Marines and our Sailors that are part of the Marine team off of Okinawa and some of them to Hawaii, a large percentage of them, roughly 10,000, to Guam.

There are training ranges up the Northern Marianas training islands that we are trying to build into a collaborative training base. In other words, you could put a couple of battalions' worth of Marines and an artillery battery and a couple of helicopter or V–22 squadrons and you may be pretty limited in your ability to be able to train there. So you need the ability to get off island to do some of that. So we are developing, right now, the training plan on how

we would use that. We have yet to begin the environmental studies, which are required, as you know.

So that is our plan. It does look like we are going to go to Guam. It does look like a good fit for us. We will need some help with the Northern Marianas training areas for training ranges to develop capabilities. But I think we are going to head in that direction, sir, but it is not finalized.

MRAP

Mr. FRELINGHUYSEN. The figures that I heard for all the military are in the billions of dollars. And I wasn't promoting earmarks, but obviously it is one of those things that has to be put in the overall mix to consider funding.

I just want to shift just back to what Mr. Bishop sort of was involved in, the MRAPs. I mean, we have thrown our arms around the MRAPs for the reasons that have been well-described. They have minimized casualties.

The Army seems to be moving ahead with fairly large buys. How would you characterize where the Marines are in that regard? And if you aren't doing it as aggressively, are there strategic and other reasons that you are not?

General AMOS. Sir, again, I want to shout this from the rooftops of Congress and say thank you, because I don't know in 37 years of being a Marine I have ever seen anything move either through the industrial base or through the Department of Defense or OSD or even Congress that has moved as fast as an MRAP has. So it has been a tremendously good news story.

Honest to goodness, Marines love them. They feel very good when they are in them. When you think about the casualties we suffered with IEDs over the last 3 or 4 years, and we haven't had that. I visited Iraq in November, looked at two staff sergeants and a corpsman. And you may have seen the picture of their MRAP. It was turned over on its side. It was one of the medium-sized ones; it wasn't a small one. The whole engine was out about 50 yards away, the front chassis was blown off, and it was on its side. And these were the three lives that were in it, and they stood there next to the vehicle and talked to me. They were just completely—I mean, they were fine and very appreciative.

So we love the vehicle. The situation, the Al Anbar province has worked in our favor, as you know. And what we found, not having deployed MRAPs over there except small numbers on the highways for road clearance missions, what we found when we put them down to our units, our companies and platoons, and we tried to go off road with some of them, you can get stuck. So they are really not off-road vehicles.

And so there is also a piece of this that—I remember going into Rawah, and we drove in there on the outskirts of the town, and everybody said, "Okay, get out." Okay, we are going to get out, and we are going to walk on a foot patrol with the platoon that was there. And the reason they walked is because they didn't want to send the wrong signal, because the people of the town now believed that they were part of the solution and they were part of the family to help them. If you drive through there all gunned up and protected, you are sending probably the signal you don't want to send.

So that is kind of the chemistry that has happened where we are. It is not necessarily that way in other areas of Iraq, as you know. So as we took a look at that, we took a look at some of the mobility and the off-road mobility. We said, okay, how many do we need? And the original buy was 3,700. That is still a program of record for us. We are going, as you know, to the JROC to get approval to lower that number to 2,225. We have every intention of putting—it is a little bit less than 300 of them into what we call our table of equipment for our engineers, our EOD folks, explosive ordinance disposal, you know, folks that do road clearance. So that will become a permanent part of the Marine Corps and will be an enduring requirement for that.

The rest, we are going to put some in Afghanistan when we go in there next month. And we are working on the exact numbers of that right now. We may end up taking a large slice of that into Afghanistan. We have, I think I looked today, and we have something around 900 or so MRAPs that have gone into the Marine zone, 919 as of yesterday.

So we like them; they are successful. But there are limitations on where you can go. Especially in some of the real small urban areas, you can't get around a corner in that thing.

So I think the next question would be, well, okay, what are you going to do with them, Marine Corps? And, first of all, I want to promise you that we are going to be good stewards of that, the same way we are all the rest of our gear. And I suspect we are probably going to take some of these, preserve them, have them forward deployed, maybe in the CENTCOM, Central Command, area. If we ever go into nasty little places like Somalia again, boy, MRAPs would be the one thing that everybody would be clamoring for.

So I think you are going to see some forward and stores kind of things, some prepositioned equipment there, and we will bring some back to America. But we are going to take good care of them. It is yet to be seen exactly what we are going to do with them.

Mr. FRELINGHUYSEN. Thank you very much.

Thank you, Mr. Chairman.

Mr. MORAN. Thank you, Mr. Frelinghuysen.

Mr. Dicks.

TRAINERS FOR MRAPS

Mr. DICKS. Thank you.

And I appreciate your being here, and sorry I couldn't be here for your testimony.

On the MRAP, when we did the up-armored Humvees and some of those things, we bought some trainers. And as I understand it, there is only one trainer Marine Corps has for MRAP. And apparently these things are a little, somewhat, as you suggest, a little bit difficult to handle.

Do you think trainers would make any sense here, in order to get people prepared to use the MRAP when they are in country?

General AMOS. Sir, I think I know what you are talking about. We had a couple, we call, surrogate vehicles out at Twentynine Palms. They look like an MRAP. I am not sure whether they were

built by the same company, but they looked and kind of smelled like one. But they really weren't one, in that they weren't——

Mr. DICKS. Actually, I think they do these, kind of, in a trailer. And like they do with the up-armored Humvees, they have a trailer, and then the person is in there.

General AMOS. A simulator.

Mr. DICKS. Yes, in a simulator. He thinks he is driving the thing. And then introduce different scenarios to the driver.

General AMOS. Congressman, I don't know of an MRAP simulator, but I know exactly what you are talking about with our seven-ton vehicles. They are called MTVRs, our big trucks. And we have those; we have them out at Twentynine Palms. And they—I mean, that is—because we have rolled some of these seven-ton trucks. And you hurt a lot of Marines when you do that.

And so we absolutely have gotten a lot of value out of that. We have bought some. I can't tell you how many we put, but we put some in Camp Lejeune and Camp Pendleton. I can't tell you how many we have and would it be better to have more.

Mr. DICKS. Let me send you something on this, just so you can take a look at it.

General CASTELLAW. Thank you.

V–22

Mr. DICKS. The other thing is, how is the Osprey doing?

General CASTELLAW. Sir, the V–22 is doing great. I also had an opportunity to fly around Anbar in a V–22 that we have deployed with the squadron over there. It compresses the battlespace. I am an old frog pilot, which is an endearing name for a CH–46, which is what the V–22 replaced. The frog does 120 knots; the V–22 does 240. Plus, it can go anywhere in Iraq without refueling and return.

Mr. DICKS. I understand General Petraeus wants one, is that right?

General CASTELLAW. Well, sir, we flew him around. He wanted to get around and see the troops over the holidays, and there wasn't any other aircraft that could take him in the time allotted to the locations he wanted to go. He would have to have done a combination fixed wing and rotary wing. With a V–22, you can go anywhere in Iraq, as I indicated.

So the aircraft is being used in all the assault missions that we have that type of aircraft for, plus in expanding the usage of it. The maintenance man-hours per flight hours is 9. To give you a comparison, the 46 is over 20. The 53 is 40.

Mr. DICKS. Is that the one that leaked from the ceiling, the oil dripped down?

General CASTELLAW. Sir, if a helicopter doesn't leak, it doesn't have any oil in it.

Mr. DICKS. I have been on a lot of Black Hawks. I have never been on one that leaked, okay. But I was out there at San Diego, and we were on some Marine Corps helicopters about 15 years ago, and they were just drip, drip, drip.

General CASTELLAW. That was probably a 53. They leak more than 46s. But yes, sir.

Mr. DICKS. I was just concerned.

General CASTELLAW. As I said, sir, if it is not leaking, no oil. So you were all right.

Mr. DICKS. Okay. We did survive.

General CASTELLAW. But, again, 53 is over 40 maintenance man-hours per flight hours. So the reliability and the readiness of the aircraft is doing well also.

We will deploy the second squadron to replace the first squadron later on this year. And then the third one will go over after that. And so we are well along in the process of transitioning.

Mr. DICKS. How many of these are we going to buy? How many is the Marine Corps going to buy?

General CASTELLAW. 360 MV–22s.

Mr. DICKS. Where are we now in that buy?

General CASTELLAW. We have delivered approximately sixty.

Mr. DICKS. Sixty?

General CASTELLAW. Yes, sir.

Mr. DICKS. Has anybody ever thought about a multiyear on this?

General CASTELLAW. Sir, we are that close right now to a multiyear. And NAVAIR is negotiating with Boeing. We expect to hear any day that we closed the deal on the multiyear.

In 2009, we are going to thirty. That is the number that we want to maintain, thirty aircraft. That will allow us to transition two squadrons a year, which is what our goal is.

Mr. DICKS. I understand one of them had an emergency landing due to a hydraulic leak. Do we know what that is all about, and can we get that fixed?

General CASTELLAW. Yes, sir. On one of the control surfaces there is an actuator, and there was a leak in that actuator. There are three hydraulic systems on the V–22, so you have triple redundancy. Everything worked. But the rules are that if you have any kind of a leak or any indication that you may have a problem, then you land. And so that aircraft landed at Greenville. It was repaired and flew home the next day.

Mr. DICKS. They say you also had a second one that had the same problem, and it had a hard landing a few months ago. Can you comment on that?

General CASTELLAW. Sir, the one I remember that had the hard landing, it was not that particular issue. We did have one that had a hard landing at Camp Lejeune. And that was the exact reason it had the hard landing. Right now it doesn't appear to be associated with the issue that it was experiencing.

Mr. DICKS. If we buy these at a rate of 30 a year, can we get the cost down even further, do you think?

General CASTELLAW. Well, that is what we expect to see when we get this multiyear signed. Again, 30 is what that will cover. It will cover 2008, which we bought 21. And then 2009 and on is 30. And the multiyear should bring the cost down.

Mr. DICKS. So that would be requested in the 2010 budget, do you think? Would you request the multiyear next year, or could Congress——

General CASTELLAW. Sir, you have already approved us going to a multiyear. You have already, in your legislation, allowed us to do the negotiation. So you are expecting us to close the deal on this multiyear.

Mr. DICKS. Thank you, Mr. Chairman.
Mr. MORAN. Thank you, Mr. Dicks.
Mr. Tiahrt.

REMARKS OF MR. TIAHRT

Mr. TIAHRT. Thank you, Mr. Chairman.

Last December, the Department of Defense released statistics about casualties in Iraq. And this is before we have had such great success over the last year in reducing the amount of casualties. And they listed them by service. The least amount of casualties was the Navy, if I recall correctly, then the Air Force, the Army. The most amount of casualties was the Marine Corps.

But they also put in there the statistics for an African American male living in Philadelphia between the ages of 18 and 25. And it was safer to be a Marine in Al Anbar province than it was to be living in Philadelphia, which I found startling. So I think it is a great tribute to the Marine Corps, to the training and the leadership that you guys have provided.

And while we are mentioning training, General Regner and I went to the Philippines back in 2000, I think it was. He was a colonel at that time. When we landed and were trying to get some things done, he bumped into a colonel in the Philippine Army that he recognized from a class at Fort Leavenworth, which opened a lot of doors for us, as I recall. That kind of training I think is very important, because you don't know where this Global War on Terror is going to take us next time. And to be able to get off an airplane and look somebody in the eye and remember his name when they serve under another country's flag is very valuable. So please keep that in the budget.

I think Congressman Frelinghuysen talked a lot about how the Marines will do with what they got. And when it comes to housing, a decade ago Dave Hobson held hearings in the MILCON Subcommittee, and we brought in your top-ranking sergeant in the Corps. And we asked him about military housing, and he kept repeating, "Sir, we are going to do the best we can with what you give us." And, you know, I admire that, but also we need to know the truth about where the shortfalls are, because if it is equipment, if it is housing, if it is something we can do for the families, for the troops, I think we all want to do that.

One of the things I think we need to do for your boys and girls that are coming back is to get some kind of screening for post-traumatic stress syndrome. These kind of things are not well-liked. Most people, even if they are suffering from some traumatic event, are not going to admit it. So I think you ought to put some kind of system in place that gets everybody to take some of the stigma away.

This kind of stuff can fester for years. I have in Wichita, Kansas, a VA hospital. There are Vietnam vets that I have met that are still suffering from PTSD here some, in some cases, 40 years later, 30 years later. Some kids it is going to hurt. They come back, and it festers. It ends up their families suffer as well. If it is caught, I think we can make a difference for these kids. And I think it is something you ought to consider. As everybody comes through, take

the stigma away, everybody gets a screening, so that we get a chance to save them from a life of misery, because that can happen.

I am also concerned about how we see cities like Berkeley reject the Corps, reject the military. The mayor of Toledo did something recently to turn down a military exercise for the Marine Corps. I know my own cousins that are older than I am that came back from Vietnam, some of them were spit on when they came back to the country, and they felt that kind of rejection. And I have to think that some of the problems that these Vietnam vets have are related to that rejection that they felt from their country. And I don't want that to happen again.

So if there is anything we can do to work out that. I think we have great support in this country for the troops. But I am concerned when I see some of these things popping up. And we need to figure out a way to work with those cities to make sure that this doesn't fester and become a problem as well.

I don't really have a question. I think you guys do a great job. I want to thank you for the training, the way you bring as many as you can home safe. And I admire the job you do. Thank you.

General AMOS. Sir, would you mind if I made a comment about a couple of those points, if that is all right, Mr. Chairman?

Commandant Hagee, I guess probably about 3 years ago, made the determination with regards to BEQs and how our Marines were living, our bachelor Marines. And we had paid bills over years with military construction money. And the person that ended up—the group of young Marines that ended up being on the receiving end of that, negatively, were a lot of our young enlisted Marines with building and barracks. And so you are absolutely right to be concerned about that.

But General Hagee, I think it was 3 years ago, said—because this plan that General Castellaw talked about, about completing all the construction and getting the Marines in the right kinds of rooms, was going to go out. I mean, it was out in 2015, 2016, 2017, because we just kind of kept shoving it to the right of the FYDP. And General Hagee said, "Drag it in, men." And that is exactly what has happened.

So the decision was made several years ago under General Hagee's leadership, let's build these out so you have all our young E1s through E3s are living two to a room and all our corporals, E4s and above, are living in a single room. They have their own head. And so that is what is going to be accomplished by 2012.

Well, in the meantime now, we are going to grow the force, so we need more of that. And I think the numbers were, somewhere out in 2014, we will have completed the rest of the military construction.

But I just want you to know that from the building side of the house, for our young enlisted Marines, help is on the way. And you can see it at places like Camp Lejeune. I haven't been to Pendleton in a while, but I will tell you, when I was at Lejeune as the commander, we broke ground on two battalions' worth of barracks that were appropriated out of this Committee, brand-spanking-new ones. And we were gutting and renovating the other ones. So, truly, help is on the way on that.

Regarding base housing—I am at Quantico now. And I had not been here for 4 or 5 years. I had been out doing other things in the Marine Corps. Came back, and all the, what I consider to be, kind of nasty housing that we put our Captains and Majors in while they are going to school down there, professional military schools, they are all gone. They are living in townhouses that any of us in here would go, "Well, I would like to put my family in there." They are absolutely beautiful. I was at Miramar last week and saw the new housing that is going up at Miramar.

So help is on the way, with regards to housing. And our current Commandant has got the attention of his three-stars to make this happen. So we appreciate your help on getting that. And I think it is a good news story.

The PTSD screening, several years ago we went back in, in March of 2004. We didn't understand it. It was kind of a soft side of the Marine Corps that, quite honestly, probably a lot of us just went, "I don't know that we need to go there." That is not the case anymore. We have got programs, our OSCAR program, where we are embedding mental health professionals in our deploying battalions, Naval officers that are mental health professionals in our deploying battalions.

We screen all our Marines, every single one, when they come out of Iraq to go to Kuwait for a couple of days to kind of get reoriented, turn their gear in and get cleaned up. And during that period of time, they do their first post-deployment health survey. Now, they can lie and cheat on that, I understand that. But what we found was we are catching some kids that have some symptoms and have some issues, that we are starting to pick it up there.

What we found, about a year and a half ago, was that some of these symptoms didn't start showing up until sometimes 3, 6, 8 months later. So we now go out at about the 180-day mark and we bring these Marines back in by name, we track them by Social Security number, and we make them do it again. So we are screening them.

There are probably other things we need to be doing. But this has caught our attention, because it is real. TBI is real. And my sense in the fleet is that we are past the point of manliness on this. In other words, we have some great Marines that are very courageous that are feeling the effects of some of this stuff, and they are coming forward. And so we are past the point of "I am a little bit ashamed, I have a stigma." I am not saying it is completely gone, but I think we are headed in the right direction, sir.

CONTRACTORS/CONTRACTING

Mr. VISCLOSKY. Chairman, thank you very much.

Gentlemen, thank you very much.

And, General, I appreciate your comments on travel by helicopter. On contractor provided services, is there a process or rules for as far as a cost evaluation of the discreet services they provide that can't be provided by civilian employees? And the reason I ask is that, excepting out inflation, service contracts for these sort of services have grown by about 75 percent in the last 10 years. And I am just wondering if you could comment on that.

General CASTELLAW. Yes, sir. Any contracting we do, we go through an evaluation process. What we have really tried to do is to free up Marines so that we can use them in their primary duties. So when we look at any particular areas that we are looking at potentially contracting out, that is the first thing. Are there Marines that we can take and we can reassign them and get them into units where, again, they use what they signed up to do? We have a process also where we continually review that because you get a contract to, say, provide the contract for chow hall support at Cherry Point, North Carolina, it is continually reviewed. And if they don't meet the standards, it can be recompeted and we can bring somebody else in. So there is a set of standards in place. There is a process in place where we try to ensure that we get the best buck for the dollar and that, where it is appropriate, that we use contracts.

Mr. VISCLOSKY. Is there a determination when you make those evaluations as to whether or not you should do it in-house with other civilian employees who are on a permanent basis?

General CASTELLAW. Sir, there is a process called A–76, and you are probably at least somewhat familiar with it. And what we look to see is whether it is inherently governmental or not. If it is inherently governmental, we are going to continue to do it with Marines or with government civilians. If it is not, then we'll look at contracting it out and using that type of support in order to accomplish the mission.

Mr. VISCLOSKY. So, in a sense, 10 years ago, you had, from what you are saying, Marines doing a lot more nongovernmental functions than they probably should have been at that time, and they can be replaced by independent service contractors?

General CASTELLAW. What we did is looked at areas on where we could again free Marines up to do their primary MOS. When General Amos and I came in, Marines were doing chow hall duty and cleaning plates and carrying out the garbage and doing stuff like that. That is one thing that we contracted out. And I haven't met a Marine yet who wasn't happy that we didn't do it. So that is what we continue to look for, is for opportunities like that.

Mr. DICKS. Will the gentleman yield?

Mr. VISCLOSKY. Yes.

Mr. DICKS. It also gives the Marines the chance to train in their unit and do the thing, as you suggested, that they signed up for. This was one of the things, I mean, there was a lot of criticism 20 years ago in the military reform group about, there were so many people doing this other kind of work and that this was a better way to go.

Mr. VISCLOSKY. Do you find contractors working beside uniform personnel in instances doing essentially the same jobs on occasion?

General CASTELLAW. In most cases, no. Again, I will stay with the example of the chow hall. What you will have is you will have a Marine that is running the chow hall. He will be in charge. It will be usually a senior staff NCO. We will also have cooks there that will work alongside the cooks that are from that particular contracting organization. Why? It is because when we go to the field and when we deploy and when we do our expeditionary thing, we need cooks that know how to do that. So there will be cases like

this where, yes, they will be working alongside them. But it will be for a good reason because we want to use them in our primary role which is to be an expeditionary force in readiness.

DWELL TIME

Mr. VISCLOSKY. On dwell time, apparently the practice of the current period of time with the Marine Corps is 7 months and 7 months. And with the Army, it is about a year and a year. Any reason as to the differential? And do you see benefits with the 7 months, or is this something particular with the corps that works better for you than a year and a year?

General CASTELLAW. Let me take a shot at that, and then General Amos will jump in. I think it is our view and then both of our spouses are heavily involved in working with the families of Marines and Sailors that belong to these organizations. And I can tell you that for us 7 month chunks are about right. With 7 months, you still have the opportunity to see the light at the end of the tunnel, to come back. And even if you are on a one-to-one—and again it is really—most Army units are on a one-to-one, too. Theirs just happens to be 12 months or—gone and 12 months back. But what we are finding in the Marine Corps is that it is better for us morale-wise and produces less stress on our families. Again, it is our culture, because we grew up with all these 6-month deployments. For 20 years, I deployed 6 or 7 months at a time aboard ships going to the Mediterranean. So that is a type of culture and environment that we understand and we know how to plan our lives around. And it continues to work for us.

General AMOS. Our regimental headquarters, all of the headquarters that are commanded by colonels and generals are there for 13 months. In other words, so we rotate the units underneath them. The battalions and the squadrons come in for 7 months and go out. You know, they are on the 7-month rotation. The only reason why the headquarters are not on 7-month rotations is we want continuity. In other words, we don't want the disruption. We don't want seams that the enemy could exploit. So we put the headquarters—and we just said, you have to suck it up. You are there for 13 months. And during that 13 months, they get to come home for 2 weeks back in the continental United States. I mean, it is not like 2 days traveling, you know, going one way in 2 days instead of 3, so you are really home for 10 days. It is when you hit home, you hit your home for 2 weeks. Many years ago, in Vietnam, we would go over there for 3 months. And that is a long time. I did not go to Vietnam, but I got in at the tail end of it. And I was gone for 13 months as a young married lieutenant, and it was a long, long 13 months.

As General Castellaw said, 7 months, Marines just appreciate it. When the Commandant came out and he kind of dug in on that thing and said Marines are going to go for 7 months, you couldn't hear it, but you can imagine the high fives that went up around the Marine Corps from all the young corporals and sergeants and lieutenants who said, good, the Commandant is taking care of me and my family. So it is a morale issue, and it works for us. That is probably about as good an answer as I can give you, sir.

Mr. VISCLOSKY. One more question on the same theme——

Mr. LEWIS. That question was great.

Mr. VISCLOSKY. I found that the culture had been essentially the 6-month rotation, but I find that interesting, yeah. On dwell times, given the stress and the responsibilities you have, are many of those being cut short, or are you seeing in some instances less dwell time at home for members of the Marine Corps? And if so, how do you try to compensate for that when it does occur?

General AMOS. Sir, we have units that are what we call one-to-one. We have a couple of units that are a little bit less than one-to-one simply because they are one-of-a-kind organizations. For instance, our unmanned aerial squadrons or UAV squadrons, we have only got two of them. Now, one of the things that has happened is we are buying more UAVs, and we are going to, 202k growth is going to give us some more bodies. So now we will have the equivalent numbers of people where we can parcel them out. But right now, they are gone for 7 months, excuse me, yeah, gone for 7 months and home whatever .85 of 7 is. Something probably around 6 months. And then they go again.

So we do have some units that are less than that. Our explosive ordnance disposal, the military police, intelligence, human intelligence, UAV, some of our helicopter squadrons are 1 to 1. Our infantry battalions are 1 to 1.2, yet we still have infantry battalions that are home for 1 to 2. But the average across the 26 active battalions we have right now is 1 to 1.2. So there are some that are less than one-to-one. We are going to 1 to 2 with the 202k growth. When we get up to 202k growth, assuming we don't spread ourselves real, real thin, much thinner than we are right now, then we will find ourselves to a 1 to 2 dwell across the Marine Corps.

Mr. MORAN. Thank you. But we are going to have to start speeding this up a bit because we are told that we may have votes at 3:20, in about 10 minutes.

Mr. Kingston.

RECRUITING AND RETENTION

Mr. KINGSTON. Thank you, Mr. Chairman.

General, I wanted to ask you about, and I am not sure who wants the question, But in terms of recruiting and retention, I understand that you have met your recruiting and retention goals. But the GAO said that there are some shortages in occupational specialties, human care, human intelligence collection, explosive ordnance disposal. Is that correct? And what is being done about that?

General AMOS. Sir, you are absolutely right. We have met our goals. We are ahead of them as a matter of fact. Some of those, like linguist human intelligence, explosive ordnance disposal, when you become an EOD Marine, you generally go up, you come up through the ordnance field. You are doing business in ordnance. And by the time you become a sergeant and you have shown a level of maturity that you can go off to school and then become, and if you have the inclination, then we will send you off to explosive ordnance disposal school. So it is a little bit like buying vehicles, putting them under contract. It takes each unit 36 months before you can finally get them out the other end. That is what happens with some of these folks.

Signals intelligence or cryptologists, EOD, that takes a lot of schooling. And we generally will put some young guys in every now and then, but usually there is a level of maturity that we want to have to begin with to go in there, as you might imagine, if you are going to go out there and do some of this either intellectually or some of the physical things, like our EOD folks. So, there are. The 202k build when it is done is going to satisfy our requirements for what we, all these low density, high-demand kind of MOSs. But the truth is, even in 2011, when we finish 202k, there will probably still be some shortages in some of those unique MOSs while we grow; in other words, while we mature those select kind of Marines to go into those fields simply because it takes a lot longer to train them and a higher level of maturity than it does for just a basic mechanic.

Mr. KINGSTON. When you recruit someone the first time, what is your targeted group? I mean, just generally, to get it, when I say "first time," generally to get them in the Marines without any specialty or anything like that? What do you look for? And specifically, I am wondering about second-generation service members. If their parents were in, does that make the recruit probably more likely as a target to join?

General AMOS. You know, I am a second-generation; my dad was in the Navy. He didn't talk to me for many years when I joined the Marines, but he loves me now. I don't know. My children are not and I don't—I am not a recruiter, so I probably can't answer that precisely. I will tell you, though, that our target audiences, the young 18, 20-year-old man or woman, high school graduate and as you know, the DOD standard is 90 percent. We are over 95 percent. We recruit a very high mental group. When I say that in public, people look and they go, that is an oxymoron, you are the Marines, what do you mean getting a very high mental group? But we do, we do. And we attract a small segment of our society that likes physical—you know, they are physically inclined, and they want to be challenged.

Mr. KINGSTON. How does something like what happened in Berkeley affect—what is—do you just kind of ignore the City Council and their silliness, or does it just annoy you to the extent that you want to react or at least among peers verbally react?

Mr. MORAN. Let's make the answer short because we have votes.

Mr. KINGSTON. Mr. Chairman, everybody else has been having 10 or 15 minutes. This is an extremely good question and you know it. And it will be my last one.

Mr. MORAN. How long——

Mr. KINGSTON. The Chairman is real interested in this answer.

General AMOS. Honest to goodness, the—once we kind of—it certainly takes a Marine and immediately, you know, your veins begin to pop out, and then you settle down and you take a look. And what is interesting for us is there is such a network of former Marines across this country that we never have to say anything. We saw it happen with the attorney that defaced our deployment Marine's car up in Chicago. He ended up in front of a judge; that was a former Marine. The prosecutor was a former Marine and the policeman that arrested him was a former Marine. So there is enough of us, a connection across the country quite honestly, and the loy-

alty to its Corps by the American people that they kind of take care of it. And it seems to be happening that way in Berkeley. So we are actually just sitting on the side lines. It is interesting reading it in the newspaper.

Mr. KINGSTON. It is like picking on a Notre Dame fan, Mr. Chairman. You just can't do it and get away with it. I appreciate it, and I yield back.

Mr. MORAN. Ms. Kaptur.

REMARKS OF MS. KAPTUR

Ms. KAPTUR. Thank you, Mr. Chairman.

Welcome, Generals, very much and thank you for your service to our country. I am curious. In your testimony, where did the phrase "the long war" come from? Was that your own?

General AMOS. Ma'am, that was actually coined by, I think, General Abizaid when he was the commander of Central Command. I believe he was the one that coined the long war. It has been supported by a whole host of studies. The Commandant has a vision group that has been in business now for about a year to try to look out on what the world is going to look like in 2025. And it seems to support General Abizaid's thing about generations of warfare of the kind we are in right now.

Ms. KAPTUR. And how long is long?

General AMOS. I think you are probably talking 20 years. That seems to be the default position that I hear as I talk to other Services and think tanks. Probably several generations, but probably out for at least another 20 years.

Ms. KAPTUR. Now, when one discusses the long war as going back 5 years, the United States had some allies in this effort. Is it your impression that, as we move forward, there are fewer allies involved with us? And I am talking about on the ground inside of the places in which we are fighting. What is your estimate of the allied support for this long war?

General AMOS. Ma'am, I had 2 years in NATO. And so I was there when we went from 16 countries to 19, and I worked alongside our allies. So I think that will be cyclical depending on the leadership of the countries that support our allies. I will tell you that we have some stalwart allies, like the Australians and the U.K., New Zealand. They are right beside us and have been beside us and fought alongside of us when we crossed the border in March of 2003. So I can't tell you how the allies are going to work because I think that is going to be dependent on the leadership.

Ms. KAPTUR. Is it not true that foreign forces from many countries have been reduced now to a level around 10,000 from a level maybe four or five times that much 5 years ago?

General AMOS. Are you talking about in Afghanistan, ma'am?

Ms. KAPTUR. And Iraq.

General AMOS. I will have to take that for the record because I truly don't know the numbers.

[The information follows:]

Currently, there are approximately 10,000 troops from 31 countries serving with the United States in Iraq. Coalition Forces in Iraq peaked at just over 25,000 around December 2004.

Currently, there are approximately 40,000 troops from 42 countries serving with the United States in Afghanistan.

Ms. KAPTUR. All right. I think my statement is correct. I think that it has been reduced by about four-fifths in terms of participation in on-the-ground combat. If you could provide those figures for the record, I would be very grateful. Also, our allies were supposed to provide funding, and that funding has not materialized. I think they paid up about $12 billion. They were supposed to have much more than that, four or five times that much in the pot. If you could kindly provide for the record the amount of funding that has come from other countries and which country, I would be very grateful.

I keep hearing references to World War II. This doesn't look like World War II to me. But maybe somebody has a different take on it, and I would be very interested on how they do view it over at DOD. Let me just say, Congressman Tiahrt, I'm sorry he is not here right now because he referenced my home community of Toledo. I get a little sensitive about that. And he made some statement about our mayor, Carty Finkbeiner, who is a mayor—he has been a life-long public official in our area and, I feel compelled to ask some questions for the record here. I want to also state that our community and region just deployed another 2,500 soldiers to Iraq from the Reserve and Guard, the largest deployment since World War II. So I don't think we have anything to apologize about for our community and its patriotism. But I have to inquire as to how the Marines—and what happened in our community was there was a unit that had come from Grand Rapids, Michigan, and deployed in the center part of our city. There was some sort of mix up in the city. I don't know what it was. But normally, Toledo, when it sees Marines, it is at Toys For Tots at Christmastime and holiday time and Hanukkah time. This was a different sort of presence. And, yes, they had been there before. My question is, can you provide me information on—under what authority the Marine Corps is taking its Reserve Units and deploying them to American cities? I would like to know which cities you are deploying to. I would like to know under what terms those units are being deployed. Are they paid—are they paying the city governments or local communities for their presence? I would like to know what types of weapons they carry and whether those weapons are loaded or not. And what are the terms of engagement, both with the local community and with the local police or whatever? And could you—are you aware of these deployments around the country, these exercises going into civilian communities?

General CASTELLAW. We have been training in various locations throughout this great Nation of ours for years and years. There is a process that we have in place where we engage with the local authorities and make plans for doing that. As you indicated, there appears to have been a communications problem that occurred in this particular case. But for many, many years now, we have successfully been training in various locations, New Orleans, Charlotte, San Francisco, Yuma, Arizona. And again, we think a pretty good process for engaging and planning with it and doing those things that do not disrupt the local citizenry. So, you know, I think we

will all do a post mortem on this and see what the issue was so it won't happen again. I don't think any of us want that.

Ms. KAPTUR. I would like a special briefing by whoever is in charge of the Reserve Units that developed these plans for around the country. Because what happened to our mayor, in my opinion, regardless of whoever thinks he is at fault or whatever, for him to become the butt of contention on all these shock jock shows around the country is unfair to his life because he has been a very dedicated public official and made the butt of jokes across this country. And I don't agree with him on everything, but this is not right. And I don't know quite what happened there, but it is really—for somebody in the political realm to see this happening in their community and not be able to stop it—I got home, all this stuff is all over the TV, you know, 3 days before you come over here to make your testimony. Maybe it is all just coincidental. But I have to tell you, Toledo, Ohio, doesn't like it because we have very patriotic people. We are in all the branches of the service. And for our mayor and the highest elected officials of our city to get in a fight over this, this is ridiculous. And so I would—are you in a position to come and someone see me separately on what actually, not just happened there, but what these plans are across the country?

General CASTELLAW. Ma'am, it is our duty to make sure that the people that we protect in the United States understand what we do, and you know, we do not want this to occur just as much as you do. And I understand——

Ms. KAPTUR. It is a public relations nightmare.

[The information follows:]

Lt Gen Bergman, Commander Marine Forces Reserve personally met with Congresswoman Kaptur to discuss the Toledo, OH issue and answer her questions.

Mr. MORAN. But, General, if you wouldn't mind perhaps getting the appropriate people to discuss the details with Ms. Kaptur, the Committee would be appreciative.

General CASTELLAW. We would love to.

Mr. MORAN. Mr. Boyd.

Mr. BOYD. Mr. Chairman, I will pass.

Mr. MORAN. Thanks very much, Mr. Boyd.

Mr. Rothman.

AFGHANISTAN

Mr. ROTHMAN. Thank you, Chairman.

Generals, thank you for being here. Thank you for your careers, your sacrifices and those of your families. I will ask two questions so I can get the answers. Hopefully—they are complicated big questions, and I apologize for the small amount of time that I have to ask them in. The National Defense Research Institute from RAND Corporation did a counterinsurgency study that just came out, a public study. And I don't agree with everything they have in the report, but they say that in order to address our counterinsurgency needs, we need to, quote, "reduce reliance on large-scale ground presence, to support civil capabilities of the local governments, to make more and smarter use of information, to prepare and enable local forces and to perform critical military tasks that only our forces can perform". Do you buy that as your role as Marines? And

if so, in whole or in part, does your budget reflect your acceptance or rejection of that notion of how you should conduct counterinsurgency? That is question one. And question two, I apologize for putting you on the spot. But I read that the Marine Commandant suggested that it might be a good idea to send Marines to Afghanistan to help out and that that proposal was rejected in large measure. Can you comment on what difference you think the Marines could make in Afghanistan? And what was the basis for that proposal? And when we can expect the Marines to be in Afghanistan.

General CASTELLAW. I will take your second question first to give my compatriot there a little bit more time to think about your first one. First of all, 3,200 Marines are going to Afghanistan in the spring. Our job in the Marine Corps is to provide this nation and the leadership options for use of our forces. And certainly we continue to provide those—that advice to the leadership within the building, and when appropriate, the Commandant, one of the Joint Chiefs, has a responsibility to provide that to the President. And he meets with the President on a regular basis and that President avails himself of that particular advice. The Marine Corps is an expeditionary force in readiness. We have various capabilities, other than our primary role, and we are exercising that now in terms of operating in Iraq. But, as indicated, the situation there now continues to improve. I think we have been very successful, and so we will continue to look for options for Marines to be used where their particular talents may be best utilized, and we will make those recommendations and then the leadership will decide where the Marines need to be.

The Marines right now on a one-time basis are being ordered to Afghanistan. We will send a battalion, as General Amos indicated—I am sorry, sir, I think you weren't here when General Amos talked about it—out closer to the border. We'll have the Marine Expeditionary Unit, which is a balanced—what we call a MAGTF, Marine Air-Ground Task Force which will operate in the south. It has helicopters. It has Harriers. It has ground mobility. It has combat service support. And it will fill a role in that part of the country. So, yes, we are going to Afghanistan. Right now it intends to be one deployment. And we think that the situation as it exists in Afghanistan right now, that we can make a difference there, too.

HYBRID WARFARE

Mr. ROTHMAN. Thank you, general.

General AMOS. Sir, I have not read the RAND study, and I thought I had read a lot of what was going on with this. So I apologize. But I am just—but if they are dealing with counterinsurgencies, and I took notes here as you talked about reduced reliance on large scale forces, there is a fashion that is going around that, and I have heard this in other quarters, where we no longer need the ability to have what we would typically call traditional, traditional forces, to perform traditional missions because of where we are headed. I think there is a piece of that that probably is truthful. If you take a look at, and we talked a little bit earlier about the long war, what the war is probably likely going to look like, the kind of wars we are most likely going to find ourselves in-

volved in, not necessarily wars, but issues, countries, nation building, stateless people moving back and forth across borders driven by national disasters in some cases, driven by extremism of one kind or another in other cases. And that is the kind of thing that we call in the Marine Corps hybrid warfare. And it is—back in 1996, General Kulak talked about the three-block war where he said: Men, you can expect to be handing out candy and food and medical supplies in one block, go down to the next block and try to get the populace under control in a kind of peace enforcement kind of a thing, a little bit like we did in Kosovo. And then in the next block, you will find yourself in full scale combat. And all within the same unit, probably all in maybe one day. And that is a little bit what hybrid warfare is like. So if you take a look out, and I think that is what RAND is referring to, that kind of future, which is not necessarily the most dangerous thing, but it is probably the most likely thing that we are going to be involved in, then I would agree that we need to adjust forces and capabilities. And I think that is the key, capabilities.

Mr. ROTHMAN. General, my question was, does your budget reflect the need for this hybrid capability?

General AMOS. Sir, I am going to say yes because we are building, in this 202k build, we are building capabilities to be able to operate successfully in that kind of environment. And what are those? Those are people that are military policemen, intelligence, reviewing, language training, culture training, both professionally here and resident and nonresident. So the answer is yes. I believe we are, yes.

Mr. ROTHMAN. Thank you, general.

Mr. MORAN. Thank you, Mr. Rothman.

Mr. Dicks has a follow-up question.

MARINE SPECIAL OPERATIONS COMMAND

Mr. DICKS. What happened, there were going to be 2,500 Marines into a Special Forces Unit? Is that still going forward?

General AMOS. Sir, it is called Marine Special Operations Command. It is headquartered down in Camp Lejeune. It comes under SOCOM, Special Operations Command, Admiral Olson. And it is not 2,500 yet. It is going to be at 2,500. It is at 1,200 right now. And as we grow the Marine Corps force, again it is just like equipment. We are sharing assets across the Marine Corps as we cross level. So we are doing our best to get that force fleshed out. But truth in lending, it will be a couple of years before we reach 2,500. But it exists. They have already deployed. And it is under command of a two-star general right now.

Mr. DICKS. When you come home on these 7-month deployments and you are back 7 months, do you have the equipment you need to train with or is that an issue like it is for the Army and the Guard?

General AMOS. It is an issue right now. And it is not so much an issue, I don't think, that the money is not there, and General Castellaw can talk. I think he will tell you the money is there. It is just a function of production. We are spread loading, cross leveling across the Marine Corps the equipment at home station, so that when units are deployed, they have got exactly what they

need. The units that are preparing to deploy. They have exactly what they need. And the units that have just come back, quite honestly, are at a readiness level that is less than the other units. So until we get to a point where all the equipment shows up—and again, it is, a lot of it is production. It is a function of physics. They can't make it. Some of these lines were closed. And so we have asked or we bought new equipment that replaces that. So some of our units back home are not at the same level as our deployed units. There is no question about it.

Mr. MORAN. Mr. Lewis.

COUNTERBOMBER CAPABILITY

Mr. LEWIS. Thank you, Mr. Chairman.

One question. It is my understanding, General, that you are quite familiar with this effort, maybe in the center of doing it, that the Marines are sending this month 12 modern person-borne IED suicide bomber detection systems to Iraq which will be integrated. And the purpose is to get a better handle on using these systems and effectively identifying ahead, with better timing, such devices. Can you describe what you are doing there, and what you think the potential is?

General AMOS. Yes, sir. About a year ago, the Commander of Marine Forces Central Command came to me, only because I have got the war-fighting level, I have got the experimentation, science and technology out of Quantico, and we are plugged into the Office of Naval Research. And he said, hey, we need what we call a counterbomber capability. Not so much because we are seeing the suicide bombers in the Al Anbar province because, quite honestly, we are not relatively speaking. We did before. We had vehicle born folks. But we are not seeing it like they are seeing it perhaps in other areas and certainly you are starting to begin to see in Afghanistan. But he said, let's see if we can develop one. So we already had some techniques and some capabilities. But we went to the Office of Naval Research, Admiral Landay. And he has an effort—now it is called Naval Innovation Lab. It is called NaIL. And we asked him to put $10 million towards the development of a counterbomber capability. And they have done that. Now, I have seen it. I have gone out and watched it in action. We are going to deploy 12 of them. The forces, we have just turned over the forces in Iraq just within the last 2 to 3 weeks and the new command from Camp Pendleton who, you know, Major General——

General CASTELLAW. I just went blank, too.

General AMOS [continuing]. John Kelly. Excuse me. Don't tell him I couldn't remember his name. John Kelly just took over, and we have trained John's forces with this equipment. And so we have delivered four sets?

Mr. LEWIS. That is our John Kelly.

General AMOS. Your John Kelly. That is exactly right. That is why I am embarrassed. I will hear about it on an e-mail tonight. But we have deployed four sets already. We are deploying another four. And this is a manufacturing issue right now. It is not a matter of money. The money is there. And then we are going to deploy another four in Afghanistan. This is a radar capability. It shows promise. We haven't deployed it in tough conditions yet in the

freezing cold and the 125 degree weather. So it is yet to be seen exactly, so we are in the experiential phase. But we decided we are going to push this into country to get this.

Now, this correlates with some other capabilities we have got. We have got a thermal imaging capability. We have got backscatter vans. I mean, we are trying our best to get ahead of this counter-bomber business. But I think right now I am excited about it; I am anxious to see how it works.

Mr. MORAN. The gentleman from Georgia.

TRAINING

Mr. KINGSTON. Thank you.

General, I just want to associate myself with the words of Ms. Kaptur. I don't understand the Toledo, Ohio, issue either. It doesn't quite seem like the public discussion of it has been accurate. It would appear that there was a major paperwork snafu somewhere along the line that this wasn't cleared because I was not aware that the Marines were training in cities and urban areas until you just said that they were. But when you respond to her, I would like to be included in that because it does—I am confused by the whole matter. I don't think the press has given us an adequate explanation.

General CASTELLAW. Well, good, sir. Again, we will be more than happy to provide whatever information we can that you need. But we have been training—when I was back in my youth, I deployed to New Orleans, and we trained in urban operations in New Orleans, landed 46 on the old Schlitz Brewery right down from the New Orleans Picayune newspaper. So New Orleans knew we were there. We made appropriate coordination with them. And it is extremely valuable training. What we are talking about is getting training that allows our Marines and the Sailors that go with them to be effective in those type of environments. And training has been extremely, extremely valuable for us. But it is extremely important that we maintain the relationship with the local communities which gives us our support and of who, of course, our ultimate responsibility for their defense lies. So I am very glad that this issue came up so that at least we can talk with you and explain to you what is going on to at least allay some of your concerns if you have any on that.

Mr. MORAN. General, do you think they had prior approval of the government, the local government?

General CASTELLAW. Oh, yes, sir. Again, you work with the local—for instance, the FBI for a time being provided a liaison that worked with the local authorities, and we had the structure set up to do this. And as I said, we have been doing this with great success for a long period of time and something happened here. We will find out what it is. We do not want to scare the people of Toledo or San Francisco or Yuma, Arizona, or any place like that. But most of all, we want their support. We want your support. We will find out what went wrong. We will talk with you about it. We will explain what happened, and we will go forward because we need your help and support to be successful.

Mr. MORAN. Ms. Kaptur.

Ms. KAPTUR. I just want to thank the gentleman from Georgia for offering, and the General, state for the record what year were you deployed to New Orleans?

General CASTELLAW. Yes, ma'am, New Orleans.

Ms. KAPTUR. What year?

General CASTELLAW. This was 1988.

Ms. KAPTUR. 1988. And how many urban units would you have deployed this year, Reserve Units into urban areas?

General CASTELLAW. Ma'am, I will get the record for that. That is not my area of expertise. And again, it is so routine, you know, that we really don't give a lot of notice to it. Let me get the people who are responsible for that and along with them, they will come and talk with you and explain what we are doing.

[The information follows:]

Lt Gen Bergman, Commander Marine Forces Reserve personally met with Congresswoman Kaptur to discuss the Toledo, OH issue and answer her questions.

Ms. KAPTUR. And I really think that, I mean, at some point, as this proceeds, I believe, Mr. Chairman, but our Mayor and our community, we have to repair this. And 2 years ago, we had Sailor of the year from Toledo. So we are pretty sensitive. We are a port city. We like Marines. But that was really unfortunate.

POST-TRAUMATIC STRESS

Mr. DICKS. Just on the 7 months in and 7 months out, have you done any research to see if the post-traumatic stress—it seems intuitive that it would be less with people that have been there for less time, unless they were obviously in very violent combat. Is there anything to suggest that that is a positive aspect of this?

General AMOS. Sir, there has not been any clinical effort done to try to determine or make a correlation between lower amounts of PTSD and 7-month deployment. The one thing I can tell you, having spent 4 years doing that, that before I came to the job I have got, that the morale factor among family members and the willingness for family members to stand by their Marine, whether it be a man or a woman, and say goodbye to them and have a smile on their face and kind of get through the deployment even during very dangerous times, a lot had to do with the fact that they knew they were going to be back in 7 months. So, right now, it is intuitive goodwill. But there has been no clinical effort.

Mr. DICKS. Thank you.

Mr. MORAN. Mr. Boyd.

READINESS

Mr. BOYD. Thank you, Mr. Chairman.

And thank you, Generals, both, for your service. I have one brief question. One of you answered earlier that one of your roles was to give the leaders options for security, and military purposes. It is my understanding and this Committee's understanding it has been reported that the Marines that are deployed to Afghanistan and Iraq are well equipped and well trained. Would you agree with that?

General AMOS. Sir, they absolutely are. They are every bit equipped and well equipped with everything they need to include

special things that you would need in Afghanistan that you might not need in Iraq. And trust me, they are very well trained.

Mr. BOYD. Secondly, it is also my understanding from previous hearings we have had here that the Marine Corps is almost totally focused on Iraq and Afghanistan and would be ill equipped and trained to deal with a major contingency in some other part of the world. Is that a fair assessment?

General AMOS. Sir, your first statement that we are almost unitarily focused on Iraq and Afghanistan is absolutely correct. The size of our force, 187,000 and rotating as we do, we are a singularly focused force. And that was the beginning reason and rationale behind the growth to 202,000 by our Commandant. He said we have got to be able to do some of the—Congress has tasked us; we have legislation that tell us the Marine Corps has to be a forceable entry force to come from the sea. We have a directive from the strategic planning guidance to be able to put two Marine Expeditionary Brigades ashore from the sea, forceable entry. I mean, that is kicking the door down. And we have got, the Commandant has said, we have got generations of Captains now that have never been aboard a ship. So as we grow the force, we get some more elasticity, more dwell time. And then, and it is our responsibility as the leadership of the Corps now to make sure we provide the training environment, the shipping. That is why Twentynine Palms is so critical to us, to be able to do the fire and the maneuver and the other things.

Mr. BOYD. So it would be a fair statement to say, if there was some major contingency someplace else and the Marines were asked to go there, that you would have to adjust that focus? It would be a serious adjustment and change?

General AMOS. Sir, if there was a major contingency, my first point would be the Marines would step up to the plate. That is not bravado. We have done it. We did it during Korea when we came down after World War II. We were down to 27,000 from 300,000 during World War II. And President Truman and Secretary of Defense Johnson said, you don't need a Marine Corps anymore. And one year later, we are developing plans for Inchon. So the Marines will step up to the plate. There is enough experience with some of the older guys, the old gunnery sergeants that we could put together a force that could come from the sea and do our Nation's bidding. I promise you that. It would not be without pain. What we want to do is get ourselves ready to the point where we can do that across the full spectrum of operations all the time the way we have always been in the past. But we are solely focused right now, and that is why the bill and your support for the bill is so critically important.

Mr. BOYD. Thank you, Generals, and thank you, Mr. Chairman.

TRAINING

Mr. DICKS. Will the General give just one last point for a second. The Army is doing counterinsurgency training now. Is the Marine Corps doing something different when they are home for 7 months?

General AMOS. Sir, because of our deployment dwell time, we are focused almost solely on what goes on inside of Iraq. In other words, counterinsurgency training, operating in that kind of environment, that is why we need to get something—a little more elas-

ticity in there so that we can do the other kind of training, the fire and maneuver, bring three battalions to Twentynine Palms. The land expansion at Twentynine Palms is critical for that. So we can do the kind of training that the Nation expects its Marines to do. Quite honestly, we are the only forceable entry force our country has, and we want to be able to train in that arena.

Mr. DICKS. Why not go in with V–22s instead of little boats?

Mr. MORAN. That will be our final question.

General CASTELLAW. Sir, a V–22 can go anywhere in the world. What happens next is what we have to focus on.

Mr. DICKS. Thank you.

Mr. MORAN. Thank you very much, General Amos. Thank you General Castellaw.

THURSDAY, FEBRUARY 14, 2008.

ARMY READINESS

WITNESSES

LT. GENERAL JAMES D. THURMAN, DEPUTY CHIEF OF STAFF, G–3, U.S. ARMY

LT. GENERAL STEPHEN M. SPEAKES, DEPUTY CHIEF OF STAFF, G–8, U.S. ARMY

LT. GENERAL MICHAEL D. ROCHELLE, DEPUTY CHIEF OF STAFF, G–1, U.S. ARMY

INTRODUCTION

Mr. MURTHA. The hearing will come to order.

We will start a little earlier. We appreciate that today because we may be disrupted to vote. So, hopefully, we will be able to have enough time to let you say what you have to say.

I don't think there's any committee that's ever done more to make sure of that readiness is funded. We will work with you and let you work with us. I think we can do the best we could with the circumstance.

I welcome you to the committee and ask Mr. Frelinghuysen if he has any comments.

Mr. FRELINGHUYSEN. No comments.

Mr. MURTHA. We will listen to your testimony. If you will put your full testimony in the record, we will get right down to questions.

General Thurman, whoever is first.

SUMMARY STATEMENT OF GENERAL THURMAN

General THURMAN. I will go first. I do have a short opening statement for you, sir, if you will allow me, as you have studied my written statement that I have provided.

Mr. Chairman, Ranking Member Young and distinguished members of the House Appropriations Committee, thank you for the opportunity to allow me to speak to you and let my colleagues and I come over and talk to you about the state of Army readiness. On behalf of the United States Army and all the wonderful soldiers and civilians and our family members, I thank you for the continued congressional funding and support that you provided us.

The readiness of our all-volunteer force depends on your consistent and committed investment in our training, equipment, total transformation and our people. Your funding and support also ensures that the Army will achieve the strategic depth needed to successfully execute missions across the full spectrum of operations.

Before I continue, I would like to introduce members of the Army staff who are here with me.

To my left is Lieutenant General Michael Rochelle, who is the Army G–1; and to my right is Lieutenant General Speakes, the Army G–8. To my right here is Major General Vinnie Bowles, Deputy G–4. Then to my left here is Ms. Barbara Sisson, who is the Director of Installation Services.

After two deployments in support of Operation Iraqi Freedom, I now know that the progress never unfolds inevitably. Progress is always carried forward by the men and women of this country who serve a cause greater than themselves. For that reason, I want to publicly thank our soldiers, the true strength of the Nation, whose patriotism and courage exemplify all warrior ethos.

Every soldier has a choice of whether to serve our Nation, especially during a time of war, and that clearly defines their role when special services require long separations from their families.

I must thank the families who have served this country as well as anyone who has ever worn this uniform. Families continue to show that they too, believe in serving one's Nation by their numerous sacrifices. And we all know there will be more, and we thank them for that.

Mr. Chairman, our Army has demonstrated extraordinary flexibility in leading the strategic demands posed by globalized asymmetric threats. The total Army is feeling the cumulative effects of nearly seven years of war in what we believe is an era of persistent conflict. This has led to our Army being out of balance. We are stretched; we are not broken.

Four imperatives will enable the Army objectives to restore balance by 2011, and that's what the Chief of Staff of the Army has placed as our number one priority—getting back in balance—and that will allow us to build the required readiness for the future.

First, we must sustain our soldiers, families and our civilians. Second, we are obligated to prepare soldiers for success in current operations. Third, we must reset to restore the readiness and depth for future operations. Finally, it is critical that we continue to transform our Army so that we have full spectrum capabilities to meet the demands of the 21st century.

I would like to state for the record, if you would allow me, what we believe we need to do to achieve full spectrum readiness and restore that strategic depth.

First, we must accelerate the growth that our Army has been authorized, which is more than just increasing manning but, rather the growth of personnel, equipment, and facilities.

Second, we must build sufficient strategic depth for full spectrum operations to fulfill increasing global demands in our formations, in order to meet combatant commanders' requirements.

Third, we must continue to obtain your full support that you give us, in a timely manner so we are allowed to transform our Army and be ready to meet the current operations and future contingencies.

Again, on behalf of nearly 1.1 million soldiers, families and our civilians, we want to thank all of you for your tremendous support that you have given us. It's not lost on us what you have done, and we are grateful for it.

I will save any further comments on readiness for the question and answer period and thank you for allowing us to come over here

today and speak to you and respond to your questions. We stand ready to answer your questions, sir.

[The statement of Lieutenant General Thurman follows:]

STATEMENT BY

LIEUTENANT GENERAL JAMES D. THURMAN
DEPUTY CHIEF OF STAFF, G-3/5/7
OPERATIONS, PLANS AND POLICY
UNITED STATES ARMY

BEFORE THE

COMMITTEE ON APPROPRIATIONS

110TH CONGRESS

ON

READINESS OF THE UNITED STATES ARMY

FEBRUARY 14, 2008

NOT FOR PUBLIC DISSEMINATION
UNTIL RELEASED BY
HOUSE COMMITTEE ON APPROPRIATIONS

UNCLASSIFIED

Chairman Murtha, Ranking Member Young and distinguished members of the House Appropriations Committee, on behalf of our Secretary, the Honorable Pete Geren, our Chief of Staff, General George Casey, and the more than one million Soldiers who serve in the National Guard, Army Reserve and are on active duty, thank you for this opportunity to report to you on the state of Army readiness. I welcome this opportunity and I pledge to provide you forthright and honest assessments. On behalf of the Army, I offer you our sincere appreciation for your steadfast support and commitment to our men and women in uniform. The American people's support sustains the current fight, is essential to the success of ongoing missions, and is needed to reset returning Soldiers and equipment for the next fight while we continue to transform and modernize for other potential strategic contingencies.

America's interests are threatened by an array of traditional, irregular, catastrophic, and disruptive challenges. As a result, the Nation requires a campaign quality, expeditionary force capable of supporting our combatant commanders across the spectrum of conflict in the 21st century to maintain national security and achieve our national strategic objectives. The Army is the Strength of the Nation and will remain central to sustaining our security and executing our National Strategy. In this era of persistent conflict, the Army and its greatest resources—American Soldiers--have proven its commitment to the enduring mission of defeating highly adaptive, intelligent adversaries who exploit technology and information to undermine and threaten US interests and challenge our Nation's security in order to achieve their ideological and political goals. Our American Soldiers are fully engaged in this fight and it is through their tremendous sacrifices that we will ultimately prevail. We have both a moral imperative and moral obligation to support them; it must never leave our minds the forward-deployed Soldiers in combat are our number one priority.

As our all volunteer force moves into the seventh year of the third longest war in American history, our focus remains achieving the best possible methods to support today's fight, sustain, reset , and prepare our Soldiers and their Families, their equipment, transform our organizations

and modernize our force in order to bring our Army back into balance. In the current operating environment, our Army has demonstrated extraordinary adaptability and flexibility to meet the strategic conditions and demands posed by global, asymmetric threats, but the reality is we are out of balance. The following factors are reasons why our Army is out of balance: (1) our supply of our forces is insufficient to sustain either current or anticipated demands over time; as a result, we lack sufficient strategic depth to provide ready forces as rapidly as necessary for other contingencies; (2) current demands provide insufficient time at home stations between repeated deployments to revitalize our people, sustain the all volunteer force, ensure equipment readiness through reconditioning and recapitalizing, and adequately prepare for other contingencies; (3) the urgency of our missions in Iraq and Afghanistan when combined with limited time at home stations compels us to focus on counterinsurgency training at the expense of training and readiness for the full spectrum of operations, and as a result, we are consuming readiness as fast as we build it; (4) and our reserve component forces are augmenting and performing in an operational role—superbly by the way-- as a result of multiple deployments for which they were neither designed nor resourced. We are out of balance but not because we are broken—our Soldiers remain resolved and committed—but rather due to a marked increase in the breadth, scope, and magnitude of the operations and engagements expected of the Army. Four imperatives – sustain, prepare, reset, and transform – frame how the Army is going to restore balance by 2011 and begin to build readiness for the future.

First, we must sustain our Soldiers, Families, and Civilians in order to rebuild and maintain readiness by providing them a quality of life commensurate with the quality of their service. These incredible Soldiers and their Families deserve the best services, facilities, and compensation and we will ensure that they are supported through supportive communities and funded programs. Families are central to the welfare and morale of our Soldiers; therefore, when we take care of the Families who are impacted by their commitment and their service, we rebuild an essential construct of readiness that will sustain the all volunteer force.

Second, we must train and equip our deploying Soldiers and units with full capabilities and force protection which will prepare them to maintain a technological advantage over any enemy. The best available equipment allows for successful execution of missions across the full spectrum of operations. Funding of the best available training and equipment will ensure that we keep pace with the evolving enemy and continue to prepare our forces to succeed in the current conflict.

Third, we must continue to reset our units to best prepare them for future deployments and future contingencies. The cumulative effects of the last six years of war have gravely impacted equipment Soldier, and unit readiness, as well as cut into the strategic depth of our all volunteer force. The funding of equipment replacement, unit retraining, and the revitalization of Soldiers and Families is necessary to reverse the negative effects of this sustained global war, and it will lead to the execution of successful homeland missions and redeployments.

The fourth imperative, transformation, emphasizes six critical areas that will improve Army capabilities from the current to the future force. Transformation changes how we fight, how we train, how we modernize, develop leaders, station our forces, and most importantly how we support our Soldiers, Families and Civilians. To effectively face the strategic and operational challenges of an era of persistent conflict and to regain balance in the near term, the Army will continue to require sustained, timely, and predictable funding. The resources and continued support from this Committee will be essential to how these imperatives accelerate the plan for restoring readiness and completing Army growth and transformation.

Growing the Army's end strength is critical to both current and future readiness. For the first time since the inception of the all volunteer force, America is recruiting its military during a period of protracted combat. We must grow the Army to provide sufficient forces for the duration of current operations and for potential contingencies. This growth allows us to revitalize and balance our force, reduce deployment periods, increase dwell time for Soldiers at home, and increase capability. We are authorized to increase the Army's end strength by 2011 to 74,200 and will achieve this goal as fast as possible.

The Army must remain a campaign quality expeditionary force capable of executing missions across the full spectrum of conflict through the use of joint and interagency capabilities and warfare tactics to mitigate the risks resulting from the protracted and prolonged confrontation with global terrorism. The ability to promptly deploy modular combined arms formations worldwide into any operational environment improves our existing expeditionary capabilities. The ability to sustain operations as long as necessary to accomplish the mission supports our campaign capability. To fulfill the requirements of today's missions, 594,000 Soldiers are on active duty (522,000 active component, 47,000 Army National Guard and 25,000 Army Reserve). Forty-three percent (259,000) of these Soldiers are deployed or forward stationed in 80 countries around the world. In addition, more than 4,600 Army Civilians are serving side-by-side with them performing a variety of missions vital to America's national defense.

We will ensure our Soldiers and units are completely ready for their mission before they are scheduled to deploy, and our goal is to generate a continuous output of fully manned, equipped, and trained forces adequate to sustain one operational deployment in two years for the active component and one operational deployment in four years for the reserve component. We believe this rotational philosophy will help us achieve a balanced, sustainable force, and currently, we are not able to achieve this standard. Also, our next to deploy forces are purely focused on counterinsurgency and barely achieve their required readiness which limits our ability to support combatant commanders' operational plans. Despite this deployment operational tempo that is unparalleled in history, the morale of our Soldiers and their Families remain high; however, there are indicators that show that strain and the signs of stress are impacting operations. I firmly believe this current deployment to dwell ratio of 1:08, which is 15 months deployed and 12 months at home station, coupled with multiple deployments for experienced combat leaders, threatens individual, unit, and institutional readiness for the Army. Therefore, to better position our forces for current and future combat operations, we must reduce the 15 months Boots on the Ground.

To meet joint force requirements for rotational and contingency operations in the new security environment, the Army must adapt and implement the Army Force Generation process. The Army Force Generation is the structured progression of increased unit readiness over time, resulting in recurring periods of availability of trained, ready, and cohesive units prepared for operational deployment in support of combatant commander requirements. Army Force Generation categorizes units into one of three force pools: Reset/Train, Ready and Available. Units in the Reset/Train force pool are not ready or available for major combat operations; they have no readiness expectation. They are, however, ready to defend the homeland and provide defense support to civil authorities at all times. Units in the Ready force pool continue mission-specific collective training and are eligible for sourcing if necessary to meet joint requirements. Supporting the "train, alert, deploy" concept, units in the Available force pool are in their planned deployment windows and are fully trained, equipped and resourced to meet operational requirements. The overarching purpose is to provide combatant commanders with trained and ready units, task organized in modular expeditionary forces that are tailored to mission requirements. These forces provide the nation with the campaign capability and depth to conduct continuous full spectrum operations in an era of persistent conflict.

The changed conditions of warfare necessitate that we can no longer accept risk in how we train and prepare for war. The Army is about to roll-out FM 3-0, the first major doctrinal change since 9-11, and is the result of six years of wartime experiences drawn from the complex and volatile strategic security environment. FM 3-0 will be our capstone warfighting doctrine, the blueprint for an uncertain future.

The centerpiece of the entire manual is the operational concept which makes clear that the 21st century warfight will require stability operations to be elevated to a co-equal status with offensive and defensive operations. FM 3-0 emphasizes the central role of the commander – especially in battle command. Since battles will be increasingly fought "among the people," considerations of ethical leadership and the ability to make morally sound decisions are now, more than ever, part of our operational concept. In addition, FM 3-0 recognizes the unparalleled

power of information in modern conflict and the fact information has become as important as lethal action in determining the outcome of operations. This new doctrine is not meant to be, and must not be, a substitute for thought – rather, it aims to establish guidelines for leaders to direct operations while allowing enough freedom for bold, creative initiative in any situation.

To fulfill our mission to the Nation, our Soldiers and their Families, our training time in between deployment cycles must support training for full spectrum operations. Deployment cycles must also provide sufficient time for reset for our Soldiers and their Families, preparation and training for other contingency missions, and sustainment and maintenance of equipment. To mitigate this operational tempo, the goal the Army is working toward for the active component is a sustainable deployment to dwell ratio of 1:3 or a ratio of 1:2 in a surge environment. For the reserve component, the deployment to dwell ratio goal is 1:5, however we are operating at less than a 1:4. We do not anticipate a decrease in the current requirements for our forces; therefore, to achieve a balanced deployment to dwell ratio, it is imperative that we grow the Army, and shift our reserve components from the model of a strategic reserve only mobilized in national emergencies to a model of an operational reserve, which we can employ on a cyclical basis to add depth to the active force. This has been happening for the last six years and will be required in a future of persistent conflict.

We are working to reconstitute Army Prepositioned Stocks (APS), transition the reserve component to an operational force, and grow the Army by 74,200 Soldiers. Tremendous procurement support is making a difference but it takes time to receive the equipment. Due to the strain of the wars in Iraq and Afghanistan, we must also rebuild and recapitalize vehicles, weapons systems, and aircraft. A lesson learned after the Vietnam War, a time when the Army's vehicles, weapons systems, and aircraft readiness levels were unsatisfactorily low, is the need to continue rebuilding and recapitalizing for years following hostilities in Iraq and Afghanistan. Even now, the importance of timely recapitalization and reconditioning is seen in the fact the Army currently has the equivalent of five ground Brigade Combat Teams and one Combat

Aviation Brigade in Army Depots nationwide, with 102 aircraft currently in reset. The operationally demanding environments of this war have strained the limitations and resources of our ground vehicles and of our fleet of aircraft. The $17B dollars you appropriated up front for FY 07 reset enabled us to optimize depot capacity and optimize taxpayer dollars. And we thank you. Reset funding has partially alleviated this strain, but continued funding will be needed as we are simply running short of aircraft on our flight lines due to age, attrition, and wartime losses. Maintaining the readiness of our aviation assets while preparing our aircrew for their next deployment is and will continue to be a monumental effort and constant challenge for Soldiers. Assessments of the impact of higher utilization rates on combat systems are ongoing.

It is absolutely essential that we have continued Congressional support to sustain the necessary growth and to reset the readiness of the Army to meet current and future operational requirements. In the past, Congress has afforded us the support and assistance required to address the costs of reset, modernize equipment, and improve the quality of life for our forces, and we thank you. The support we have received is helping to arrest declining readiness, but operations continue to stretch and stress our all volunteer force. Our need for increased resources for training, equipping, and stationing is driven by requirements to sustain current combat operations, grow the Army by 74,200 Soldiers to meet force requirements, and to transform the force in a time of war. The Army has used supplemental funding to conduct combat operations in the GWOT and, increasingly, to provide for base budget needs.

History has proven that we cannot narrowly define the conditions for which our Army must be ready. We did not recognize the symptoms of a broken Army after Vietnam until it was too late, and it took us a decade to recover. We cannot accept the risk of unprepared, untrained leaders and Soldiers. No level of risk is acceptable if it threatens the development of thinkers, planners, leaders, and assertive commanders who can execute effectively across the full spectrum of operations, from irregular warfare to major combat operations to stability and humanitarian operations. Your support of our training and reset needs will allow us to remain faithful to our

enduring mission: to be where the country needs us and to prevail over any and all challenges we face.

Recent decisions by the Secretary of Defense, the President, and the Congress are accelerating the growth of our force and increasing access to the reserve component to mitigate risks to current and future readiness. The Army requires the resources requested in the President's Budget to regain balance and build capacity for future challenges. The Army will remain central to the successful achievement of U.S. national security objectives for the foreseeable future, particularly in an era of persistent conflict in which operations will be waged increasingly "among" people.

Finally, this Nation has high expectations of the Army; we have never failed to meet any demand or challenge our Nation has asked of us. Now more than ever, Soldiers who willingly sacrifice for this great Nation, tour after tour, need the steadfast and loyal support of the American people and Congress to simultaneously sustain our readiness, prepare our force for current and future contingencies, reset the force during this extended war, and transform technologies to face the challenges of the future, and most importantly, fulfill our commitment to Army Families. With the continued support from Congress for our legislative and financial needs, I am confident the Army will restore balance, build the readiness necessary in an era of persistent conflict, and remain ready. Our Army is the Strength of the Nation and we have trust and confidence that our Nation will do the right thing. Again, I thank you for the opportunity to report to you on behalf of the Army and our greatest assets, American Soldiers.

REMARKS OF MR. MURTHA

Mr. MURTHA. All right, well, we appreciate what you have just said.

You know our concern about your readiness. I remember when we went to the all volunteer Army, and I voted against it, because I felt that we couldn't sustain a long deployment without a draft. We lost that battle, but I remember during that period of time I kept hearing we have got to have high school graduates. Well, high school graduates dropped from 94 to 79 percent. We didn't take anybody with tattoos for a while. We are now waiving criminal records and drug problems. We are waiving twice as many as we waived before. I know it's a very difficult task for you folks when you are given a certain number of people you have to reach out to.

And I can remember when I went into the Korean War, this guy next to me, they said, raise his arm; and he raised it about this high. That's fine, they said. So there are different standards at different times when you take people in.

But what I worry about is that the technology is so vastly different than it was when I was there. I went in 1955, I got out and went back in 1966, and the only thing that was changed was the alphabet.

There are some big changes in the last 10 years. Anybody that is in the service today has to know a little bit about computers, and you have to be educated better than you used to be.

I went to Aberdeen a couple of years ago, and they couldn't even do one push up. I know you get by with some people not doing one push up, but I worry about Afghanistan and Iraq. I was in Iraq at Thanksgiving. I was in Afghanistan just last weekend. Two people sitting at the same table had diabetes. Now, we had the Surgeon General in—no, it wasn't the Surgeon General but a colonel who was an expert in diabetes. We recommend against anybody going to the battlefield with diabetes. I don't know what these people's jobs were, but I hear all kinds of stories of people that should have a medical deferment, but they are being sent into combat.

Of course, I hear the other thing about how hard it is on the families. This administration cut 39 percent of the money out of the money that we put in to help with the counseling and taking care of family, what we call "the family approach." We are going to restore that money. We are going to make sure that the medical benefits go to the people who should have them.

Admiral Mullen gave me a book yesterday about PTSD. This goes back to World War II, Korea. I am going to tell you something. I remember it just like that. I mean, I know what he is talking about, having been there myself. I know how it affects somebody who is in combat. The more they go back, the harder it is for them. And there will be a long-term impact and cost to the U.S.

So we need to address this readiness as quick as we can, because our procurement is either a $200 or $300 billion supplemental for the short term right now. And we better make sure that you work with us, telling us what we need so we put the right mix in, because whoever is elected next time, will likely call for a lot of cuts.

You talk about increasing personnel. Well, you know better than anybody else when you start to decrease the budget, personnel

costs are the things that come first because they are 100 percent outlay in the first year versus procurement, which is 10 percent outlay in the first year.

I am going to go into equipment shortfalls, in the question period, but we have seen it. We are trying to address it. This year, we have a lot of help from you. We appreciate that. So we appreciate your coming before the Committee; and the members. I am sure, we will be here to ask you the questions that we ask ourselves.

But we appreciate the work you are doing, and we appreciate what the families are doing. I went up to Ft. Drum on Friday to talk to them about some of the problems that I have seen in the papers. Sometimes it doesn't turn out to be that way.

I was pleased when I was in Afghanistan. It wasn't as bad as I was reading the newspaper. I thought it wasn't going as badly as some people were projecting. Of course, this is wintertime. They don't exactly go out and do the fighting in wintertime as far as Afghan goes, but the military is doing their jobs.

Admiral Mullen said we can't win this militarily. He agrees that you have to get the State Department involved in it. They have been hesitant to get involved. We have done everything we could to try to shift the responsibility for construction and infrastructure improvements and so forth. We haven't had much success, although it looks like we are starting to get there a little bit, what the parliament did and military security being a little better, so things look a little better.

But the American public is speaking and saying we cannot bear $343 million a day. We have got to figure out the best way ahead this year, because none of us know what's going to happen next year.

Mr. Frelinghuysen.

FORCE GENERATION

Mr. FRELINGHUYSEN. Thank you, Mr. Chairman.

Gentlemen, we are enormously proud of you and all those who serve under you. I know the chairman and all committee members thank you for your service and recognize that we have an all-volunteer Army.

I should say for the record, Mr. Chairman, I was one of those drafted.

Mr. MURTHA. And he did pretty well for himself.

Mr. FRELINGHUYSEN. I did. I had a good life for a draftee.

I am not sure we need to go back to that system, because, obviously, today we have a military that is highly motivated, well educated and, I think, well supported by this committee.

General Speakes, you and I have talked; and, as we speak, we have about 3,200 New Jersians, a number of the 50th Infantry Brigade Combat Team going to Iraq. On the issue of Army force generation, where do we stand relative to that program?

General SPEAKES. Sir, what I would like to do is first ask for help from General Thurman. He is the G–3. His job is to orchestrate the staff and the Army through the ARPERGEN process. My particular responsibility, then, is to ensure I follow his guidance when it comes to such important issues as equipping.

So let me ask General Thurman if he would be willing to take that question on, and then——

Mr. FRELINGHUYSEN. The Army plan was—correct me if I am wrong—on one-year deployment? Every five years?

General THURMAN. Yes, sir.

Mr. FRELINGHUYSEN. Obviously, the caveat is in there, but can you talk about where we stand?

General THURMAN. Congressman, if you would allow me, that's a very good question.

What I would tell you up front, and I would just like to talk about where we are up front in terms of our rotational capacity, in terms of what the current commands are.

Currently, for the Active force, we are rotating for every rotation down in either Iraq or Afghanistan at about just—as you know, it's 15 months down there for Active Army. For the Reserve components, it's 12. It's 12 months from total mobilization.

What we want to get to, our goal, is to get for our Reserve components every year that we are deployed, that would be 12 months, and we would like to spend at least five years back in dwell. Now, currently, we can't get there from here.

DWELL TIME BETWEEN COMBAT ROTATIONS

Mr. FRELINGHUYSEN. Tell the committee where we are now.

General THURMAN. Okay, that is a very good question.

Where we are right now, for the AC, we are rotating at about a one for one-deployment cycle to about 8 months.

Now, what we have done, if we spend 15 months down range for the Active, then we want to guarantee at least 12 months dwell. So we are rotating less than really a one-to-one right now, 1 year deployed, 1 year back at home.

For the Reserve components, your combat formations are rotating at about a 1-year deployment mobilization period for them. Because we are in the 12-month mob period, 4 years back home is what we got.

Now, we have some units that are less than that. It's about a 1-year and then a 3.3-year dwell.

For your specific question on the 50th, we do know about that formation. I can get you the exact details of where they stand, equipping and personnel, because we have gone forward to the Department to ask that we alert these formations at least 24 months out, so we can make sure that they have got the amount of personnel and equipment for the mission set that they have been given. We put them on our Army force generation cycle that allows us to have X number available at any one time and X number in a ready pool and in a reset train.

But that is what we are trying to do, what you stated up front, but we can't meet that goal right now.

[The information follows:]

The 50th IBCT, currently in New Jersey, is scheduled to deploy in late FY08, location: Iraq, Baghdad (T). As a next-to-deploy unit, the 50th IBCT has equipping prioritization over AC and RC units not slated for deployment. HQDA ensures their equipping needs will be met, given the constraints of competing equipping needs of other next-to-deploy units, equipment requirements of units currently deployed, and stock levels.

Mr. FRELINGHUYSEN. So the Army force generation model is a work in process?

General THURMAN. Yes, sir. It is a work in process, given the demands that we have. A function of that model is the amount of supply that we have, and the demand is greater than supply right now.

Mr. FRELINGHUYSEN. How would you characterize the other components besides, obviously, having enough troops to do the job? And, obviously, they are motivated. They, obviously, have families behind them that are concerned. How about the matching of equipment and training? Where does that fit into the overall equation?

General THURMAN. Sir, the way we prioritize the manning and the equipment is we have a Department of Army master prioritization list. I am the guy that has responsibility for prioritization of the Army resource priority list that I give to either General Rochelle or General Speakes to fill from based on, one, we want to make sure that the current force that is deployed has exactly what they need. That is priority one.

Then that is, for the next priority, or the next deployers, that when they fall in that readiness cycle, we start addressing Reserve component concerns. At two years out, right now, is when we try to take a look at what their overall status is, if they are under title 32.

The third priority that we have is our institutional generating force capability; fourth priority are folks that are in a reset train. Frankly, we do not have enough people and equipment, given how we are trying to grow the Army and fill the demands to have everybody up right now. So that is how we have to do that.

Mr. FRELINGHUYSEN. Could you tell the Committee what percentage of the force has been deployed once, twice or or three times or more?

General THURMAN. General Rochelle can tell you the exact, by component.

[The information follows:]

Component	1 Deployment	2 Deployments	3 Deployments	4 Deployments	5 Deployments
AC	212,369	84,304	19,951	4,018	1,080
ARNG	118,884	13,702	755	35	3
USAR	55,552	6,483	536	33	3

Mr. FRELINGHUYSEN. Yes, by component.

General THURMAN. He can tell you that with the exact numbers, by AC that has been deployed for Army National Guard and Army Reserve.

Mr. FRELINGHUYSEN. And you build into this overall equation—as we are working on the next supplemental, you know, you are building the needs of what we are talking about into that supplemental?

General THURMAN. Yes, sir. We are trying to project what we believe is the demand. We meet whatever the COCOM requirements are globally, but, in particular with Afghanistan and Iraq, it's what the CENTCOM commander, what they ask for and request for forces. We try to anticipate that and build that in the Army force generation model.

MILITARY CONSTRUCTION

Mr. MURTHA. Let me add to what the gentleman is asking. We have been working with the Army. We have found shortages in bases for military construction and in the bases for the people that returned from Germany and from Korea. They are going to transfer I think it's $2 billion to military construction to take care of the shortfall, but they wouldn't be prepared when they got back, in everything the Army told us.

The other thing we are looking at, when I was out in Fort Bliss, I noticed they had a substantial shortage of military construction for medical structures. This has been going on for years. This is something that people must make a decision on. Okay, we need this. Or We need that. There will be large costs. So we don't get the medical stuff taken care of. That is almost $5 billion.

We trimmed it down to $4 billion. We are going to try to put $2 billion in this supplemental and $2 billion in the next one. So we will add $2 billion for infrastructure in military construction and another $2 billion for medical structures, and infrastructure for the services' bases in the United States. Now we are going to look at—and see what they need.

But our experience has been, when we looked at the hospitals, they have been sorely underfunded for a long time; and we want to make sure that our personnel get the best medical care wherever they go, and the benefits they deserve.

We also hear from CBO that the $70 billion we have provided, has been used in part for ground vehicles, that will be up to date a couple more years. So if we robustly fund those products for the next two supplementals, we think that you will be in a lot better shape.

Now, still, the Army is in bad shape. You can voice it any way you want to, but there is no question, in my mind, when you have to send people with diabetes into the area even though the surgeons say don't do it, when you have people who have been deployed as often as they have been, and when you read this book that Admiral Mullen gave me about PTSD, you realize the tremendous pressure on these troops and their families during their period of time.

So I appreciate what you go through as trying to set the priority. We want to work with you; and, as Mr. Frelinghuysen said, we want to make sure we do everything we can to get you through this period of time and get you back to a stance you can address world events in case something happens in the future. This Iraq war is one thing. But we also have to worry about what might happen down the road and be prepared to deploy; and right now we are not ready to do so.

General THURMAN. We can get those deployment figures from General Rochelle at some point.

Thank you, Mr. Chairman.

Mr. MURTHA. Do you have those figures?

DEPLOYMENT DATA

General ROCHELLE. I would be happy to give you those figures, sir.

First, before I do that, though, let me make it clear that at any point in time when one looks at the Army, we have to ask ourselves, how many individuals have deployed in the current force, the snapshot we see today? How many are coming in through the initial entry pipeline who are destined to units who are going to deploy?

Here is the large question that rarely gets asked. How many people have ever deployed by components who have left the force? I am afraid I only have one component figure for that latter figure that I would like to start with.

Since the beginning of Operation Iraqi Freedom and Operation Enduring freedom, a little over a quarter of a million people from all components who have deployed have left our formations. So, with that as a background, let me present you the figures that you asked for.

Mr. MURTHA. You add to that, I think, 37 percent have never been deployed, never been deployed to Iraq or Afghanistan. At least, that's the figure Admiral Mullen gave us yesterday, right?

General ROCHELLE. That is a correct figure, sir. Again, that is a snapshot in time.

For the Active component, if we take a look at the numbers who have deployed, who are currently deployed or have deployed, that is 63 percent today. But add to that, add to that another 45,000 who are pending deployment—meaning they are in units that have a deployment order, and they will deploy with that unit—that is 45,000 more.

We then aggregate individuals who are in the training pipeline, new adds, if you will, new enlistees, new officers. That number grows to 80.4 percent of the force, Active component force, that has deployed on a deployment order and initial entry training and will deploy for the Army or for the National Guard. Thirty-seven percent of the National Guard has deployed.

What I am afraid I cannot give you on the National Guard is those other components, but one can assume that another 10 percent, 20 percent are on deployment orders from the G–3 of the Army or in initial entry training. So that that would kick that number up, in my estimation, to between 42 and 57 percent.

The Army Reserve, sir, 32 percent; and, likewise, I would estimate another 10 percent, which would make it in the 42, 45 percent of the Army Reserve has been deployed. It's a very daunting figure.

What I did not give you, sir, is for those other components that are carrying a substantial burden, as you know, the numbers of soldiers who have deployed, who have left the formation. But I would be happy to provide that.

Mr. MURTHA. Thank you, sir.

[The information follows:]

Deployed Since 9/11

Component	Losses
AC	152,209
ARNG	45,911
USAR	34,888
Total	233,008

Mr. MURTHA. Mr. Moran.

Mr. MORAN. Let me pass for the time being because Mr. Cramer was here before me, and then if I could go.

TACTICAL MISSILES

Mr. CRAMER. Thank you, Mr. Chairman.

Thank you for being here.

Yesterday, we had Secretary England and Secretary Gates; and I asked about missile research funding trends. The Army has historically spent RDT&E money on the development of missile systems. However, I am getting the impression that the recent plans indicate that there is some degree of comfort with the current inventory of tactical missiles.

I know, General, that you asked for a capability gap analysis way out. We have got a number of threats. I don't know that we are ready or can anticipate what the threats will be in years from now, but my concern is that if all of a sudden we are only developing one tactical missile program, the JAGINT program, is that smart for us in the long run? Would you share some of your concerns, General Thurman, on that?

General THURMAN. Congressman, on the 21st of December, we sent a request to assess the capabilities. We asked him to assess the overall capabilities of gaps on missiles inside the Army. We did ask that.

Now, as we were trying to look to the future is the reason that I sent that request down to Lieutenant General Mike Thain to assess our current capabilities and see if, given the operational environments that we may see in the future, if we got that right.

Mr. CRAMER. How long will that take?

General THURMAN. I don't know the exact time, but, what I told him yesterday is go assess that capability, go see if we have a gap and to come back with me on that estimate, that is what I would tell you.

[The information follows:]

On 21 Dec 07, the Army G–3 signed a memo directing the Army's Training and Doctrine Command to conduct an Army Missile Capability Gap Assessment that looks at future Army missile capability needs in the context of a Joint force. Discussions are underway to ensure assessment scope, use of current analysis results and completion date will identify and provide recommendation/direction for any potential missile capability gaps. We expect to provide the results by the FY12 President's Budget submission. No Congressional update is currently scheduled.

MINE RESISTANT AMBUSH PROTECTED VEHICLES

Mr. CRAMER. I want to follow up with you on that. I want to switch to the MRAPs. How many MRAPs does the Army currently have in Iraq and in Afghanistan?

General THURMAN. Sir, currently, fielded today—and these are today's numbers, because that changes every day—there are 1,429 in Iraq.

Mr. CRAMER. In Iraq alone?

General THURMAN. Of which 1,175 have been fielded to our soldiers, if we are operating with that.

For Afghanistan, MG Rodriguez asked for an operational needs statement, and their requirement is 615 of the RG–31 Echo Light for Afghanistan. We are starting to ramp up. We have got the priorities changed through Central Command, changed the prioritization on the Iraq vehicle, and the Joint Staff approved that back here.

We have now diverted 615 that will go into Afghanistan, because there was concern with that IED threat in Afghanistan.

Mr. CRAMER. From here forward, what is your acquisition goal?

General THURMAN. Sir, as it stands now, the interim requirement that we have right now is 10,000 MRAP. We are studying what we need over and above that for the future. That's the interim requirement. I will let General Speakes speak on that as the Army G–8. That is what we are doing right now. We are doing a follow-up assessment with the theaters.

General SPEAKES. Sir, as you know, we are doing this whole MRAP process in collaboration with the Army and the Marine Corps. At this point—we are doing this by increments.

Mr. CRAMER. Ten thousand over what period of time?

General SPEAKES. Ten thousand is our total requirement right now, based upon the last JROC validated requirement for the Army as a part of the joint picture. The issue in all of thisis that it is a continuously evolving picture, so we have a requirement to provide an update to the Joint Staff next week. And what that will do is lead to the JROC setting a new a requirement for the Army that will then go into the Office of the Secretary of Defense; and we anticipate about the first week of March that the Office of the Secretary of Defense will make the decision on the next increment. The Army will be the principal service, we believe, that will be involved in that. So we expect somewhere in early March that the Secretary of Defense will announce any adjustments to the current MRAP requirements.

Mr. CRAMER. How have the MRAPs performed?

General THURMAN. Sir, I would tell you that they have performed in a very good manner, and I will just cite a couple of examples. In cases with IED strikes, which would have probably destroyed an 1114 up-armored Humvee, an M–1114 or M–1151, we have seen our soldiers walk away from them.

Mr. ROTHMAN. Microphone, please.

General THURMAN. I am sorry. We have seen our soldiers walk away from them.

The interim response out of our soldiers is they are very pleased with the vehicle, because it allows us to move through those areas, particularly in Iraq, and move our logistical formations, medical, and help them better get through the environment. That is a dangerous environment, as you well know, in Iraq, particularly with the improvised explosive devices.

But that is our initial assessment, and we have got about a 10 percent initial assessment, but it has been very positive, is what I would tell you.

Mr. CRAMER. Thank you, Mr. Chairman.

Mr. MURTHA. Mr. Hobson.

AFGHAN POLICE PISTOLS

Mr. HOBSON. Thank you, Mr. Chairman.

General, I have ask so many questions it will take all afternoon, but I am just going to start on two.

Pistols. The chairman and myself were in Afghanistan—maybe you anticipated from yesterday I was going to ask pistols again. We bought pistols for training the Afghan police. The guy—I won't use the language in here that the guy used with us, but there was a trainee there that comes from Pennsylvania, none of them had any good things to say about that pistol. It has a bad firing pin, just to say one thing.

Do you have any comment on the pistols?

General SPEAKES. Sir, let me first provide some background on the request that was made in Afghanistan.

Late in 2007, the Afghan security service requested over 9,900 M9 Berettas. There was a lack of Berettas in the Army, so what the office within the Army that is charged with overseeing this did was to go ahead and decide to purchase the M9s as a——

Mr. MURTHA. What was the time schedule there? What period of time are we talking about?

General SPEAKES. Sir, this is done in response to a request that happened in the late fall time period. I don't have any specifics for that. I can provide them.

Mr. MURTHA. 2007?

General SPEAKES. Yes, sir, this is late 2007.

So, due to a lack of available extra M9s in the Army inventory, the decision then was to go ahead and purchase a commercial version of the M9 pistol from Beretta. That was the process that was gone through, and that is how the Afghan security forces got a commercial variant of the M9 pistol.

Mr. HOBSON. It's not a Beretta. It is Smith & Wesson.

General SPEAKES. Sir, that is not my information——

Mr. HOBSON. I will tell you, with all due respect, sir, we were in Iraq. I saw it. He saw it. It is not a Beretta. That is bad enough, because the Berettas didn't perform either. But this is a variant. It is a Smith & Wesson purchased pistol—and we can't find out who purchased it, what office purchased it, or how many of them they purchased.

I am astonished that nobody knows. Nobody knew there. Nobody knows here. And they bought thousands, sir. What happened, we are told by the guys who use them, that it's a variant of the Beretta. Actually, it's a variant of the Glock, I think. And they got caught and yelled at by the Glock people, so they modified it some more. And when they modified it, it screwed it up.

So, very bluntly, I don't think anybody knows what we bought, and it is a waste of money, and we are trying to tell these people in weapons—first of all, I don't like the 9-millimeter to begin with, but that is another's story.

Could I ask one more question, and then I will stop. I will switch total subjects, gentleman.

CAMP MCCOY, WISCONSIN

Some months ago, maybe, or longer, I went up to Camp McCoy. I don't know if any of you know where Camp McCoy is, but it's——

General SPEAKES. Wisconsin, yes.

Mr. HOBSON. It is a Reserve unit. Some of my kids are up there. My TAG caught hell from the Army, because he took me up there to see our kids, and I saw the camp as well.

In 1960, I went to the Volk field across the way and stayed in similar buildings that you have got there today. They are all World War II barracks, which we put 111,000 plus kids through there in training.

The field training is fine, but they live in outrageous old-type conditions. They don't make it in the line because the Reserve and the Army has got so many things that they don't give them any money to fix this place up. I think it's outrageous that we send 111,000 kids for training up there, and this is a base that was used even before all this up tempo.

And they can't get any money except out of hide to do any repair up there, and they can't get any money to build or rebuild new stuff up there. It's not on the FYDP because it is below the line, and there are about six other bases like this. This is one I know about. This is one I visited.

Before long, one of those barracks is going to catch on fire, because they have a lot of heavy electrical stuff on them now they can't fix them up fast enough. The chow is right out of World War II. It shouldn't exist in this day's world. What really ticks me off—and I am an Air Force guy. I can go right next door to Volk field and it's all fixed up. And they are just training—they are doing Guard and stuff training over there.

These guys are going out in the field, and they are being treated terrible, before they go, in these barracks. I think the big Army ought to look at this thing and get something done about it.

Thank you, Mr. Chairman.

GUARD AND RESERVE FACILITIES

Mr. MURTHA. Let me add to what Mr. Hobson said.

I went to Bragg, I went to Stewart and found the same types of facilities for the Reserve and Guard. Now I hope that this money that we are putting in will take care of that.

For instance, the Guard and Reserve came in and had inadequate facilities, to say the least. Mr. Etheridge, who represents Bragg and complained for a long time about a sewage line that wasn't taken care of, I think we finally got that taken care of.

But I know the pressure that is on you folks to spend money on the troops in Iraq. But, in the meantime, we have troops that are in training that have inadequate facilities. I hope you go back and relook at what you already gave us. You gave us an estimate of what you needed, and I hope that is in that estimate, because we need to make sure that the Guard and Reserve have facilities as good as everyone else has. I know we are looking at dual equipment in the next go around for the Guard and the Active Army.

I know that right now we don't have the best equipment in the training cycles, so they go and have to relearn what they are doing when they get to Iraq.

So we can't rush over these problems. We have got to really fix them. That is what it amounts to. That is what we are here for. We have got to hear what the problems are so we can fix them. But we can't fix them if nobody tells us what the hell going on.

Mr. Hobson.

Mr. HOBSON. That is what the problem is. That is why this Committee and the ranking member are so good. These guys can't come—if I hadn't raised heck about this, they wouldn't have been back in to see me. This isn't even my State. But because I had been there and I saw it, I was able to get them in. You have got to use us when you can use us. Fortunately, they came back.

Thank you, Mr. Chairman.

Mr. MURTHA. Yes, I think it's changed since Secretary Gates came in. I see a new openness here. When I talked to the Secretary this morning, asked him how he is feeling, he said he is not feeling too well. Broken arm in three places, he not feeling too well. But, at any rate, there has been more openness there.

Mr. Dicks, I am going to go vote, if you will assume the chair.

Mr. DICKS. I will ask a few questions.

Mr. MURTHA. You have 10 minutes.

READINESS

Mr. DICKS [presiding]. Have you talked at all about readiness yet, how you measure readiness?

General THURMAN. Sir, we have not specifically been asked that. I haven't been asked that question of how we measure readiness.

Mr. DICKS. Why don't you talk about that a little bit, gentlemen?

General THURMAN. First off, with our readiness reporting system, if a unit that is not assigned a directed mission, we have four levels of readiness—or, actually, five levels of readiness in our metrics, C–1 through 5.

Mr. DICKS. But C–1 is the best, right?

General THURMAN. Yes, sir. That is measured in terms of personnel, equipment, availability, on-hand equipment, equipment readiness and training for units that get an assigned mission. And we use also a percent effectiveness rating for the mission that they have been given when they are deployed into combat, if that formation is going to be used for something other than it was organized, designed and equipped for. And so that is how we do it.

Mr. DICKS. Right now, most of the units are being trained to do counterinsurgency, and that is it, right, to the deploy into Iraq?

General THURMAN. Sir, that is correct, and that is one of the things that is a concern of mine as the Army G-3. Because we have got to get back to full-spectrum readiness, in my mind, to be able to operate across that full-spectrum of conflict.

Mr. DICKS. Why don't you describe the things that they would be doing if they were trained for full-spectrum? What equipment would they train on? What would they be doing for full spectrum versus what they are doing now so the committee will understand what is and isn't happening?

General THURMAN. Yes, sir. I would be very happy to answer that question.

Across the spectrum of conflict, as you stated, we are primarily focused on counterinsurgency operations. So we are not training on the high end for major combat operations.

What am I talking about? If you take an armor brigade combat team or one of our transformed brigade combat teams, they are task organized to fight on the high end.

What am I talking about in terms of the business to be able to deliver in direct fires? The synchronization that is required for fire support, for maneuver—fire maneuver on the high end takes more training. It takes more repetition.

So, given the deployment cycles we have right now, we do not have the sufficient time to train across that entire spectrum and do all of those tasks collectively to be able to synchronize in a combined arms fashion on the high end of the spectrum of conflict, because we have some units that we are requiring to—for example, let's take an artillery unit. They may be required to go down and perform something other than an artillery mission. That goes on. So that may be in lieu of formations to fill holes for transportation formations or military police. We have had to do that as we are trying to build enough depth back into the force. That is how we would explain that by different types of missions that we would get.

Mr. DICKS. So is there anything other than major combat operations that they might be training for, just major combat operations in counterinsurgency? I mean, if you were doing full spectrum, are there other things that you didn't mention?

General THURMAN. Sir, across the spectrum of conflict, the way we look at that and see the strategic environment right now—if you look at from today out through at least 2020, 2025, we have done those traditional training missions. We said—and I would tell you this as a former division commander. I used to think if I was trained on the high end and I could do all that, then I could do everything across that spectrum.

I don't believe that any more because now we are forced to operate in and around populations. We are forced to understand cultures. We are forced to understand an enemy that is not a state-on-state enemy. It's an enemy that uses assymetrical warfare. So now we are in—if you look at that strategic environment as a more irregular warfare, perhaps disruptive or catastrophic.

So what we have looked at in the Army is how we focus and train these formations to meet the needs of the future. So that range across the spectrum is from stable/peace, unstable/peace, uncertainty and general war.

SUBJECTIVE READINESS RATINGS

Mr. DICKS. Now, I have been concerned about this ability of the commanding officer to raise their readiness rate. Can you explain to me under what circumstances that occurs? Is there pressure applied from any source for these commanding officers to raise the readiness rates?

Mr. MURTHA [presiding]. Meaning artificially, just give them a new——

Mr. DICKS. Well, do commanders make a subjective decision that units are really better off than what their equipment and training and everything looks like. For example, we probably are a three, but they raised it to a two or a one as they deploy into Iraq.

General THURMAN. Congressman, I can answer that. What I would tell you is we measure our readiness—the readiness report is an objective assessment, and that is with the personnel on hand, the equipment on hand, and the equipment readiness in training. We will allow that commander to upgrade or downgrade one level of C rating. We have put metrics in place.

We want them to tell an honest assessment of readiness. We want to make sure that we do not mask or exaggerate readiness levels, and we look every month at every readiness report because now we can see down through all the units with our readiness reporting.

So we encourage those commanders to call it like it is and tell us what their no-kidding state of readiness is.

Mr. DICKS. Thank you. I will be back.

Mr. MURTHA. There has been no individual in the Congress of the United States who has worked harder on readiness than Bill Young. Health care is his big issue, but readiness comes second to health care. He understands how important health care is based on readiness and readiness based on health care. So I had to drag him from another hearing to make sure he got here to talk to you about readiness.

Mr. YOUNG. Mr. Chairman, thank you; and I am going to apologize to you and to our witnesses. The only reason that I was at the other subcommittee is that General Peake, whom I am sure you all remember from being Surgeon General, was our witness. I really felt compelled to be with General Peake because we have an adopted Marine son who was shot in Kuwait. General Peake was there at the time and performed the surgery that saved his life. So I really wanted to be there, Mr. Chairman. You know Josh very well.

Mr. MURTHA. Yes.

Mr. YOUNG. But on the issue of readiness, Chairman Murtha is really right that this whole subcommittee is concerned about readiness.

I want to go just a little bit beyond today. Operation Enduring Freedom and Operation Iraqi Freedom, what is the situation with our Army in the event that you had to be deployed, you had to face another situation somewhere other than Afghanistan or Iraq? Are we able to meet another obligation?

I know one time we used to talk about two major regional conflicts, that we could handle two without any difficulty. We don't hear that conversation any more today, but what is our situation with readiness as it relates to another unexpected or even expected eventuality?

General THURMAN. Congressman Young, first off, are we ready for another contingency? As you know or may not know, that we have several operational plans that the Joint Staff has for—COCOM to respond to whatever the contingency may be. A U.S. response would be joint. It is hard to discuss without getting into a classified forum for those types of crises.

I would tell you, as I stated up front, that our concern is we have really eaten into the strategic depth of the Army, and that is why we have got to continue our growth.

Mr. MURTHA. And our forward deployment of supplies?

General THURMAN. That is correct, sir.

The other piece of that that is important is our Reserve components. That helps us build back strategic depth and gives us that operational force that we need to meet these potential crises. That is one of the things that we are concerned about, and we are trying to build that back as fast as we can.

SOLDIER STRESS

Mr. YOUNG. General, we do the best we can to provide whatever the Army or the Defense Department-wide advises us that is needed to accomplish the mission and to protect our groups while they are performing that mission. We know that we have worn out a lot of equipment. We have had to step up to the plate with appropriations to reset Army. We already reset the Marine Corps.

But, yesterday, Secretary England made quite a statement where he and the Chairman of the Joint Chiefs, Admiral Mullen, were there. And Gordon said, our troops are tired. So we are not only wearing out our equipment, we are wearing out our troops. If our troops are tired, that has got to affect readiness.

I realize we are trying to grow the size of the Army so that deployments don't have to be as long. There is more dwell time between deployments. We realize that, and we understand that program. But if we run out of troops, where do we go?

I mean, these guys are tough. Chairman Murtha and I both see them at the hospitals, especially, when they have been wounded and they come into Walter Reed or Bethesda. You can be really proud of them. They are tough. Their attitudes are just unbelievable. They are a tremendous inspiration. But they are wearing out, and there is only so much we can get out of a human being. What do we do?

General THURMAN. Congressman Young, my number one concern every day that I work is how we can take the stress off the force.

What I would tell you, 15 months is too long. We know we need to get back to something that is more palatable to our soldiers and their families.

Dependent upon demand, we are doing our very best to look at how we do things smarter in terms of how we reset these formations when they return and we take time for soldiers and families to reintegrate and give them—take-a-knee-type event, if they could, for at least the first six months, and we don't have any directed training. We are working that out right now.

But that is a concern of ours. We know we have got to reduce the amount of boots on the ground and expand the amount of dwell time before they are called back. That is something that I have worked on. That is my number one priority that the Chief of Staff of the Army has given me, to work that and look across the whole formation of how we can do that better and smarter.

Mr. YOUNG. Well, sir, I hope I don't sound critical in my questioning and in my statements, because I think you all have done

an unbelievable job, and I think your troops have done an unbelievable job on the ground. We are here to support.

I think you will find this committee is prepared to provide whatever you identify to us that you need. I am certain the chairman has made that commitment over and over again, and I certainly make that commitment. So if there is something that you need from us, we will provide it. The only thing we won't provide is if we don't know about it.

Thank you very much.

Again, just please pass on to your troops that the members of this Committee understand what they go through and we appreciate the sacrifices they make and the really good job that they do.

Thank you for being here today.

General THURMAN. Yes, sir, thank you.

Mr. MURTHA. Mr. Moran.

MINE RESISTANT AMBUSH PROTECTED VEHICLES

Mr. MORAN. Thanks, Mr. Chairman.

Mr. Chairman, yesterday, when we had the Marine Corps testify, they said that the current MRAPs in the Iraq theater have substantial challenges navigating urban warfare. They are not designed for off-road expedition, they have to stick to the highways and they often get—when it rains, they get stuck in the mud.

So their conclusion was that this MRAP vehicle that we put so much money into, and an enormous amount of money to just fly them over there, would be better served for forward positions in another area in another region, rather than mission-critical operations in Iraq. Maybe send them to Afghanistan, although I don't even know if they work in Afghanistan.

I would like for you to respond, because what I have heard is fairly positive about the MRAPs, but maybe you are supposed to say that. I would like to know what we are going to do with all of these MRAPs, plus I don't know how many more we are sending—how many more, thousands?

Mr. MURTHA. They said they have 10,000 already produced.

Mr. DICKS. Will the gentleman yield?

I think I was at this hearing. I don't quite remember the tone that the gentleman is reflecting here.

I heard the Marine Corps say, thank God for the MRAPs and the lives that have been saved—they haven't lost a single life since they were there. So I don't remember—this is a much different hearing than the gentleman from Washington heard.

Mr. MORAN. Well, I don't know what the gentleman from Washington heard.

Mr. DICKS. I think the staff heard it——

Mr. MURTHA. Just a minute, Mr. Moran has the time, but 4,000 has been sent by the government, according to the staff, and 10,000 are ordered, is that accurate?

General THURMAN. That is accurate for the Army, sir.

Mr. MURTHA. Mr. Moran.

Mr. MORAN. Do I have my time back here, Mr. Chairman?

Mr. MURTHA. Yes.

Mr. DICKS. You certainly do.

Mr. MORAN. It turns out they did say that, Mr. Dicks. It's possible you weren't there at the time. They said all the things I said, not what you said.

Mr. DICKS. Well——

Mr. MURTHA. Would the gentleman from Washington let the gentleman from Virginia——

Mr. MORAN. Nevertheless, since it was my time, I am going to restate they have difficulty navigating in urban areas. They get stuck, and they have to stay on the highway because they can't go off road.

But my bottom-line question is, what are we going to do with all the thousands of MRAPs we have over there when the war in Iraq is over? What are we going to do with all of those?

General THURMAN. Congressman, those are very good questions. Your latter question, I will tell you we are looking at how many of those we think we need to put in our Army preposition stocks. We are evaluating that right now as we look to the future.

The first portion of your question, it depends on where you are at in Iraq. In some of the areas, if you are in a confined area, at least in the urban, the roads are in there, and you know there are obstructions in there with the way their prior distribution center is set up, and it is hard to navigate in and around, just like it is for other vehicles.

But I would tell you, without that—and I will just use a vignette that I experienced with what I saw the other day. We had one about 600 pounds of explosives, and it tipped the MRAP over and, unfortunately, the soldier killed appeared to be crushed, but the other three walked away from it.

It's that confidence—soldiers have to have confidence in that equipment, confidence in themselves, their leadership and know that we are going to do everything we can to adapt to that threat. But some of the road networks are pretty bad in Iraq.

SUBJECTIVE READINESS RATING UPGRADES

Mr. MORAN. I understand that, but we were told that they were going to be able to navigate all those roads.

The subjectivity of some of the evaluations of the combat brigades is of concern; and the question has been raised, of the Army's combat brigades reporting the highest level of readiness, how many of the Army's combat brigades would be able to report C-1 if the commanders were not allowed to subjectively upgrade their readiness?

We ask that because we understand that there is a fair amount of subjective upgrading. Of course, that impacts on the Army's overall readiness picture and makes it look better, but it is not necessarily consistent with the traditional means of grading a combat brigade.

Can you respond to that?

General THURMAN. Yes, sir, Congressman.

For selective upgrade or downgrade, we have metrics—first off, that is a commander's report, and I will tell you I have not seen any pressure on commanders to report better than what they are. As a matter of fact, we don't want them to do that.

With the current metrics that we have from the Department of the Army, a unit commander, let's say a brigade-level commander, he can upgrade one level or downgrade. We don't want to take that flexibility away from a commander. There may be cases in terms of training where he thinks he has done what he needs to do to meet the training requirements.

If they want to go to a higher level of readiness, then it's going to take the approval of the next higher commander to approve that. So we put metrics in place because we want our commanders to tell it, to call it like it is, because they know we are going to call on them. I feel pretty good that we are not putting that pressure on these commanders.

Mr. MORAN. Well, we have been told, General, that most of the combat brigades that have been deployed to Iraq would not be receiving a C–1 rating if it was based on the objective component measures, but that it is becoming commonplace for the brigade commander to increase to C–1, that it is not necessarily giving us an accurate reflection of the readiness.

Now, that is why we ask these questions, so you can put that on the record.

General THURMAN. Congressman, what I would tell you is, sir, I would be more than happy, in a closed forum or classified forum, to sit down and give you the status of every Army unit and show you who has upgraded and who has downgraded in their overall C ratings.

Mr. MORAN. I don't think they want the status of every Army unit, but it is a concern, and it's worthwhile to discuss it. I appreciate that.

I think we are going to need to go vote.

MRAP

Mr. DICKS [presiding]. You go right ahead. Mr. Murtha and I are going to rotate. But if you want to go and vote, that's fine.

And just to get back to the point that Mr. Moran made, and he was right. They did say they did have mobility problems in getting around corners in tight urban situations and they did have issues.

The thing that I picked up on the positive side was that they haven't lost a single Marine since they have been in the MRAPs, and the Marines loved it for that purpose, because they saved lives.

What is happening with the Army? How effective is the MRAP then for the Army?

General THURMAN. Sir, Congressman, I would tell you it has been in our initial assessment very good. We have lost at least one that I know of right now that was catastrophic, and I won't want to get into the classification of what actually happened to the vehicle, but it has been very positive as I tell you. I mean, we track that on a daily basis.

Mr. DICKS. So it was a good decision to put MRAP over in Iraq, from your perspective.

General THURMAN. As my perspective, sir, as the Army G–3. Yes, sir.

Mr. DICKS. And we have Humvees, we have Strykers, we have the right mix now between the Humvees and the MRAPs—or have

you got your requirement, your full requirement of MRAPs yet, or do you want a different mix or numbers than you have?

General THURMAN. Sir, we do not have our full requirement of the stated requirement that the theater has asked for.

Mr. DICKS. What is that? Do you know?

General THURMAN. The current acquisition number, as we discussed, I believe, earlier, was 10,000. We are evaluating—and I went back just this last Saturday and asked the theater to come back to us with an operational assessment and tell us, you know, one, what is the operational assessment so we know what the future requirements are and how is that vehicle performing and what do we need to do with it. That is an ongoing assessment right now.

Mr. DICKS. Thank you.

Mr. MURTHA [presiding]. The time of the gentleman has expired. Was it your time that expired?

Mr. DICKS. No, it wasn't. I gave him triple time.

Mr. MORAN. Mr. Chairman, it might be of interest to know that Mr. Dicks did acknowledge that the Marine Corps did say that in terms of the mobility of the vehicles.

Mr. DICKS. And they also said, thank God, they liked the vehicles.

Mr. MURTHA. The Marine Corps has talked to me about the difficulties. You just pointed out the difficulties. I have seen an M-1 tank where the turret was blown off; and I worry about head injuries, too. They may not have been killed, but we want to look into head injuries when these things are blown up.

So it's a program where you wanted it, troops wanted it, they put the money into it, and it's probably one of the biggest procurement programs in the history, $21 billion. Because the troops wanted it, we came up with the money.

Mr. Rothman.

TRAINING

Mr. ROTHMAN. Thank you, Mr. Chairman.

Generals, thank you for your services and your sacrifices throughout your career and those of your family. We do appreciate it.

A couple of questions. I know that Mr. Dicks, my colleague from Washington, asked this while I was upstairs in terms of what are our forces being trained for. Is it strictly limited to the terrain, temperature and types of combat that we are experiencing in Iraq and Afghanistan or are there other things we are training for?

In general, I heard there are other things we are training for. Because, yesterday, the Marines were here to tell us that, unfortunately, they were not being trained for anything other than the kind of combat that they are going to fight in Iraq and Afghanistan. Could you respond?

General THURMAN. Congressman Rothman, yes, sir.

Currently, we are focused entirely on counterinsurgency operations. Once again, it's the amount of supply that we have in our Army forces to meet the COCOM demands. We know we need to build that depth back to train for full-spectrum operations.

Mr. ROTHMAN. General, does your budget request this year provide for funds to expand the training to include other potential theaters?

General THURMAN. Yes, sir, it does. And our training accounts, when we get the amount of time back home, that we can, in fact, train for full spectrum. Time is one of the resources that we have. Because we have to turn our Active units around with our brigade combat team so fast that it takes about 18 months to train for full spectrum operations. We are not doing that right now.

DWELL TIME

Mr. ROTHMAN. In your understanding, is the Army—have they announced plans to provide 18 months back home?

General THURMAN. Sir, we have not announced that. Our goal for—rotational goals right now is we would like right now for every year deployed, for 12 months, we would like to get back home for two, but we can't meet that right now.

Mr. ROTHMAN. Go away for 12, be back for two?

General THURMAN. Yes, sir.

Mr. ROTHMAN. Or be back for 12?

General THURMAN. Yes, sir, right now, our goal currently is one to one.

Mr. ROTHMAN. Oh, I see. Go for 12 months, back for 24?

General THURMAN. Yes, sir, but it's only one month rotation policy for the AC down in Iraq and Afghanistan.

FULL-SPECTRUM TRAINING

Mr. ROTHMAN. Well, let me just offer my observation that there is something fundamentally wrong with a policy that would not allow us to train for other theaters. It simply shows the limits of our capability to do the extent we want to stay in Iraq or Afghanistan.

Something has got to give, but I don't think it can be facing future threats. As someone once said, that is not planning, that is wishful thinking, that there will be no threats for which we need to be trained. But that is my observation.

Unless—so you need to hear from higher ups. You are just waiting for the time to train, but you say there is money in the budget to train if you are given the time. Is that correct?

General THURMAN. Congressman Rothman, if I could just be clear, we don't have any policy that says we won't train for full spectrum. The fact of the matter is, given the current global demand, we cannot—we do not have the time available to train for full spectrum operations. That is the current state, given where we are with demand.

FUTURE COMBAT SYSTEMS

Mr. ROTHMAN. If I may go on to another subject just briefly, last year, the Army testified that the future combat systems program is critical to the future capacities of the U.S. Army. Just last week, however, the Secretary of Defense said that he had concerns about the program in view of the pressures on the defense budget, in terms of balancing the budget pressure and the modernization

goals which are to be addressed by the future combat systems. Can you address the issue of whether you are still pushing for the Future Combat Systems and how you would accommodate this pressure on the budget and these modernization goals?

General SPEAKES. Sir, I would be glad to discuss that.

The first point is the Secretary of Defense was asked a hypothetical question. He was asked to project, based upon a budget downturn, what the pressures would be on the Department of Defense. The Army recognizes that in the event of a budget downturn that everything we do has to be reevaluated.

The points that I would like to make overall is—the Future Combat System is the centerpiece of our Army modernization. It is the way that we take a force that is being trained and shaped to fight today and move it to the future. As you have already addressed, we don't want to be focused solely on counterinsurgency operations. We want to be full spectrum, as General Thurman has outlined earlier.

To do that then, in our base budget, we have a plan for Future Combat Systems. It is a part of our overall investment strategy. FCS is never more than one-third of that funding strategy. So the point is, it's affordable, it's deliberately designed to be the critical element that moves us forward, gets us to the next decade with critical capabilities and continuously cascades new capability to the force.

The other thing that we think is very important is it is designed for how we are seeing the battlefield evolve. It is not last decade's plan for last decade; it is this decade's plan for the next decade. So we are working very, very hard. We are very optimistic.

If we were to take you to Fort Bliss this summer, you will see the lead elements of FCS right now being used by soldiers who are evaluating it to see if it has the promise to be brought to the Army right away.

Through spinouts every two years you will see elements of FCS hit the force. We are really excited about that. Many of the early elements of FCS are already in combat today.

For example, as you take a look at the frag kit five that is on Humvees, that frag kit has elements of the armor solution that will be a part of the main ground vehicle. If you take a look at the UAVs that are flying overhead, if you take a look at the robotics we are using against IEDs, all those are elements we are trying to help shape and prepare for the future.

So FCS is affordable, it's absolutely necessary, and the Army leadership is absolutely committed to it.

Mr. ROTHMAN. Thank you.

Mr. MURTHA. Let me say something about FCS now. You know, I have given a challenge to yourself and General Casey. We are quite willing if we can see you folks willing to take a short-term chance in order to put some money in it.

He and I talked just yesterday. We sat down and talked about how much of a chance he could afford to take in order to come up with FCS.

TRAINING READINESS

What worries me, FCS is one thing. Of course, the money worries me too. But when you say 18 months—and I have known this for a long time—to train people in conventional type war or what we consider conventional type warfare, and we are training them all in the type of warfare that we always do. We're going to make an invasion or whatever. It is that we train them for that particular task.

We got a hell of a problem here. When it takes 18 months and they are only home 8 months and something happens someplace else, everybody in this room can see we have a problem in the future with the number of people we have available to us.

What I worry about, what is going to come down first thing? What is going to come down? Personnel is coming down, because that is 100 percent, and the other stuff is 10 percent outlay.

So I hope that you will come up with something—I hope you will come up with the money that adds to that money. And we are not going to get this done if we don't come up in the next 2 or 3 years with a big pot of the money.

What I saw, they weren't ready to go with a lot of stuff, but we ought to get what we are ready to go with.

Mr. Hobson.

RECRUITING AND RETENTION

Mr. HOBSON. I want to talk about one of the things that you have been able to do is attract people. Although when we have talked in the past, you have dropped your standards. Good you get into that.

Mr. MURTHA. I did. I talked about the possibility, talked about tattoos, I talked about waivers and so forth. I didn't talk about enlistment bonuses, which breaks my heart we have to pay captains and majors to stay in.

Mr. HOBSON. Do you have any plan? Well, let me go back——

Mr. MURTHA. We didn't have to when he went in.

General THURMAN. The 1994 Bush administration——

Mr. HOBSON. The 1994 Bush administration, but he knew a little more on retaining.

This committee has had an attitude that we will fund if you will ask for people. We had a huge spike trying to get the Army figure, and we asked the committee to do that. I don't know the numbers or how you are growing them, but I am concerned that the programs for not only retention but for getting this recruitment, which I am amazed that you are able to do, but do you have any programs to get away from having to get to pay huge bonuses and lessening the standards for the Army as we move forward and we can attract people? Because I am concerned with the war coming down we have to get people.

Mr. HOBSON. The heart of the Army, the heart of any group is its people and retention of those people.

What kind of new plans are you all coming up with to make this work? Because our objectives—the Chairman gives out the number about the number of people from West Point, officers who are leaving. I can tell you that my recruitment—and I have a very strong

military, with the Air Force, Wright Patterson in my district—but my applications for the first time in the academy have gone down, just the number of people coming in to apply for it.

So we need to reinvigorate this program. Some people are calling for the draft. I don't want to go back to the draft. But do you have any programs to change this?

General ROCHELLE. Congressman Hobson, let me address your question as the Army G–1, with a little bit of experience in the business of recruiting.

I will tell you, first of all, that indeed it is challenging at any time to recruit for an all-volunteer Army. I have had two tours, if you will, in the front lines of recruiting, and I can speak firsthand of how challenging it is. But, first of all, I would have to say that we are blessed as a Nation that this young generation of millennials, as they are commonly referred to, in my estimation, really are the next great generation. They are stepping up to the plate.

The Chairman spoke a little bit earlier in his opening remarks about high school graduation and expressed a little bit of trepidation. We are concerned about that. But there is a trend that I would like to refer to that is much, much larger than the Army, and the trend goes a little bit like this: Fifty percent of all the minority youth who enter high school today will not graduate. Seventy percent of every young American who enters high school today who is at or below the poverty level will not graduate from high school. And across the Nation, 30 percent, irrespective of race or ethnicity, irrespective of socioeconomic status, will not graduate from high school.

In spite of that, the Army is still—no, we are not hitting our 90 percent high school degree grad that is the DOD standard. But in spite of that, we are hovering at 80 percent and will not go below 80 percent high school degree graduates in 2008, fiscal year 2008.

The key metric, if you may—all are important, but the key metric is the one—those who score in the upper 50th percentile of the Armed Services Vocational Aptitude Battery. Because that, more than anything, reflects trainability. The high school degree, which was adopted in the 1970s and 1980s, really speaks to stick-to-ittiveness.

To your question, it is going to require innovation for us to remain viable and continue to grow the Army. We are on a very, very positive track right now for growing the Army ahead of schedule, the schedule approved by the President. But it is going to take innovation. We are employing innovation, and I will name just two.

We recently launched a partnership with the Army National Guard called Active First. The National Guard, sir, as you have stated and several have alluded to, is ubiquitous across our Nation. There are places where it simply would not be profitable to have a recruiting station and several recruiters. So the partnership calls for a young person to be recruited by the National Guard, trained and then employed, upon completion of training, for a period in the active force.

Mr. HOBSON. Let me follow up for just a second, and then I have to go vote. The Guard does another thing that is good. In my State, we will pay 100 percent for a kid to go to college at a state institu-

tion in the State that is public or the similar amount to a private school within the State. That has got us a lot of quality young people.

The second thing, I don't know whether you are doing—are you doing a GED program for these young people, where you can get them a high school equivalency while they are there. I think you can help society as a whole with these numbers if you will get them GEDs. And if the Army cares about them and you give them structure in their life, these kids can then achieve in the future, not only in the Army but elsewhere.

General ROCHELLE. Sir, you are reading my mind, because that was my second point, my second point of innovation. At Fort Jackson, South Carolina, later this year, we will employ and launch a program that was designed and will be spread across larger if it proves very profitable—and we think it will—which is designed to do precisely that.

Mr. DICKS [presiding]. The gentleman's time has expired.

Mr. Bishop.

MODULAR BRIGADE STRUCTURE

Mr. BISHOP. Thank you very much.

And welcome, gentlemen. And I, too, had conflicting subcommittee responsibilities.

But following up on Mr. Hobson's point, let me just say for the record I appreciate, General Rochelle, your willingness and the willingness of the Army to meet with the Congressional Black Caucus in addressing some of the concerns that were just touched upon in your answer to Mr. Hobson's question.

I am concerned about some issues regarding modularity. The Army is in the process of converting to a modular brigade structure while at the same time fighting a war with half of the active component brigades deployed in combat theaters. In fiscal year 2006, there were 51 brigade combat teams, and of course, by the end of 2008, we are expecting to have 69.

Can you discuss the utility of adding an infantry battalion to each of the modular brigades, presumably to increase combat power, without requiring increases in command and logistical functions? Do you think that makes sense? And is the Army exploring such an idea?

And tell me what the impact of modularity is going to be on the equipment requirements. If additional equipment is required, is it funded? Is it fully funded, I might ask?

And what would you think—and this is probably the more complicated of the questions—what is the desired number of brigades in the force-generation pool that will allow us to achieve 1-year dwell time and 1-year combat tour? And added to that, what would be the number of brigade combat teams necessary to sustain a rotation of 2 years at home for every year that it is deployed?

Mr. DICKS. Why don't we let him answer that? I think that is a lot of questions. Then you can follow up.

Mr. BISHOP. Okay.

General THURMAN. Congressman Bishop, your first question, the training and doctrine command is looking at the modular concept in terms of do we have the structure right. And, as you know, that

would add more spaces to that formation, because with the force structure allowance that we have, that we have been authorized to grow in the AC, is 547.2. Having fought these formations, we always probably want more, but it gets into what is affordable out there and looks at the overall capability we have to have.

In respect to modularity, I think, as it stands right now, we have 38 that we have converted on the AC side plus enablers and two nonmodular brigades, for a total of 40.

We are growing the Army as fast as we can. And what we are trying to do by fiscal year 2011 is have a total on hand of 76. And I can go into detail on the actual force mix. And that is 48 on the active, 28 on the reserve components.

Your specific question on what does it take in the Army force generation to have available, as I understand it, at a 1-to-1 ratio I believe you asked. That would be 24 brigade combat teams, programmed right now, as we get to 76, and five Army National Guard combat teams, for a total of 29. Additionally, that would give us a rotational capacity in that program—that is what is in the program—of about 236.8K of rotational capacity with enablers. And that would be what we would be trying to do to put on that force-generation model of what is available, what is ready, and what is in the reset trained.

Now, right now, given our demand, the reset trained and ready is compressed, so we can't get to that. That is why it is so important for us to get as fast as we can to the program growth, so that we can get that capability. I will tell you that the capabilities in those formations is very good. And you have the combat power in there, at least in this environment, that you can rapidly task organize, given that mission, and apply combat power to decisive point with that. So I would tell you, I think it is going to take that stress off as fast as we can grow it.

Now, I will defer to General Speakes to answer the equipment challenges that we have with modularity.

Mr. BISHOP. What about the 2-to-1?

General THURMAN. Oh, I am sorry. To get to a 1-to-2, given a 76 brigade combat team growth for the AC, that would be 16 brigade combat teams. That is what would be on that 1-to-2-cycle, with approximately 106,000 or 107,000 of enabling forces at rotational capacity. And then for a 1-in-4 with our reserve components, because they are part of this equation, we would ask them to provide four brigade combat teams. That is at the programmed growth of 76 brigade combat teams. And we are trying, by the end of fiscal year 2011, to have that completed and have grown that capability.

Mr. MURTHA [presiding]. The time of the gentleman has expired.

Does Mr. Frelinghuysen have any questions?

FUTURE COMBAT SYSTEMS

Mr. FRELINGHUYSEN. Yes, I do, certainly before Mr. Dicks comes back, because he is going to reclaim that time. Before he comes back, let me thank you, General Speakes, for the emphasis added in response to Congressman Rothman. I mean, it would be catastrophic if we did not continue, even as expensive as they may be, our investments in the Future Combat Systems. We might as well

put up a white flag. I mean, we would not be able to proceed with modernization unless we make those investments.

Would you make the connection between modularity, the brigades we are sending out in the field now that are modular, which are all about flexibility, and the flexibility that will come—are there going to be Future Combat Systems modular brigades? Could you talk a little bit about that?

General SPEAKES. Sir, I can.

Mr. FRELINGHUYSEN. I know we are spinning the technology out. To some extent, the technology is futuristic being put to use.

General SPEAKES. Right. Sir, what we have been able to do is the program that General Thurman just laid out takes and puts the modular formations across our Army. And it is magnificent because, as General Thurman said from his personal experience as a combat commander, you have the flexibility, the agility and the sustainability to be about, to be successful in today's battlefield.

What my challenge is right now, I am behind, because, you see, what I am doing right now is taking equipment that was designed in the 1970s and 1980s, in large measure, and we are adapting it and trying to modernize it to try to fulfill this modular vision, but we know it is not really what we want. What we really want is equipment that is common, that has incredible force protection capabilities, that has much more agility and much more sustainability.

We are seeing the initial elements of that in these Stryker Brigade Combat Teams, which have a common platform and the ability to almost have a network capability for command and control. It gives us a vision of where we are headed. The next step in this will be Future Combat Systems, because——

Mr. FRELINGHUYSEN. You are marrying future combat system technology now to the modular units that you are setting up? That is sort of what I wanted——

General SPEAKES. Exactly. And then what you will see is all this common equipment in the brigades that already have been successful in combat. So instead of using 1970s and 1980s technology, stuff that was designed for the Cold War, we will have common platforms, much more survivability, much more lethality, much more force protection capability. So those are the things that we are seeing in Future Combat System that we are so excited about.

Mr. MURTHA. We still have $160 billion to $200 billion which we have to find. So you are going to have to do some hustling.

Mr. Dicks, before we adjourn.

RESET

Mr. DICKS. Okay. Let me ask you, on this very question, how are you going to decide what you are going to fix of all of this equipment that we are bringing back, the so-called reset, and how much are you going to just wait to get the new stuff?

I mean, I hope we don't go replace all the equipment and then buy new equipment. I am sure that is what Mr. Murtha is worried about here, accelerating the Future Combat Systems. This is the time to fill the holes with the new equipment if it is there.

General SPEAKES. Exactly. So in the near term, what we have is, to fulfill what General Thurman needs, every formation coming

back has to be made ready to go again. That is what we are doing with reset, thanks to your generous support. So what we are doing now is returning formations within a year with equipment that is ready to go. And that has been a tribute to the resourcing you have given us for reset.

Mr. MURTHA. What we are saying is, in the future, if you want the Future Combat Systems you are going to have to take a chance on not resetting and rehabilitating as much as you want to in order to get the other, or we are not going to be able to find the money, because it is such a big bill.

MRAP

Mr. DICKS. One final thing. On the MRAP again—and I want to say this for the record. There is no MRAP being built in Washington State, but I just want to give a fair hearing here.

We have done trainers for the uparmored Humvees. They are kind of in a container, and these guys go in and train on this thing. I am told, General Thurman, there is only one trainer for the MRAP. Do you think it would be a wise investment to do some more of these trainers, since we are going to be using this thing?

Mr. MURTHA. Particularly in Washington State.

Mr. DICKS. No, it has nothing to do with Washington State.

General THURMAN. Congressman Dicks, sir, what I would tell you is that requirement has not been fully brought into me, as the G–3. Now, you asked me, do I think we need to have trainers for these vehicles? I think we have to evaluate that and look at that.

Any time that we can substitute a training system out there—and that is a trade-off with money now and funding—absolutely. You know, we have done that with a lot of our equipment. But right now, I have not got the full requirement on that.

Mr. MURTHA. I appreciate that answer, and we have to go vote again. So we will adjourn the Committee until the week after next.

[CLERK'S NOTE.—Questions submitted by Mr. Cramer and the answers thereto follow:]

MISSILES

Question. The Army has historically spent RDT&E money on the development of missile systems; however recent plans suggest the Administration feels comfortable with the current inventory of tactical missiles. Tactical missile development is declining in such a manner that in a few years the Department of Defense will only be developing 1 tactical missile program, Joint Air to Ground Missile (JAGM)? Does General Thurman believe the readiness of our current inventory of missiles is sufficient to address an emerging threat such as North Korea, China or Russia? Does the General feel comfortable the United States Army can continue to sustain a healthy industrial base for future tactical missile research and development as threats emerge and the requirements for Army readiness change?

Answer.

(1) Is current missile inventory sufficient to address emerging threats such as North Korea, China, or Russia?

In accordance with guidance from the Office of the Secretary of Defense (OSD), Army requirements are based upon approved scenarios and Defense Intelligence Agency Threat Reports. We have not received scenarios or threat reports for all of the areas listed. The Army conducted extensive modeling and analysis to determine munition requirements for OSD approved scenarios. Based on a comparison of these munition requirements and Army inventory, some missile systems fully meet FY15 requirements while other missile systems require additional procurement to do so. However, missiles have a limited shelf life, and Army inventories of critical missiles begin to decline without additional procurement in the FY15 President's Budget re-

quest. Army inventory projections also are predicated upon receipt of FY08 and FY09 supplemental funds.

(2) Does the G–3 feel comfortable the U.S. can continue to sustain a healthy base for future tactical missiles?

The Army recognizes the health of the Missiles Industrial Base is an issue. At present, we have an unsurpassed capability in Close Combat, Aviation, Fire Support and Air Defense. The result is limited upgrade or develop of new missile systems. In response, the Army has initiated a missile capability gap analysis to highlight emerging capability gaps, help focus the President's Budget requests in FY12–17 to ensure capability gaps do not develop, and to ensure that the U.S. retains the industrial base capacity to counter emerging threats.

Question. I have heard rumors that the Army G–3 has requested an Army Missile Capability Gap Assessment and is expecting this assessment to address the POM 2012–2017. Is this Assessment going forward as requested and can this Subcommittee expected to be undated once this assessment is finalized?

Answer. On 21 Dec 07, the Army G–3 signed a memo directing the Army's Training and Doctrine Command to conduct an Army Missile Capability Gap Assessment that looks at future Army missile capability needs in the context of a Joint force. Discussions are underway to ensure assessment scope, use of current analysis results and completion date will identify and provide recommendation/direction for any potential missile capability gaps. We expect to provide the results by the FY12 President's Budget submission. No Congressional update is currently scheduled.

[CLERK'S NOTE.—End of questions submitted by Mr. Cramer. Questions submitted by Mr. Murtha and the answers thereto follow.]

MODULARITY

Question. The Army is in the process of converting to the modular brigade structure, while fighting a war, with approximately half of the active component brigades deployed to the combat theaters. In fiscal year 2006, the Army had 51 brigade combat teams. By the end of fiscal year 2008 the Army plans to have 69 brigade combat teams.

Please discuss the utility of adding an infantry battalion to each of the modular brigades. The idea is to increase combat power without requiring a significant increase in command and logistical functions. Does this make sense and is the Army exploring such an idea?

Answer. The Army continually assesses the utility of the modular force designs and applies changes based on lessons learned and operational experience. The Army must balance the strategic risk of preserving the All-Volunteer Force in persistent conflict, the operational risk of providing sufficient capacity to support joint force rotational requirements, and the tactical risk of maintaining sufficient capability within the Brigade Combat Team (BCT) to conduct successful full spectrum operations. The current BCT design includes one Recon & Surveillance Squadron with three troops and two Maneuver (Combined Arms Battalions) with 4 companies each. This design has one more maneuver company than a legacy brigade. Adding a third combined arms battalion would make the BCT "more capable" than previous designs, but would increase the size of a Heavy BCT by 812 personnel and an Infantry BCT by 848 personnel which would add an additional 56.1K Soldiers at a cost of over $4.8B per year across the force. In addition, the increase of 68 Maneuver Battalions would generate an equipping bill of $2.5B.

Question. What is the impact of modularity on equipment requirements? If additional equipment is needed, is that equipment fully funded?

Answer. The transformation of our force has driven up the requirements for equipping. The current plan from 2005 to 2013 provides $174.9B in procurement ($41.0B for the Reserve Component ($29.4B to ARNG and about $11.6B for Army Reserve) and $133.9B for the Active Component) from the base budget to meet these increased requirements; however, because of pre-modularity shortfalls, the Army depends on supplemental appropriations to close the gap between new requirements and existing equipment and modernization shortfalls. Our greatest concern would be a loss of supplemental funding support for this plan, resulting in an inability to fully meet the Army's equipment requirements across all components and the unhinging of the Army's Equipping Strategy.

The Army had significant equipping challenges prior to 9/11. Particularly noteworthy were the equipment shortages and lack of modernization in the Reserve Components. Because of the need to integrate the Reserve Components to meet the demand of persistent conflict, the Army has adopted a new total force operating

strategy that resources units based on their deployment window, regardless of component. The previous incremental "tiered" resourcing strategy resulted in late deploying Active and most Reserve Component units being equipped last and with the least modernized equipment. Additional funding gained through supplemental spending will fill shortages and modernize outdated equipment in the force and fund payback plans for diverted Reserve Component equipment. The Equipping Strategy is linked to the Army Campaign Plan which reflects the time-phased transformation of the Army into the modular force.

Question. Has the Army been able to meet the schedule for forming modular brigade combat teams? What have been the key challenges in terms of personnel and equipment?

Answer. The Army is on track to complete personnel growth by 2010 and Modular BCT growth by the end of FY 2011. The most significant challenges to meeting this timeline are:

(1) Manning: Ensuring manning programs provide for the recruitment, development, distribution, sustainment, retention and associated systems critical to building and maintaining the all volunteer force. Logistics, Military Intelligence, and Aviation Captains and Majors are among the major manning challenges.

(2) Equipping: How to best balance funding to minimize risk to the current force and maintaining the momentum in Modernization to ensure the viability of the Future Force. Battle Command Systems, trucks, and night vision devices are three of the major equipping challenges for Brigade Combat Teams.

GROW-THE-ARMY-BRIGADES

Question. Currently, and over the next several years, the Army is adding end-strength and equipment in order to form six new infantry brigades.

When will the Grow-the-Army brigades be available for combat deployment?

Answer. As a matter of course, the GTA BCTs will be available for deployment one year after they activate. The Army will activate one additional BCT in each year from 2008–2010 and three BCTs in 2011. By the end of FY 2011 all GTA BCTs will be available for deployment.

Question. What is the status of manning, equipping and training the Grow-the-Army Brigades?

Answer. The Army is on track to complete personnel growth by 2010, BCT growth by 2011 and equipment growth for the BCTs by 2015. To monitor our progress in meeting these goals, the Army conducts a monthly Force Validation Committee process to synchronize resourcing functions for select units that will deploy or convert within a given window. This process brings together the Army Staff and supported commands to identify and resolve manning, equipping and training issues. Using current readiness data as a baseline, the Force Validation Committee projects the status for each unit as it builds to its scheduled deployment or conversion date. Units that are not projected to meet stated readiness goals on their deployment or conversion date are intensively managed at each level to adjust resources and mitigate shortfalls.

Question. Is the necessary equipment for the Grow-the-Army Brigades fully funded?

Answer. The Army's current program from 2008–2013 provides a total of $68.6B to include $17.0B in procurement to support the Grow the Army plan's original 2012 BCT timeline. The Chief of Staff has approved an accelerated Grow the Army Plan timeline that will have all BCTs in the force by 2011, and will require an additional $2.6B in funding for personnel and training.

Question. Will all the new brigades be light infantry brigades?

Answer. The GTA initiative was based on increasing rotational depth and filling global operational demands as quickly as possible. The growth of six AC Infantry BCTs was the optimal way to accomplish the rapid growth with a structure suitable to meeting current operational demands in an era of persistent conflict. This decision is subject to review based on the results of Total Army Analysis and the Quadrennial Defense Review. This process will analyze existing requirements, current operational demand, and projected future demand to ensure we have the appropriate mix of Heavy, Infantry, and Stryker BCTs within the force and across the Active Component and Army National Guard.

RESET FUNDING

Question. General, Congress provided $17.1 billion for Army's reset needs in the fiscal year 2007.

Please update the Committee on the execution of the $17.1 billion provided for Reset in fiscal year 2007?

Answer. In FY07, the Army executed $16.4 billion of the $17.1 billion provided for Reset. The Army was unable to spend the remainder of the funds toward Reset due to operational changes in the Theater that resulted in less equipment returning to the States than planned. The Army reprogrammed these dollars toward the Mine Resistant Ambush Protected vehicle, a high priority force protection item. In total, the FY07 funds Reset of 25 brigade combat teams: 20 completed during in FY07 and 5 are completing in FY08.

Question. What are the key production challenges facing Army Reset in terms of industry and depot capacity? Are you facing any major capacity problems?

Answer. Our primary challenge is the receipt of timely, adequate funding. The Army requires the remaining $7.6 billion in FY08 GWOT procurement no later than Memorial Day to remain on schedule for FY08. Timely receipt of these dollars leads to maintaining the necessary workforce, procuring of additional spare parts and contracting with our industrial partners which leads to the necessary production. Since FY03 the depots have doubled their direct labor hours from 12.5 million to 27.1 million (projected) in FY08, tracked vehicle Reset increased 200 percent, radar and Stryker Reset increased 100 percent, and all other systems' Reset increased 50 percent. Additionally, new procurement increases equipment on hand ratings, allowing units to start training earlier and improve the Army's strategic depth.

Our depots currently are not operating at full capacity. We currently are at 27.1 million labor hours and have the capacity to go to 40 million labor hours. We are operating at the necessary capacity to meet current requirements with available funding. Each depot's production capacity utilization is being optimized in accordance with the commodity the depot repairs and the Army's rotation schedules. In FY07, 109,249 items were scheduled to be Reset. By the end of FY07, the actual Reset completions totaled 123,425 items—30 percent over schedule. In FY08 we plan to complete 130,000 items. As Army requirements change, depot production will increase as necessary to meet them. Our only requirement is for predictable, early funding, which is essential to allow for the timely procurement of repair parts, adequate production planning, and the hiring and training of necessary personnel.

PRE-POSITIONED EQUIPMENT SETS

Question. The Army drew upon pre-positioned equipment sets to sustain initial combat operations in Iraq. Some equipment was repaired and replaced in pre-positioned sets only to be dawn out again for the surge.

What is the readiness posture of Army pre-positioned sets today?

Answer. The readiness posture of the Army Prepositioned Stocks (APS) available equipment sets for APS–4 are at 88%–95% of fill. The APS reconstitution plan will ensure all the other APS equipment sets will have a readiness posture of 95–100% of fill.

(1) APS–4 in Korea and Japan is available; it is comprised of an HBCT (95%) and a tailored Sustainment Bde (88%). APS–4 will be completed by 4th Qtr FY 08.

(2) APS–3 Afloat has a Port Opening Package capability in Guam AOR at 90% of fill. This set consists of a temporary afloat set of 20 units (twelve port opening and eight medical units/teams) loaded aboard the USNS Pomeroy. The full Sustainment Bde Set will be completed in FY 11.

(3) APS–5 is issued and is planned for reconstitution when no longer required for ongoing operations in accordance with APS Strategy 2015.

Question. Is additional funding needed to repair and reset pre-positioned equipment sets as the surge brigades depart from Iraq?

Answer. APS funding has been incorporated in the Supplemental request and identified as part of the Reset funding and in Program Objective Memorandum (POM) FY 10–15 process. The total cost of APS reset is $8.9 B in both Operations Procurement (OPA) & Operations Maintenance and Army (OMA) funds through 2015. Army will reconstitute APS by 2015 with the continued support of Congress to fully resource the budget requests for Army equipment (Supplementals and POM 10–15).

Question. What is the time line to have all the pre-positioned sets returned to their desired readiness?

Answer. The APS stocks were used to support Operation Iraqi Freedom (OIF)/Operation Enduring Freedom (OEF) and to accelerate the build of the Brigade Combat Teams (BCTs). The Army has developed an APS reconstitution timeline to support the approved Army Prepositioned Stocks (APS) Strategy 2015, the FY 10–15 Program Objective Memorandum (POM) (based on equipment availability) and Army resource prioritization.

- Current Year:
  - APS–5: Infantry Brigade Combat Team

- Near Term:
  - APS–5: Heavy Brigade Combat Team #1
  - APS–3: Infantry Brigade Combat Team #1, Sustainment Brigade #1
  - APS–2: Heavy Brigade Combat Team
  - APS–5: Infantry Battalion
- Mid Term to 2014:
  - APS–3: Infantry Brigade Combat Team #2, Sustainment Brigade #2
  - APS–5: Fires Brigade, Sustainment Brigades #1 and #2

Question. Does the Army intend to add MRAP vehicles to pre-positioned equipment sets?

Answer. Mine Resistant Ambush Protected Vehicles (MRAP), will be incorporated into APS–5 and APS–3 when no longer required for operational use (variant type TBD). MRAP availability will be based on the results of Training and Doctrine Command's (TRADOC) Tactical Wheeled Vechicle Strategy.

Question. Given the deployment capability of U.S. Forces and the uncertain nature of conventional and unconventional threats, are pre-positioned sets a wise investment? Would it be a wiser course of action to take the equipment from the pre-positioned sets and use it to outfit modular brigades and the new Grow-the-Army brigades?

Answer. Army Prepositioned Stocks (APS) is a strategic asset that has proven its value in every recent major contingency. APS provides the strategic responsiveness to deploy globally to any contingency operation. The last four years of the GWOT in Iraqi, have demonstrated that the APS program is flexible, responsive, and critical to the Army's ability to deploy forces in support of the Combantant Commander requirements and adapt to changing strategic requirements. APS was used to support Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). Diverting the APS equipment to support the building of modular BCTs and Grow The Army effort limits the ability to rapidly reinforce forward units by air movement. Current operational plans and future planning scenarios to include requirements that use APS sets. The Army complies with the National Defense Authorization Act (NDAA) 2007 to identify any APS sets utilized and the plans to reconstitute those APS sets annually.

MINE RESISTANT AMBUSH PROTECTED VEHICLES (MRAP)

Question. As the threat from Improvised Explosive Devices and Explosively Formed Penetrators grew, the limit of how much armor could be applied to the HMMWV was reached. The DoD identified the MRAP-type trucks to provide greater force protection. The Army seemed skeptical at first about acquiring MRAPs in large numbers.

General, what is the current Army acquisition objective for MRAPs?

Answer. The current AAO for MRAPs is 10,000 systems (based on the September 2007 interim requirement). A new interim requirement for MRAPs of 12,000 systems is currently in staffing. The final requirement is dependent on many factors, including future actions taken by the enemy.

Question. How many MRAPs does the Army have currently fielded in Iraq; and how many in Afghanistan?

Answer. As of 4 March, the Army has fielded 1,333 MRAPs in Iraq and 8 in Afghanistan.

Question. When do you expect to reach your acquisition goal?

Answer. The current plan is to procure the 10,000 systems by October 2008 and field them by December 2008. If a new interim requirement of 12,000 is adopted, it is anticipated that these systems could be produced by February 2009 and fielded by April 2009.

Question. How have the MRAPs been received by soldiers, and how have the MRAPs performed in terms of mobility and utility; and how have they performed when they have been attacked by various threat weapons?

Answer. In his initial assessment, LTG Odierno reported the fielding of MRAP vehicles has had a positive impact upon crew survivability in Theater. Although in some operating environments, it came at the expense of maneuverability and mobility. Nevertheless, these limitations were expected and most units are "eagerly awaiting additional vehicles."

Due to the low densities fielded, there has been no opportunity to do side by side "best of breed" analysis. It is premature to tell which variant of MRAP is superior or to provide definitive feedback on performance, final numbers and/or category mixes.

Question. What is the proper mix of HMMWVs and MRAPS?

Answer. A two-thirds MRAP to one-third Up-Armored HMMWV fill per Brigade appears about right as a fielding plan. However, it is premature to tell which variant of MRAP is superior or to provide definitive feedback on performance, final numbers and/or category mixes.

Question. Is the Army MRAP requirement fully funded?

Answer. The Army has been funded for 10,000 systems. The Joint Program Office reports sufficient funding to procure 12,000 systems for the Army.

Question. What are your plans for the MRAP vehicles once the war in Iraq is over?

Answer. Training and Doctrine Command is conducting tactical wheeled vehicle analyses that include: 1) mission roles and profiles; and 2) threats and capabilities of the various fleets including the MRAP, Joint Light Tactical Vehicle and HMMWV. The initial results of those analyses will influence POM decisions; the Force Mix Brief to Congress; and the Combat and Tactical Wheeled Vehicle Strategy due to the Deputy Secretary of Defense in JUL 08. The Army's Tactical Wheeled Vehicle strategy is an ongoing effort to ensure our Soldiers receive the best capabilities available in ground wheeled vehicles to meet current and emerging threats.

CONTRACTORS AND READINESS

Question. The Department of Defense has made a major effort to outsource support functions in order to allow soldiers to remain focused on core military skills and duties. The proliferation of contractors performing support functions ranges from the dining facility to aircraft maintenance. Contractors are working side-by-side with military forces at home station and in the combat theaters.

What is the commander's role in defining contractor duties; in supervising contractors; and in disciplining contractors?

Answer. Primary oversight of contractor performance and conduct falls to the cognizant contracting officer, and is generally dictated by the terms of the Government contract.

Contractor employees are required to comply with all guidance, instructions, and general orders issued by the Theater Commander, as incorporated by the Government's contract, including those relating to force protection, security, health, safety, or relations and interaction with local nationals.

Commanders may refer contractor criminal misconduct to DoD/Department of Justice under MEJA, and if jurisdiction is declined, may then consider the exercise of jurisdiction under Article 2, UCMJ in coordination with DoD.

Question. Training scenarios at the National Training Center and at other locations include role players who represent the Iraqi population. Do Army training scenarios include role players for contractors, such as contractor security personnel?

Answer. Army maneuver Combat Training Centers primarily use personnel assigned to their Opposing Force cadre to replicate the various contractors in theater, including private security contractors. In many instances the centers use Arabic-speaking personnel to role-play contractors working on U.S. Field Operating Bases, since U.S. forces in theater are in day-to-day contact with Arabic contractors. Army maneuver Combat Training Centers are working to integrate into training scenarios actual personnel from contracted companies.

Every Army maneuver Combat Training Center also challenges deploying forces to work through Rules of Engagement and Escalation of Force scenarios that involve private security contractors in Situational Training Exercises or scripted situations during their Mission Rehearsal Exercise. Training of unit contracting officials at Combat Training Centers occurs, but is limited due to constrained resources (time, expertise and dollars) that are focused on other mission-essential training tasks and capabilities.

At maneuver Combat Training Centers, unit officials are trained on the basics of the contracting process from start to finish, and specifically on how to manage Commander Emergency Relief Program (CERP) contracts to completion in coordination with role players for "local contractors," Provincial Reconstruction Team members, and representatives of the U.S. Agency for International Development. With the Battle Command Training Program, division and corps staff officers discuss best contracting practices with actual subject matter experts from theatre. Additionally, a Joint Personnel Recovery Activity workshop is given, which discusses the accounting and recovery of contractors on the battlefield.

RECRUITING AND RETENTION

Question. A key principle of the U.S. Armed Forces is to attract and retain competent personnel to assure readiness and operational effectiveness. While the services have generally met their aggregate recruiting and retention goals, the GAO re-

ports that the Army has experienced shortages in mission-critical occupational specialties such as health care, human intelligence collection, and explosive ordnance disposal. There is growing concern within the department as to how the Army can meet current operational demands with what appear to be chronic shortages in these occupational specialties. In addition, there is growing concern that recruitment standards have been relaxed to meet numbers.

Gentleman, the Committee is very concerned regarding the recruitment and retention for mission-critical occupational specialties. For example there continues to be a shortage of nurses in the military and many billets remain vacant. Given the wartime environment that we are in, this Committee is extremely interested in what resources are currently available to recruiters to remedy this problem?

Answer. Specialties such as Special Forces, Explosives Ordnance Disposal, Air Defense and Transport Operators are examples of mission critical occupational specialties that are targeted through a combination of our highest enlistment bonuses and educational incentives. Currently, 27 critical skills are at the highest statutory incentives levels, receiving enlistment bonuses of up to $40,000 and the Army College Fund of up to $74,000 or loan repayment up to $65,000.

The NDAA06 raised maximum recruiting bonus limits for all Army components ($40,000 for the Active Components and $20,000 for the Reserve Components) and we recently initiated a High School Diploma Grad targeted program, Army Advantage Fund, which will enable many Soldiers to make substantial down payments on a home or business in exchange for a service commitment. Recent legislation expanded the student loan repayment program to offer a broader range of loans for repayment and enhanced educational benefits for our deployed Reserve Component members. We have targeted enlistment and re-enlistment bonuses as well as the Army College Fund to our most critical skills and training programs.

Through targeted re-enlistment incentives, the Army is addressing specialties that are currently short due to rapid growth and transformation. The incentives for each specialty are adjusted semi-annually using the Selective Re-enlistment Bonus Review Board. Shortages in critical skills such as Explosive Ordnance Disposal (EOD) Specialist, Human Intelligence Collector, Motor Transport Operator and some others are continually targeted for some of our most robust incentives.

Question. Has the Army analyzed why these occupational specialties have consistently been under-filled, and what is the operational impact of these shortages and what resources are needed to fill these positions?

Answer. From a recruiting perspective, the Army has conducted internal analysis as well as utilized sources such as RAND and the Army research Institute and studies from outside agencies. Factors ranging from the requirements for security clearances, aptitude test scores, difficulty of training and propensity toward military service have all been cited. Each critical skill is evaluated at a minimum on a quarterly basis to determine needed changes, receive input from training proponents and to develop innovative targeted recruiting initiatives. On February 1st, the Army instituted the Army Advantage Fund as an innovative tool to reach a more diverse audience through guaranteed down payments for a first home or small business. There is potential to expand into other markets as well. The critical skills are the Army's most expensive recruiting targets and will require continued funding at levels needed to attract and retain these Soldiers.

The operational impact of Soldier shortages in certain skills jeopardizes the unit's mission and places Soldiers at greater risk. Having the required amount of Soldiers in the right skills and grades is essential to ensure units are fully functional and have the right leadership, experience, training oversite, can provide for the health and welfare of Soldiers. Shortages magnify Soldier stress through longer hours and more frequent deployments.

Question. Is the Army concerned that the strain of multiple deployments will discourage good individuals from joining the Army- or "re-upping" and staying in?

Answer. There are certainly challenges with recruiting during a period of protracted war with the added strain of multiple deployments. However, we are optimistic about the Army's ability to find, recruit and enlist the Soldiers we need to grow the force. The Army was able to meet or exceed its recruiting goals in Fiscal Year 2007 in all of its components.

Retention is monitored very closely given the high operational demand and multiple deployments experienced by most of our NCOs. Multiple deployments to Afghanistan and Iraq are currently not having an adverse impact on enlisted retention. In FY 2007 the Army achieved or exceeded the retention mission in every component. To date for FY 2008, all components are exceeding their year to date (prorated) missions. The retention rates in deploying units have consistently exceeded 100% since FY05. For instance, nearly 600 troops reenlisted in Baghdad on Independence Day, this past year. More than 100 Army Reserve Soldiers gathered at the

Al Faw palace at Camp Victory, Iraq, January 18, 2008, to reenlist during a ceremony marking the 100th Anniversary for the Army Reserve. Continued high retention rates are a significant indicator of the quality of leadership within our ranks, the fact that Soldiers believe in what they are doing and value the traditions of service to the Nation.

Question. DoD standards on qualification tests call for at least 60 percent of recruits to be Category 1 to 3 (the higher end of testing) and 4 percent Category 4, the lowest end. The Army had chosen a higher standard of 67 percent in Categories 1 to 3, and 2 percent in Category 4. However, now the Army plans to revert to the lower standards of the DoD guidelines, which basically lowers the IQ standards for recruits. Do you believe that this will reduce average effectiveness of Army units?

- Please describe the standards by which candidates are measured.
- Do you expect these standards to be relaxed further to achieve the aggressive recruitment goals?

Answer. The Army adjusted to the DoD standards in August 2005, in line with the rest of the services, of 60% TSC I–IIIA and 4% TSC IV. Prior to that time Army had internal a goal of at least 67% Test Score Category (TSC) I–IIIA, and no more than 2% TSC IV. The Armed Forces Qualification Score (AFQT) average score has ranged between 56.5% and 57% since FY04 so adjusting to DoD standards has not affected the quality of the force.

Applicants are measured based on the percentile in which they score on the Armed Forces Qualification Test (AFQT). Test Score Category (TSC) I–IIIA includes those applicants who score in the top half (50th percentile or higher). TSC IIIB includes those who score between the 31st and 49th percentile. TSC IV includes those who score between the 10th and the 30th percentile, of which the Army typically only enlists those in the 21st percentile or higher. The lowest category is TSC V (9th percentile or lower). By law, the military does not enlist TSC V applicants.

The recruiting environment remains challenging and Army remains focused on recruiting a quality force in line with DoD quality mark standards.

Question. Recruiting and retention goals are often relayed to Congress in the aggregate, providing little or no visibility into how each occupational specialty is staffed. Will you provide the Committee with details on recruiting and retention by MOS?

Answer. The Army monitors the strength of each MOS carefully to ensure each required skill is properly manned and maintained. Due to several factors, including high entrance standards, high volume requirements, and undesirable duties, recruiting and retention is more difficult for some MOS's. To compensate, the Army uses priorities and incentives, both monetary and non-monetary, to shape the recruiting and retention efforts by MOS.

The Active Army is meeting its year-to-date goals for overall recruiting and is generally doing well at the MOS level. However, there are a few MOS's that are below their targets, including: Patriot Fire Control Operator/Maintainer (81%), Microwave System Operator (49%), Military Intelligence Systems Maintainer (74%), and Psychological Operations Specialist (76%). As the year progresses, the recruiting force places special emphasis on these MOS's to ensure that each critical skill is manned to the required levels. One way the Army does this is through the quarterly Multi-component Enlisted Incentives Review Board (MEIRB) which aligns incentives and priorities with the needs of each MOS. For example, Microwave System Operator now receives the highest enlistment bonus available to assist in achieving its annual target.

As the Army continues to transform and grow; the Army Retention Program will continue to adjust, encouraging the right Soldiers with the right skills to reenlist to meet the manning requirements of a growing Army. In a time of war and sustained operational demand, retention is a significant indicator of the quality of our leaders and the commitment of our Soldiers. Currently, the Army is meeting or exceeding its objectives in each category (initials, mid-careerist and careerists). Through targeted reenlistment incentives, the Army is addressing specialties that are currently short due to rapid growth and transformation. The incentives for each specialty are adjusted semi-annually using the Selective Reenlistment Bonus Review Board. Shortages in critical skills such as Explosive Ordnance Disposal (EOD) Specialist, Human Intelligence Collector, Motor Transport Operator and some others are continually targeted for some of our most robust incentives.

Question. With the increases in reenlistment and enlistment bonuses, do you feel that the funding for recruiting and retention initiatives is sufficient?

Answer. Base funding alone is not sufficient to cover recruiting and retention initiatives. Currently, all three Components rely heavily on the Supplemental to fund recruiting and retention programs. In FY08, the Active Component Supplemental is expected to account for 68.7% of total Active recruiting and retention funding; the

Reserve Supplemental is expected to account for 20.6% of Reserve recruiting and retention funding; and the National Guard Supplemental is expected to account for 40% of total National Guard recruiting and retention funding.

Question. How does the Amy recruiting command plan to adapt to meet the new end-strength requirements? What are the short- and long-term implications associated with sustaining a heightened end-strength?

Answer. The Army recruiting command has both increased the number of production recruiters and developed several new recruiting programs in order to meet recruiting goals dictated by the increase in end strength. Two notable programs are: Active First, where Soldiers who enlist in the National Guard first serve a tour on Active Duty; and the Recruiter Assistance Program, where Soldiers who refer a recruit to the Army are paid a cash bonus if the recruit completes Basic training. In addition to these programs, the incentive bonuses offered to Soldiers for both enlistment and reenlistment continue to increase.

The short-term implication to sustaining increased end strength is that the Army must rely on Supplemental funding to meet recruiting and retention missions. The long-term implication is that the Base program will need to be significantly increased in order to guarantee continuing success of recruiting and retention incentives and programs.

GROWTH IN CONTRACTOR-PROVIDED SERVICES

Question. The Army's obligations on service contracts rose from $3.8 billion in fiscal year 1997 to $22.9 billion in fiscal year 2007. (Per 2009 President's Budget). This is a growth of $19.1 billion, or 500% over 10 years (inflation accounted for 17% of this growth).

Over the same period, the Army's obligations for civilian pay rose $2.4 billion, or 51% (pay raise accounted for 30% of this growth).

Who in the Army has oversight for "contract services"?

Answer. The oversight of services acquisition is the shared responsibility of requiring activities, contracting activities, and the Assistant Secretary of the Army (Acquisition, Logistics and Technology) (ASA (ALT)).

The ASA (ALT) retains responsibility over the acquisition of services. The ASA (ALT) delegated authority to review and approve service acquisitions with a total planned value of $500 million or more to the Deputy Assistant Secretary of the Army (Policy & Procurement) (P&P). Prior to approving any acquisition of services with a total planned value of $1 billion or more, the Under Secretary of Defense (Acquisition, Technology & Logistics) must be notified.

Acquisition of services with a total planned value of $500 million or more are reviewed by the Army Service Strategy Panel (ASSP), chaired by the P&P. Since April 2003, twenty-eight (28) Army service acquisitions valued at above $500 million have been reviewed under these procedures. These acquisitions represent a total estimated value of over $249 billion.

Contracting Officer's Representatives (CORs) provide the day-to-day oversight of the contractor's performance. CORs help ensure the government obtains quality services, on time, and at the level and prices specified in the contract.

As of February 23, 2006, the Secretary of the Army requires Army HQDA Principals and Senior Commanders at Army Command, Army Service Component Commands, and Direct Reporting Units to be responsible for the approval for requirements for contracted services. The Assistant Secretary of the Army (Manpower and Reserve Affairs) reports these requirements directly to the Secretary of the Army.

Question. How are Army commanders at the various levels of command trained to manage contracting out for services?

Answer. The United States Army has a wide range of schools that its officers attend throughout their career and before they enter into command positions. Examples:

- Command & General Staff School, Command & General Staff College
- School for Command Preparation, Command & General Staff College
- Garrison Precommand Course, Army Management Staff College
- General Officer Senior Command Course, Army Management Staff College

The Command & General Staff School provides a core course entitled F–106, Military Contracting and Ethics. This course covers: (1) why and how the Army uses contracting to effectively support military operations, (2) considerations and effective planning for contracting support, (3) types of contracts—what and how they provide support to include their capabilities and limitations, (4) authorities and responsibilities for identifying requirements, drafting statements of work, and overseeing contractor performance, (5) role of the contracting officer's representative, and (6) obligations and restrictions concerning oversight of contractor personnel.

In addition, exercise training venues, such as the Combat Training Centers, are incorporating realistic contracting training scenarios into operational training.

Question. The Army is forming a new Contracting Command with a two-star commanding general. Has the general officer been selected yet?

Answer. No, a general officer has not yet been selected as the commanding general for the new U.S. Army Contracting Command (ACC). The ACC is currently being headed by Mr. Jeffrey Parsons, a Department of the Army civilian who is a member of the Senior Executive Service. The position will eventually be filled by a two-star general.

Question. The Army now has a Contracting Command located at Fort Belvoir, Virginia and an Army Contracting Agency. Is there a degree of duplication and potential confusion in having two seemingly similar organizations at two different places?

Answer. The U.S. Army Contracting Agency (ACA) and the various contracting organizations within the U.S. Army Materiel Command (AMC) will be transformed into the new U.S. Army Contracting Command (ACC), that will fall under AMC. There will be no duplication as the ACA will be disestablished once the new ACC becomes operational. The realignment of ACA and the creation of the ACC will provide the most efficient structure to effectively execute installation and expeditionary contracting for the Army. This reorganization will help avoid confusion because it will provide a centralized capacity to support the warfighter and provide one contracting face to the customer.

Question. What is the Army doing to increase the number of available contracting professionals, and to ensure those professionals have the necessary skills and status to be effective?

Answer. The Army is increasing the number of contracting personnel. In January 2008, affected Army commands and organizations were tasked to evaluate their manning needs and submit concept support to support their personnel requirements. Concept plans are due to the Army G–3 by March 31, 2008. The Assistant Secretary of the Army (Acquisition, Logistics, and Technology) Contracting Oversight plan has already been submitted to the Army G–3. To date, we have received increased requirements for 478 military and 815 civilians. In addition, we are moving forward with the following initiatives aimed at increasing the stature and career development of the Army's contracting personnel:

- The Army is opening more command opportunities for military contracting officers and we are working on adding five General Officer positions based on the recommendations from the Gansler Commission.
- We are now capturing expeditionary contracting lessons learned and incorporating them into our doctrine and contingency training system. We are also developing a battlefield contracting community of interest where lessons learned will be posted.
- We are adapting training exercises to stress rapid acquisition, logistics, and contracting in expeditionary operations; include contracting operations and planning requirements in all military exercises.
- The Army Contracting Campaign Plan task force is exploring ways to foster civilian participation in expeditionary operations, such as:
  - authorizing long-term medical coverage
  - providing civilian medals for service
  - providing optional life insurance for civilian employees
  - removing the need for a waiver to the annual pay cap

Question. Has the Army accurately determined those functions that are defined as core functions, and those that are considered as non-core?

Answer. The Secretary of the Army's policy letter of September 4, 2007 states: "We must transform to meet enduring requirements in our core competencies with Military and Civilian employees, and only use contractors for surge or specialized needs."

The Army has accurately determined those functions that are defined as core and non-core based on the applicable Department of Defense (DoD) policy, which provides broad latitude for using military, civilian employee or contract in a given function depending on the facts and circumstances.

- The Army uses the DoD Manpower Mix Criteria in Department of Defense Instruction 1100.22 to determine what functions are military essential, inherently governmental, exempt from private sector performance (core functions) or available for contractor performance (non-core functions).
- The DoD Manpower Mix Criteria is based on risk considerations, the law of war, the statutory definition of inherently governmental, command and control, rotation base and career progression, as informed by applicable Status of Forces Agreements, international agreements and other statutes.

• The characterization of a function under the DoD Manpower Mix Criteria varies depending upon the facts and circumstances:

- Security functions in a high threat environment are inherently governmental except where there are "rules for the use of deadly force" that limit the contractor's discretion and there is adequate governmental oversight to assure compliance with those rules.
- Interrogation is inherently governmental but may be contracted under a statutory exception authorizing the use of a personal services contract if there are sufficient governmental oversight personnel to limit the discretion of the contractor.
- Providing advice to governmental decision makers is normally not inherently governmental except when the government's ability to make independent decisions is eroded through the loss of expertise.

Question. Do you find that contractor personnel generally end up working along side of military personnel, doing much the same work, but the contractor costs the government three or four times the pay of a lower ranking enlisted soldier. How does that make fiscal sense?

Answer. In many cases, contractor personnel end up working along side of military personnel, doing much the same work, but the contractor costs the government three or four times the pay of a lower ranking enlisted soldier. However, the pay of a Soldier and the total cost of a contract is not the appropriate comparison. The cost of the contractor is the complete cost to the government, but the Soldiers' pay is only one cost component. The full cost of a Soldier includes: non-taxable basic allowance for housing, non-taxable basic allowance for subsistence, health care costs, the GI bill, re-enlistment bonuses, the cost to train and recruit a Soldier, permanent change of station moves, and retirement accrual.

The specific difference in cost of a contractor and a Soldier will vary depending on the type of work performed, but comparing pay of a Soldier to cost of a contract will always overstate the difference, and fails to consider operational priorities and limitations.

The decision to use contractor personnel as opposed to military personnel is based on long-term cost rather than per hour cost, as well as availability of military personnel, and prohibitions against using contractors to perform inherently governmental functions. When the decision was made to reduce the size of the standing Army as part of the "peace dividend" in the early 1990s, it increased our need for contractors to provide non-inherently governmental support and logistics functions in order to free up our military personnel for combat operations. The majority of the support and logistics functions had to be contracted to free military enlisted and officers for the war effort. Each enlisted or officer performing an administrative function reduces the available forces.

In a fiscal analysis, the comparison is between the cost to sustain the Army on a war-footing throughout periods of relative peace, while maintaining the capability to perform the full range of both military and administrative mission, against the cost to sustain the current force structure augmented with contractor personnel.

MENTAL HEALTH ADVISORY TEAM (MHAT)

Question. The U.S. Army Surgeon General chartered the Operation Iraqi Freedom (OIF) Mental Health Advisory Team (MHAT) in July 2003. Its mission was to assess OIF-related mental health issues and to provide recommendations to OIF medical and line commands. The MHAT conducted group interviews and surveys of soldiers. Many of the soldiers who participated had been engaged in combat. This was the first time in history soldiers were surveyed in this manner regarding behavioral issues during active combat.

On May 4, 2007, DoD released the fourth MHAT study since 2003. MHAT–IV was conducted in August and October of 2006 and assessed more than 1,300 soldiers and for the first time nearly 450 Marines. The commanding general of Multinational Force, Iraq, also requested a first-ever study of battlefield ethics with the participation of soldiers and Marines currently involved in combat operations. Survey participants were not selected to be representative of the entire deployed force. Units were specifically targeted for this survey because they experienced the highest level of combat exposure.

Gentlemen, according to the Mental Health Advisory Team report, soldiers who deployed longer (greater than six months) or had deployed multiple times were more likely to screen positive for a mental health issue. What steps are taken to assure that these soldiers get the proper attention?

Answer. The Walter Reed Army Institute of Research (WRAIR) continues behavioral health research prevalence and intervention studies aimed at reducing mental

health problems of Soldiers across the deployment cycle (e.g., Battlemind Psychological Debriefing, and Expressive Writing). Operationally, the Task Force 62 Medical Brigade conducts continuous and ongoing prevention activities throughout the deployment cycle in Theater. Depending on OPTEMPO and identified need, Combat Stress Control units will deliver customized services to units based on assessed needs and requests by the unit commander.

MHAT V Soldier Survey data further underscores the importance of the 6–12 month in-Theater timeframe for when Soldiers are most susceptible to behavioral health problems. Task Force 62 Behavioral Health personnel are focusing outreach for units that have been in-Theater more than 6 months.

Finally, Army Leadership has mandated that all Soldiers receive Post-Deployment Battlemind Training upon return from operational deployment.

Question. The 2006 adjusted rate of suicides per 100,000 soldiers was 17.3 soldiers, lower than the 19.9 rate reported in 2005, however higher than the Army average of 11.6 per 100,000 soldiers. Does the Army have proper resources to provide counseling to soldiers?

• When soldiers need counseling who provides this counseling?

Answer. Yes, the Army has proper resources to provide counseling to the deployed force. When required, counseling is provided by forward deployed behavioral health providers. There are approximately 200 mental health providers and technicians (150 Army and 50 Air Force) deployed in support of Operation Iraqi Freedom; and approximately 30 mental health providers and technicians (7 Army, 21 Air Force, and 2 Navy) deployed in support of Operation Enduring Freedom.

In a typical month, over 1,800 new service members are seen in behavioral health clinics, and over 3,000 command consultations are conducted regarding the morale and mental health of the fighting force. On average over 5,000 behavioral health appointments occur per month. There are four restoration centers that provide 3–5 day inpatient treatment programs, with a "return to duty" rate of 93%. The corollary outpatient "return to duty" rate is 99%. Less than one half percent of the fighting force is evacuated annually for psychiatric reasons.

Question. The Mental Health Advisory Team found that both soldiers and Marines reported at relatively high rates—62 and 66 percent, respectively—that they knew someone seriously injured or killed, or that a member of their unit had become a casualty. What mental health assistance is available to our soldiers who are still in combat?

Answer. There are approximately 200 mental health providers and technicians (150 Army and 50 Air Force) deployed in support of Operation Iraqi Freedom (OIF); and approximately 30 mental health providers and technicians (7 Army, 21 Air Force and 2 Navy) supporting Operation Enduring Freedom (OEF). Each brigade combat team (BCT) has a behavioral health section assigned directly to them, also known as organic assets, and operates in the BCT area of responsibility. In addition, OIF has the equivalent of 4 deployed combat and operational stress control (COSC) detachments conducting area-wide behavioral health and COSC services. OEF has organic BCT behavioral health assets and the equivalent of 1 COSC detachment.

Traumatic Event Management (TEM) is the approved U.S. Army term used to define any support activities taken to assist in the transition of military units and Soldiers who are exposed to Potentially Traumatic Events (PTEs). The goal of TEM is to successfully transition units and individuals, build resilience, promote posttraumatic growth (PTG), and increase functioning and positive change after enduring a trauma.

TEM is taught to Army behavioral health personnel during the COSC course, currently taught 6 times per year at San Antonio, TX. TEM is also published in all Army behavioral health field manuals and includes the use of both individual and group support activities to address the impact of PTE on units and Soldiers who are routinely exposed to it as a result of conducting military operations.

Both organic behavioral health assets (division) and echelons above division (Task Force 62 Medical Brigade) provide services to units and Soldiers after critical incidents such as firefights and improvised explosive device attacks. Also, Chaplains are indispensable parts of the team taking care of Soldiers after combat losses.

Question. According to the Mental Health Advisory Team, approximately 10 percent of soldiers reported mistreating non-combatants or damaging their property when it was not necessary and less than half of soldiers would report a member of their unit for unethical behavior. Is there any concern that with lower standards these incidents could become worse?

Answer. No, there is minimal concern that these incidents will become worse. MHAT V found that unethical behaviors did not change significantly relative to 2006. Battlefield ethics issues have been incorporated into the AMEDD combat and operational stress control (COSC) and into the Battlemind Psychological Debriefing

program developed by Walter Reed Army Institute of Research. In addition, Army generated a new COSC concept, known as "remind" that addresses threat of dangerousness to others and the risk of unlawful behaviors. This concept is being fielded actively through behavioral health channels and will be published in existing COSC doctrine.

Question. Please explain what the Army has done to address the Mental Health Advisory Team findings? Can you provide a list to the committee regarding what recommendations were followed and which recommendations were not?

Answer. MHAT V reviewed all MHAT findings and reported the results for each. The review is included in the MHAT V report dated February 14, 2008. The review addresses a total of 46 recommendations including 4 redeployment recommendations, 19 deployment recommendations, 4 post-deployment recommendations and 19 sustainment recommendations. A complete list of recommendations with the status of each is enclosed.

Question. What is the cost of a Mental Health Advisory Team and how many more reports do you think there will be?

Answer. I expect annual MHAT missions will continue as long as combat operations exist in support of the Global War on Terrorism. We have significantly reduced the costs for these assessments in both personnel requirements and expenses. MHAT 1 required a 12–member team that remained engaged in the assessment and reporting process for approximately 6 months. MHAT V was accomplished with a 4–member team that produced a final report in about 2 months. I expect future MHATs will continue to use this smaller, more financially efficient configuration. Regardless of the team's size, it will still require extensive planning and support.

[CLERK'S NOTE.—End of questions submitted by Mr. Murtha.]

TUESDAY, FEBRUARY 26, 2008.

MISSILE DEFENSE AGENCY

WITNESSES

LIEUTENANT GENERAL HENRY OBERING, DIRECTOR, MISSILE DEFENSE AGENCY

LIEUTENANT GENERAL KEVIN CAMPBELL, COMMANDING GENERAL, U.S. ARMY SPACE AND MISSILE DEFENSE COMMAND

PAUL FRANCIS, GOVERNMENT ACCOUNTABILITY OFFICE, DIRECTOR, ACQUISITION AND SOURCING MANAGEMENT

INTRODUCTION

Mr. DICKS. The Committee will come to order. We have a motion from Mr. Young.

Mr. YOUNG. Mr. Chairman, I move that those portions of the hearing today, which involve classified material, be held in executive session because of the classification of the material to be discussed.

Mr. DICKS. All those in favor of the motion signify by saying aye. Aye. Opposed? The motion is adopted. I want to welcome our witnesses today on a hearing on missile defense. We have a very distinguished panel that should give the Committee the benefit of several perspectives on where we are, where we are going, and what challenges exist.

Our panel this morning includes Lieutenant General Henry Obering, Director of the Missile Defense Agency; Lieutenant General Kevin Campbell, Commanding General of the U.S. Army Space and Missile Defense Command; and Mr. Paul Francis of the Government Accounting Office, where he is the director for acquisition and sourcing management. These gentlemen appeared before the Committee last April, and we are pleased to have them back. First, I would like it congratulate the Missile Defense Agency, in collaboration with the National Reconnaissance Office, on the task last week in which a failed U.S. satellite in a decaying orbit was intentionally destroyed using a modified SM–3 interceptor launched from an Aegis cruiser. This was great collaboration by MDA, Navy, and the NRO. I also would like to point out that in recent years, our missile defense programs have made some significant strides in fielding missile defense systems to defend the United States. It has deployed forces, friends, and allies against ballistic missiles of all ranges, in all phases of flight. This progress is the result of the efforts of many people in government and industry, and should be noted. This progress also is the result of very substantial investments of tax dollars.

Since 2002, Congress has appropriated almost $60 billion for missile defense, while at the same time, allowing an unprecedented amount of flexibility, such as an exemption for many Department

of Defense (DoD) acquisition regulations. The fiscal year 2009 budget requests a further $10.9 billion for ballistic missile defense programs. A major responsibility of this subcommittee is to oversee the allocations of such funds. You can be sure that we will work with the DoD to understand the basis for its request, to take that into account as we move forward in the appropriations deliberations. Included in the '09 request is over 700 million, including military construction, for a European site for ground-based missile defense to include 10 interceptors and two large X-band radars.

Last year Congress expressed some reservations about the pace and manner in which this initiative was planned. I expect there will be further discussions about the European site this year. Other areas that are likely to be of interest include the ability of Congress to provide thorough oversight, given the manner in which MDA budgets for programs, the lack of independent cost estimates, and the comparison between General Accounting Office (GAO) cost estimates and MDA estimates, and the future of boost-phase defense.

Now, I will note that General Obering and MDA has come forward with a new Block approach, which may answer some of the issues that have been raised by the GAO. I look forward to the testimony of our witnesses, but first want to call on Bill Young, our ranking Republican member, and former chairman of this subcommittee and the full committee. Mr. Young.

Mr. YOUNG. Well, Mr. Chairman, thank you very much. And I just want to join in the congratulations for really a job well done. It is pretty exciting to see how effective this shot on the satellite was. And missile defense is such an extremely important matter. This Committee has taken some raps over the years because we have strongly supported funding for missile defense, but the importance to our Nation cannot be overemphasized. So just thank you very much for a job well done. And I am interested in hearing any details about this shoot-down that we might not have seen on television. Thank you for being here.

Mr. DICKS. And Mr. Young, we are also trying to figure out how General Obering is going to get the NRO to pay for this. Maybe the GAO can help us on that. General, have at it.

SUMMARY STATEMENT OF GENERAL OBERING

General OBERING. Thank you very much, Mr. Chairman. Good morning, good morning Congressman Young, and distinguished members of the Committee. I want to thank the Committee for the support that we received over the years for this critical defense program. As Director of the Missile Defense Agency, it is my role to develop, test, and field an integrated, layered missile defense system to defend the United States, our forces, allies and friends against ballistic missiles of all ranges in all phases of flight. For 2009, we are requesting $9.3 billion. Approximately 75 percent, or about $7 billion of this will be allocated to near-term fielding and development. To lay the foundation for this request, let me review why missile defense is so critically needed. There were over 120 foreign ballistic missile launches last year, significantly exceeding what we observed in previous years.

North Korea's development of a long-range missile, their advances in missile technologies, such as solid fuel, and their export activities remain troubling. Iran continues to pursue newer and longer range missile systems and advanced warhead designs. Their actions underscore the need to field and integrate long-range defenses with NATO's shorter range defenses. As background for the 2009 request, let me provide an assessment of where we are today.

Simply said, 2007 was the best year that we have experienced in the missile defense program. We had historic accomplishments in all aspects of our program, development, testing, and fielding, and across all environments, land, sea, and space-based. Thousands of men and women across this country in government and industry made this achievement possible. We have now fielded a system that may be activated on short notice to provide protection in times of crisis and, if necessary, defend the United States from long-range ballistic missile attack.

In addition, we have fielded an initial capability to protect our allies and deployed forces from medium and short-range ballistic missile attack. We have now emplaced 24 long-range interceptors in Alaska and California. We have modified 17 Aegis ships for tracking, with nine destroyers and three cruisers capable also of engaging shorter range missiles with the 23 Standard Missile–3 sea-based interceptors that we delivered. And, in collaboration with the U.S. Navy, we began upgrading the Aegis weapon system and delivered 18 modified Standard Missile–2 Block IV interceptors for a sea-based terminal capability. We expanded and improved the sensor network to detect, track, and discriminate threat objects. In addition to the Cobra Dane radar in Alaska, we completed the testing and integration of fixed radars in California and the United Kingdom. We achieved partial mission capability on the very transportable radar in Japan, and delivered another one for testing in Alaska. We also conducted sea trials and integration demonstrations with the powerful sea-based X-band radar, now deployed to the Pacific Ocean.

The Agency also developed and tested new command, control, battle management, and communications technologies to integrate and improve the depth, range, and reliability of our defenses. Our increasingly complex and realistic testing has continued to bolster our confidence in these capabilities. I also want to highlight that, as in the past, we will be spending about $2 billion in 2009 on testing alone. Our very active flight test program in 2007 accomplished 10 successful intercepts in 10 attempts. This included a long-range ground-based intercept, six Standard Missile–3 intercepts of both separating and unitary targets, and three THAAD intercepts of unitary targets.

We have now demonstrated hit-to-kill successes in 34 of 42 attempts since 2001, and conducted 26 of 27 successful flights since 2005. And we do not count the satellite event last week as a test. We have now not had a major failure in our system in our testing in over 3 years. This year also marked a major success by our allied partner, Japan. In their December test off the coast of Hawaii, they successfully intercepted a missile warhead, marking a major milestone in our expanding missile defense relationship. Yet the system we have today is not sufficiently robust to meet war fighter

requirements. Using a new Block structure that you referred to, we plan to allocate $1.7 billion in fielding new capability. Over the next few ears, we will improve long-range defenses by fielding additional silo-based interceptors in the United States and upgrading the early warning radar in Thule, Greenland.

Upon reaching agreements with the Governments of Poland and the Czech Republic, we will begin site construction for a missile field and fixed-site radar. We also plan to deploy six more Aegis-capable warships and an additional 36 Standard Missile–3 interceptors, 48 THAAD interceptors in two fire units, and up to 100 modified sea-based terminal interceptors to protect against short to medium-range threats. We are allocating about 2.4 billion in our development program to help ensure America's missile defense capabilities remain effective and reliable well into an uncertain future.

One of our most critical needs is the ability to deal with complex missile threats, which would include multiple warheads, advanced decoys, or other sophisticated countermeasures. Therefore, one of our highest priorities is the Multiple Kill Vehicle program for both land and sea-based interceptors, which will allow us to handle these more complex threats. With the launch of two demonstration satellites later this year, we will also be able to move forward with the Space Tracking and Surveillance System, which would provide a persistent global detection, tracking, and fire control capability.

We are working to give this country its first boost-phase intercept capability, which will enable the warfighter to shoot down a missile shortly after it has been launched. The progress made in the revolutionary Airborne Laser program has been exciting and historic, and is on track for a lethal shoot-down of a boosting missile in 2009. We are also planning the first flight of our Kinetic Energy Interceptor in 2009, which will deliver an alternative boost phase capability as well as a midcourse capability. There are several other major efforts underway, to include the U.S.-Japan cooperative development of a follow-on Standard Missile–3 interceptor to give the Aegis system an ICBM intercept capability, a more robust sea-based terminal capability, studies of the potential benefits of a space-based intercept layer, and our continuing advanced technology efforts, to include our work with Israel to co-develop very short-range ballistic missile defenses.

With our unprecedented success, we have also had some setbacks. This past year we experienced only the second complete target failure in 42 flight tests, but it was enough for me to revamp our target program. I have made the transition from the legacy boosters to the modern Flexible Target Family a high priority for this year. In the Kinetic Energy Interceptor program, we experienced nozzle failures in one of our second stage firings, which is under investigation. We also experienced some cost growth in the THAAD, Aegis and GMD programs, which is being addressed within the overall missile defense portfolio.

But as I stated at the beginning, 2007 was an outstanding success, we are making great strides in 2008, and with your support, we are looking forward to continued success in 2009. America needs this critical defensive capability to protect her people, her

forces and her allies from this growing missile threat. I look forward to your questions.

[The statement of General Obering follows.]

Unclassified Statement of

Lieutenant General Henry A. Obering III, USAF

Director, Missile Defense Agency

Before the

House Appropriations Committee

Defense Subcommittee

Regarding the

Fiscal Year 2009 Defense Approprations
Ballistic Missile Defense

Tuesday, February 26, 2008

Embargoed Until Released by the
Appropriations Defense Subcommittee
United States House of Representatives

Lieutenant General Henry A. Obering III, USAF
Director, Missile Defense Agency
Missile Defense Program and Fiscal Year 2009 Budget
Before the
House Appropriations Committee
Subcommittee on Defense
February 26, 2008

Good afternoon, Mr. Chairman, Congressman Young, distinguished Members of the Committee. Thank you for this opportunity to discuss the Department of Defense's Fiscal Year (FY) 2009 Missile Defense program and budget. As Director of the Missile Defense Agency (MDA), I have the privilege of leading an outstanding group of men and women who are working hard every day to develop, test and field an integrated, layered ballistic missile defense system to defend the United States, our deployed forces, and our allies and friends against ballistic missiles of all ranges in all phases of their flight. I want to thank this Committee for the support we have received for this critical defense program.

We are requesting $9.3 billion in FY 2009 for missile defense. Roughly 75 percent of this request, or $7 billion, will be allocated to the near-term development and fielding of missile defense capabilities. Of this amount, $715 million is for sustaining the capabilities we already have in the field today. I also want to highlight that, as has been the pattern for several years now, we will be spending about $2 billion of the funding in FY 2009 (more than 20 percent of the missile defense budget) on test activities.

The Ballistic Missile Defense System (BMDS) is daily becoming more integrated, robust, and global. The BMDS already includes fielded assets operated by Air Force, Army, and Navy units under the integrated control of Combatant Commanders. Our current, limited homeland defense against long-range ballistic missiles will soon be

bolstered by additional interceptors in Alaska and the upgrade of an existing radar in Greenland to protect against enemy launches from the Middle East.

The defense of deployed forces, allies, and friends against short- to medium-range ballistic missiles in one region/theater will be buttressed by additional Standard Missile (SM)-3 interceptors, more Aegis BMD engagement-capable warships, two Terminal High Altitude Area Defense (THAAD) fire units, and up to 100 modified sea-based terminal interceptors. Tying these assets together will be a global command, control, battle management and communications capability.

Recent flight tests are confirming technological progress and operational effectiveness for short-, medium-, and long-range defensive capabilities. Since February 2007, MDA and the military services have executed a successful long-range ground-based intercept, six sea-based intercepts of separating and unitary targets, and two THAAD intercepts of unitary targets. In the near future, MDA's capability development program is expected to yield enhanced capabilities to discriminate between enemy warheads and countermeasures and options for "multiple kill" capabilities to meet future challenges.

To demonstrate the long-range BMDS capability, for example, we conducted an integrated flight test last September involving a realistic target launched from Alaska and tracked by the operational upgraded early warning radar in northern California. An Aegis ship and the sea-based X-band radar in the North Pacific tracked the target as well. The target was successfully destroyed by a Ground-Based Interceptor (GBI) launched from an operationally configured silo in central California. The data needed to calculate a fire

control solution for the interceptor was provided by the operational system and the operational command and control, battle management and communications system was employed by the warfighting commanders. Overall, this single test included numerous components separated by thousands of miles and managed by four executing organizations within the Missile Defense Agency.

As missile defense capabilities expand worldwide, international cooperation with allies and friends is dramatically increasing. Assuming we obtain agreements with Poland and the Czech Republic and obtain congressional approval to proceed, MDA intends to begin site construction for additional long range interceptors and a fixed-site radar in Europe to defend allies and deployed forces in Europe and expand the U.S. homeland defense against limited Iranian long-range threats. Also, we have undertaken substantive cooperative efforts with European, Middle Eastern, and Asian nations. With the purchase of Aegis BMD and Patriot Advanced Capability-3 assets, and with our fielding of a transportable X-band radar at Shariki, Japan is in the process of fielding a multilayered system interoperable with the U.S. system. Further, with MDA's support, the Department of Defense participated with Israel to develop an Israeli missile defense architecture that can meet threats expected in the next decade. We also held meetings with senior Russian officials and technical experts to discuss both threat perceptions and missile defense cooperation, including the potential for partnering with Russia in a joint regional architecture.

THREAT UPDATE

To lay the foundation for our budget request, let me review why missile defense is so critically needed. There remains intense interest in several foreign countries to develop ballistic missile capabilities. In fact, there were over 120 foreign ballistic missile launches in 2007, significantly exceeding what we observed in previous years. This comes on the heels of a very active 2006, during which time both North Korea and Iran demonstrated an ability to orchestrate campaigns involving multiple and simultaneous launches using missiles of different ranges. Currently, North Korea has hundreds of deployable short- and medium-range ballistic missiles and is developing a new intermediate-range ballistic missile and a new short-range, solid-propellant ballistic missile, which it test-launched in June 2007. Iran has the largest force of ballistic missiles in the Middle East (several hundred short- and medium-range ballistic missiles), and its highly publicized missile exercise training has enabled Iranian ballistic missile forces to hone wartime skills and new tactics.

North Korea's ballistic missile development and export activities remain especially troubling. Pyongyang continues to press forward with the development of a nuclear-capable ICBM. While the firing of the Taepo Dong 2 in July 2006, launched together with six shorter-range ballistic missiles, failed shortly after launch, North Korean engineers probably learned enough to make modifications, not only to its long-range ballistic missiles, but also to its shorter-range systems. North Korea's advances in missile system development, particularly its development of new, solid fuel intermediate-range and short-range ballistic missiles, could allow it to deploy a more accurate, mobile,

and responsive force. North Korea's nuclear weapons program makes these advances even more troubling to our allies and the commanders of our forces in that region.[1]

In addition to its uranium enrichment activity, Iran continues to pursue newer and longer-range missile systems and advanced warhead designs. Iran is developing an extended-range version of the Shahab-3 that could strike our allies and friends in the Middle East and Europe as well as our deployed forces. It is developing a new Ashura medium-range ballistic missile capable of reaching Israel and U.S. bases in Eastern Europe.[2] Iranian public statements also indicate that its solid-propellant technology is maturing; with its significantly faster launch sequence, this new missile is an improvement over the liquid-fuel Shahab-3.[3] Iran has reportedly bought a new intermediate-range ballistic missile (IRBM) under development by North Korea;[4] this underscores the urgent need to work with our allies in the North Atlantic Treaty Organization (NATO) to field and integrate long-range missile defenses in Europe. Moreover, Iran's development of a space launch vehicle using technologies and designs from its ballistic missiles means Iran could have an ICBM capable of reaching the United States by 2015.[5]

---

[1] Oral Statement by the Director of the Defense Intelligence Agency, Lieutenant General Michael D. Maples to the Senate Select Committee on Intelligence Annual Threat Assessment Hearing, 5 Feb 2008 http://www.dia.mil/publicaffairs/Testimonies/Statement29.pdf; Current and Projected National Security Threats to the United States , Lieutenant General Michael D. Maples, U.S. Army Director, Defense Intelligence Agency, Statement for the Record, Senate Armed Services Committee, 27 February 2007 http://www.dia.mil/publicaffairs/Testimonies/statement28.html.
[2] Statement of Lieutenant General Michael D. Maples, 5 February 2008.
[3] Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January to 31 December 2005, Central Intelligence Agency, http://dni.gov/reports/CDA%2011-14-2006.pdf .
[4] Statement of Lieutenant General Michael D. Maples, 5 February 2008.
[5] Current and Projected National Security Threats to the United States Vice Admiral Lowell E. Jacoby, U.S. Navy Director, Defense Intelligence Agency Statement For the Record Senate Armed Services Committee, 17 March 2005 http://www.dia.mil/publicaffairs/Testimonies/statement17.html

Syria is working to improve its ballistic missile capabilities and production infrastructure. Today Syria is capable of striking targets in Israel and Turkey, our southern NATO partner, using rockets and ballistic missiles. Syria can produce longer-range Scud variant missiles using considerable foreign assistance from countries such as North Korea and Iran.[6] So our vigilance must extend well out into the future, when the threats we face today have grown and new threats may have emerged.

NEW MISSILE DEFENSE PROGRAM STRUCTURE

We have established a new block structure to organize our program of work and present our budget. The Agency has made this change to address concerns about transparency, accountability, and oversight and to better communicate to Congress and other key stakeholders. The new approach has several key tenets:

- Blocks will be based on fielded missile defense capabilities that address particular threats and represent a discrete program of work—not on biennial time periods.
- When MDA believes a firm commitment can be made to the Congress, the Agency will establish schedule, budget, and performance baselines for a block. Block schedule, budget, and performance variances will be reported.
- Once baselines are defined, work cannot be moved from one block to another.

[6] Acquisition of Technology Relating to Weapons of Mass Destruction and Advanced Conventional Munitions, 1 January to 31 December 2005, Central Intelligence Agency.

Based on the above tenets, MDA has currently defined five blocks (see figure 1). Blocks 1.0, 3.0, and 4.0 deliver capabilities for long-range defenses, while Blocks 2.0 and 5.0 deliver capabilities to address the short- and medium/intermediate-range threats.

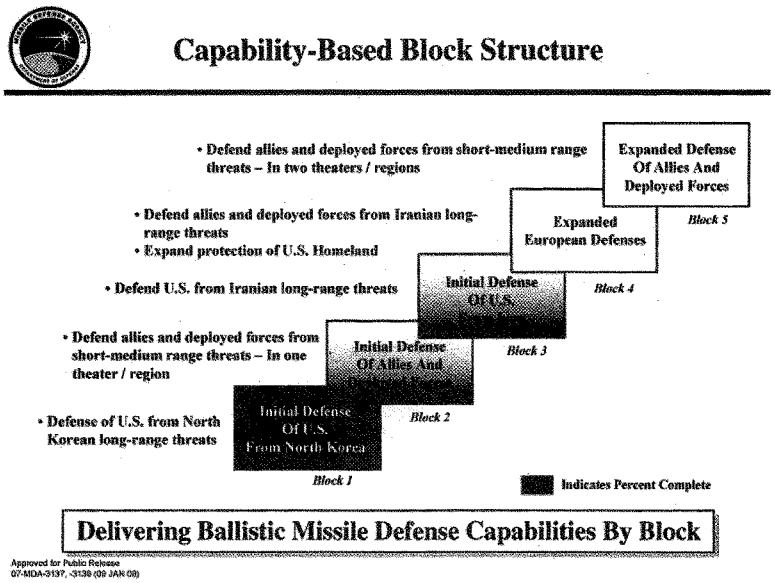


Figure 1: Capability-Based Block Structure

Future blocks (Block 6.0, etc.) will be added when significant new capabilities are expected to be fielded based on technological maturity, affordability, and need. For example, a new Block 6.0 might include enhanced defense of the United States against complex countermeasures, drawing on volume kill capabilities from the multiple kill vehicle (MKV) program, improved discrimination capabilities on our integrated sensor,

command and fire control network as well as upgraded hardware and software on our weapon systems.

MDA's budget is organized through the period of the Future Years Defense Program based on the new block structure. Also, program funding that does not fit into Blocks 1.0 through 5.0 is assigned to four general categories:

- *Capability Development* – technologies such as the Airborne Laser, Multiple Kill Vehicle, Kinetic Energy Interceptor, Far-Term Sea Based Terminal, Project Hercules and the Space Tracking and Surveillance System, which address future challenges and uncertainties
- *Sustainment* - operations and support of weapon systems, sensors, and command and fire control components
- *Mission Area Investment* – activities that support multiple efforts and cannot be reasonably assigned to a specific block or capability development program (e.g., intelligence and security; modeling and simulation; systems engineering and testing cores; safety, and mission assurance)
- *MDA Operations* – activities that support the Agency, such as Management Headquarters and Base Realignment and Closure (BRAC)

HIGHLIGHTS OF BUDGET SUBMISSION FOR FY 2009

Our priorities in the FY 2009 budget submission include near-term development, fielding, integration and sustainment of Blocks 1.0 through 5.0; increasingly robust testing; and a knowledge-based Capability Development program.

Block 1.0

We are nearing completion of the work in Block 1.0. We are requesting $59 million for fiscal year 2009, mostly to conduct additional system ground and flight tests to support a final Block 1.0 capability declaration.

This past year we saw an unprecedented pace of fielding of an integrated missile defense capability, much of it related to Block 1.0. In 2007 we emplaced 10 additional GBIs, for a total of 24 interceptors in missile fields at Fort Greely, Alaska and Vandenberg Air Force Base, California. In 2008 we plan to increase interceptor inventories up to a total of 30 at the two sites. By the end of 2008, we will complete work installing the Long-Range Surveillance and Track (LRS&T) capability on 18 Aegis BMD ships. These ships will contribute to long-range defense by passing early detection, cueing, and tracking data across communications lines into BMD system communication and battle manager nodes located at Fort Greely and in Colorado Springs.

This past year we transitioned the transportable forward-based X-band radar at Shariki Air Base, Japan from the interim site to a permanent location. This radar provides precise early detection and tracking to increase the probability we will destroy any lethal target launched by North Korea. The Sea-Based X-band radar (SBX) completed crew training and testing off the coast of Hawaii and transited to the North Pacific to conduct a cold weather shakedown off Adak, Alaska, where it will be home-ported in 2009. The SBX participated in system flight tests this past year, including the September 28 long-range intercept test and the December 17 engagement of a medium-range separating target

at sea by our ally, Japan. This spring the radar will again participate in a long-range intercept test.

In 2007 we completed the fielding of C2BMC infrastructure to improve our ability to operate with Japan and receive direct feed from the Space-based Infrared System. We moved communications equipment and shelters to support the forward based X-band radar at Shariki and installed a second server suite at U.S. Pacific Command. We also began fielding enhanced C2BMC displays and improvements to our communications capabilities. The Parallel Staging Network we installed at U.S. Strategic, Northern, and Pacific Commands as part of the Concurrent Test, Training and Operations (CTTO) capability, will be completed this year. Without impeding the operational readiness of the system, CTTO allows the warfighter to conduct training and the Missile Defense Agency to continue with spiral upgrades, testing and development.

By 2009 we plan to install additional planning and situational awareness capabilities to facilitate executive decision-making in the European Command. C2BMC capabilities also provide our senior government leadership situational awareness of hostile ballistic missile activities and updates on the performance of the ballistic missile defense system.

Block 2.0

Since 2002 we have expanded and improved terminal and midcourse defenses to defeat short- and medium-range threats from land and sea. We are requesting about $1.3 billion for FY 2009 for Block 2.0 fielding, development, and integration. This block represents the foundation of the capabilities required to protect forces we deploy abroad and our allies and friends, initially in a single region or theater of combat.

We began fielding SM-3 interceptors in 2004. Block 2.0 comprises 71 SM-3 Block I and IA interceptors (we will have 38 in inventory by the end of 2008). To date, we have converted 12 Aegis BMD LRS&T ships to engagement-capable ships. By year's end, we will have 18 Aegis BMD ships--15 destroyers and 3 cruisers--all of which will have surveillance and track as well as engagement capabilities. For the past three years, the Navy and MDA have collaborated on plans for a Sea-Based Terminal defensive layer. We are upgrading the Aegis BMD weapon system, and the Navy is upgrading the SM-2 Block IV missile, the goal being to deploy up to 100 interceptors to provide a near-term terminal engagement capability on 18 Aegis BMD ships beginning in 2009.

We are working closely with the Army to begin developing and fielding by 2009 two Terminal High Altitude Area Defense fire units, with the plan to deliver them by 2010 and 2011. THAAD is uniquely designed to intercept targets both inside and outside the Earth's atmosphere. Consisting of 48 interceptors and the associated radars and C2BMC, THAAD will provide transportable terminal protection from short- to medium-range ballistic missiles for our troops and our allies.

Block 3.0

We are requesting about $1.7 billion for FY 2009 to expand the defense of the United States to include limited Iranian long-range threats. Block 3.0 builds on the foundation established by Block 1.0. Block 3.0 provides 14 additional GBIs above what we plan to deploy by 2008, along with two key radars needed for protection of the United States – the upgraded early warning radars at Fylingdales in the United Kingdom and at Thule in Greenland.

This past year we completed operational testing of the Royal Air Force Fylingdales radar and made the radar available to the warfighter for emergency situations. In 2007 we began upgrades to the Thule radar and will continue to integrate it into the system by 2009. Together with the early warning radars in California, Alaska and the United Kingdom, the Thule radar will ensure coverage of the United States against threats from the Middle East. In the Pacific theater, we will continue to enhance additional forward-based X-band radar capabilities in Japan and at other operating locations to meet warfighter needs.

Block 3.0 also provides capabilities to defeat more sophisticated midcourse countermeasures. We are pursuing two parallel and complimentary approaches to counter complex countermeasures: first, more sophisticated sensors and algorithms to discriminate the threat reentry vehicle in the presence of countermeasures; and second, a multiple kill capability to intercept the objects identified by the discrimination systems as potential threat reentry vehicles. Block 3.0 will focus on the first of these approaches. It includes upgrades to the Ground-Based Interceptors, sensors, and the C2BMC system. The full implementation of this approach will be conducted in phases, with the first phase referred to as "Near Term Discrimination" and the second phase as "Improved Discrimination and System Track."

Block 4.0

We are requesting about $720 million for fiscal year 2009 for Block 4.0 fielding, development, and integration. Block 4.0 fields sensors, interceptors, and the C2BMC infrastructure needed to improve protection of the United States and, for the first time,

extend coverage to all European NATO allies vulnerable to long-range ballistic missile attack from Iran. This block focuses on deployment of the midcourse X-band radar, currently located at the Kwajalein test site, to the Czech Republic and the establishment of an interceptor field in Poland, pending agreements with both governments. By devaluing Iran's longer-range missile force, European missile defenses could help dissuade the Iranian government from further investing in ballistic missiles and deter it from using those weapons in a conflict. We believe that the long-range defense assets we are planning to deploy to Central Europe offer the most effective capability for defeating this threat.

The European Midcourse Radar would complement sensor assets deployed in the United Kingdom and Greenland and provide critical midcourse tracking data on threats launched out of the Middle East. The radar also would operate synergistically with the planned forward-based transportable X-band radar, jointly providing early threat detection and discrimination of the reentry vehicles.

A European Interceptor Site will consist of up to 10 interceptors, the two-stage configuration of our flight-proven 3-stage GBI. A 2-stage interceptor has less burn time than the 3-stage version, which allows it to operate within the shorter engagement timelines expected. Nearly all of the components used in the 2-stage interceptor are identical to those already tested and fielded in the 3-stage interceptor, which means modifications required to design, develop and produce a 2-stage variant are minimal. Nor are such modifications unprecedented. In fact, the first 10 Ground-based Midcourse Defense integrated flight tests, conducted between January 1997 and December 2002, successfully utilized a 2-stage variant of the 3-stage Minuteman missile. As we do with

all system elements and components, we have planned a rigorous qualification, integration, ground and flight testing program for the 2-stage interceptor.

Several countries in southern Europe do not face threats from Iranian long-range missiles. Yet these same countries are vulnerable to the shorter-range ballistic missiles currently fielded by Iran and Syria. Mobile system sensors for Aegis BMD, THAAD, and Patriot are designed to be augmented by other sensors, like the European Midcourse Radar, and their interceptors are designed to engage slower short- to medium-range ballistic missiles systems. Together with other NATO missile defense assets, these missile defense forces will protect European countries vulnerable to short- and medium-range ballistic missiles when integrated into the NATO command and control structure.

Block 5.0

We are requesting $835 million for Block 5.0 for FY 2009. This block builds on Block 2.0 to expand the defense of allies and deployed U.S. forces from short- to intermediate-range ballistic missile threats in two theaters. Block 5.0 will increase the number of SM-3 and THAAD interceptors and improve the performance of the Aegis BMD Weapons System and the SM-3 interceptor.

The SM-3 Block IB interceptor, a critical Block 5.0 development effort, will have major modifications to include a much improved seeker and a Throttleable Divert and Attitude Control System (TDACS). When combined with processing upgrades to the Aegis BMD Weapons System, the more capable Block IB interceptor will more readily distinguish between threat reentry vehicles and countermeasures. The Block IB expands the battle space and enables more effective and reliable engagements of more diverse and

longer-range ballistic missiles. This year we look forward to completing design and testing for the two-color seeker and TDACS and commencing the element integration of the SM-3 Block IB missile in 2009.

Block 5.0 includes delivery of 23 SM-3 Block IA interceptors, 53 SM-3 Block IB interceptors, 2 additional THAAD fire units with an additional 48 interceptors, one X-band transportable radar for forward deployment, and the associated C2BMC support.

Development/Operational Testing

Testing under operationally realistic conditions is an important part of maturing the BMDS in all five blocks. We have been fielding test assets in operational configurations in order to conduct increasingly complex and end-to-end tests of the system. Our testing to date has given us confidence in the BMD system's basic design, hit-to-kill effectiveness, and operational capability. While the system is developmental, it is available today to our leadership for activation to meet real world threats.

Our flight tests are increasing in operational realism, limited only by environmental and safety concerns. Each system test builds on knowledge gained from previous tests and adds increasingly challenging objectives. The Director, Operational Test and Evaluation, the Operational Test Agencies, and the warfighting community are very active in all phases of test planning, execution, and post-test analysis. Using criteria established by the war fighter and the Agency's system engineers, all ground and flight tests provide data that we and the operational test community use to anchor our models and simulations and verify system functionality and operational effectiveness.

In 2007 we conducted many system ground and flight tests. Our flight test program for Ground-Based Midcourse Defense, Aegis BMD, and Terminal High Altitude Area Defense confirmed technological progress for short-, medium-, and long-range defensive capabilities. Last year we executed successfully a long-range ground-based intercept, six SM-3 intercepts of separating and unitary targets, and three THAAD intercepts of unitary targets. As of today, we have demonstrated hit-to-kill in 34 of 42 attempts since 2001. Last year alone we successfully intercepted the targets in 10 of 10 attempts.

After a legacy target failure in May 2007, we successfully completed Ground-based Midcourse Defense Flight Test-03a on September 28, 2007. In this test, an operationally configured GBI launched from Vandenberg Air Force Base engaged a threat representative intermediate-range target fired from Kodiak Island, Alaska using sensor information from the operational upgraded early warning radar at Beale AFB in California. Trained crews manning fire control consoles reacted within a specified window under limited-notice launch conditions. This test leveraged fielded hardware and fire control software as well as operational communications, tracking, and reporting paths. The Exo-atmospheric Kill Vehicle successfully collided with the target near the predicted point of impact, destroying it. This was our most operationally realistic, end-to-end test of the long-range defenses to date. Though they were not integrated into the system at the time, the Sea-Based X-band radar and an Aegis BMD ship using its onboard SPY-1 radar also tracked the target and gathered data for post-test analysis.

We also had enormous success with our integrated ground tests, which involve the operational long-range defense elements and employ the actual operational hardware. We test the system end-to-end by simulating engagements. These ground tests, conducted in a lab environment and in the field, involve the wider missile defense system community, to include the National Military Command Center, the Operational Test Agencies, and U.S. Northern Command. They teach us a great deal and give us confidence to move forward with our intercept tests. The most comprehensive to date, these tests demonstrated the ability of the system to execute multiple, simultaneous engagements using operational networks and communications and fielded system elements in different combinations. The war fighter also was able to evaluate tactics, techniques and procedures. In 2008 and 2009 we will continue our integrated ground test campaigns.

We completed five sea-based intercept tests in 2007. In all Aegis BMD tests, we do not notify the ship's crew of the target launch time, forcing crew members to react to a dynamic situation. This past year we successfully used Aegis BMD cruisers and destroyers to engage threat-representative short-range ballistic missiles and medium-range separating targets. We conducted a test with the U.S. Navy involving simultaneous engagements of a short-range ballistic missile and a hostile air target, demonstrating an ability to engage a ballistic missile threat as the ship conducts self-defense operations. In November we simulated a raid attack on an Aegis BMD cruiser using two short-range ballistic missiles. The cruiser destroyed both targets.

The December 2007 test off the coast of Kauai in Hawaii marked the first time an allied Navy ship successfully intercepted a ballistic missile target with the Aegis BMD midcourse engagement capability. The SM-3 successfully intercepted the medium-range separating target in space, verifying the engagement capability of the upgraded Japanese destroyer. It also marked a major milestone in the growing missile defense cooperative relationship between Japan and the United States.

Terminal High Altitude Area Defense completed three intercept flight tests against threat-representative short-range unitary targets in the atmosphere and in space. In addition, the THAAD radar and fire control participated in two Aegis BMD flight tests to demonstrate THAAD-Aegis interoperability. These initial THAAD intercept tests at the Pacific Missile Range Facility in Hawaii demonstrated integrated operation of the system, including radar, launcher, fire control equipment and procedures, and the ability of the interceptor to detect, track and destroy the target. Soldiers of the 6th Air Defense Artillery Brigade stationed at Fort Bliss, Texas operated all THAAD equipment during the tests, which contributed to operational realism.

In 2007 the Missile Defense Agency conducted 25 major tests and successfully met our primary test objectives in 18 of 20 flight tests. In doing so, we used the test ranges available to us today to maximum capacity. These totals include three Patriot tests, two Arrow tests, and the U.S.-Japan cooperative test. Our test plans for 2008 and 2009 will continue to use more complex and realistic scenarios for system-level flight tests and demonstrate interceptor capabilities against more stressing targets.

In 2008 we are planning two system-level long-range intercept tests, and two more in 2009, all of which will push the edge of the envelope in testing complexity. The tests in 2008 will involve targets launched from Kodiak, Alaska and missile defense assets separated by thousands of miles. We are expanding the number of sensors available to cue the system and engage targets. In our next long-range test, we will involve the early warning radar at Beale and the forward-based X-band radar, temporarily sited at Juneau, Alaska. This test also will demonstrate integration of the Sea-Based X-band radar into the sensor support system. The intermediate-range target will have penetration aids. Later in 2008 Ground-based Midcourse Defense will attempt to defeat a longer-range threat-representative target and demonstrate the ability of the SBX to send tracking and discrimination data through Ground-based Midcourse Defense Fire Control and Communications to the Exo-atmospheric Kill Vehicle prior to engagement.

We plan three Aegis BMD intercept tests in 2008 and 2009. In 2008 we will demonstrate an intercept of a unitary, short-range ballistic missile target in the terminal phase of flight using a SM-2 Block IV interceptor. Later this year we will conduct the second Japanese intercept test against a medium-range target warhead. And in 2009 we will conduct an intercept flight test against a medium-range target to demonstrate an expanded battle space.

The first test of THAAD this spring will involve engagement of a separating target low in the atmosphere. In the fall we plan to demonstrate THAAD's salvo-launch capability against a separating target. In late spring 2009 THAAD will engage a complex

separating target in space. And in 2009 we will increase test complexity by demonstrating THAAD's ability to destroy two separating targets in the atmosphere.

In addition to our system flight- and ground-test campaigns, the Missile Defense Agency will continue to participate in Patriot combined developmental/operational tests as well as Air Force Glory Trip flight tests.

Knowledge-Based Capability Development

The proliferation of ballistic missile technologies and systems means we will face unexpected and more challenging threats in the future. We are requesting about $2.5 billion in FY 2009 for capability development work to deliver advanced capabilities that will help ensure America's ballistic missile defense system remains effective and reliable and a major element in our national defense strategy well into this century.

Destroying ballistic missiles in boost phase will deprive the adversary of opportunities to deploy in midcourse multiple reentry vehicles, sub-munitions, and countermeasures, thereby reducing the number of missiles and reentry vehicles having to be countered by our midcourse and terminal defenses. Success in the boost phase will increase the probability we will be successful in defeating an attack in the other defensive phases. As part of this layered defense strategy, we are developing the Airborne Laser (ABL) and Kinetic Energy Interceptors (KEI).

ABL is being developed to destroy ballistic missiles of all ranges. In 2007 the ABL program met all of our knowledge point expectations and cleared the way for the installation of the high-power laser on the aircraft by the end of 2008. We completed in-

flight atmospheric compensation demonstrations and conducted low power systems integration testing, successfully demonstrating ABL's ability to detect, track, target, and engage non-cooperative airborne targets. Next we will integrate the high power systems and gear up for a series of flight tests leading to a full demonstration and lethal shoot-down in 2009 of a threat-representative boosting target.

The KEI program will provide mobile capabilities to intercept ballistic missiles in the boost, ascent or midcourse phases of flight. This multi-platform, multi-payload, rapidly deployable capability could not only extend the reach of the missile defense system, but it also will add another defense layer. In 2007 we completed hypersonic wind tunnel testing of the booster and successfully conducted static firings of the first- and second-stage motors. This year we are focusing on preparations for the 2009 flight test of the KEI booster, which, if successful, will demonstrate we are ready to proceed to intercept testing and integration into the system.

We are pursuing parallel and complementary efforts to counter complex countermeasures. Project Hercules is developing a series of algorithms to exploit physical phenomenology associated with threat reentry vehicles to counter on-the-horizon advanced threats and counter-countermeasures for employment in system sensors, kill vehicles, and C2BMC. The algorithms will improve sensor and weapon element tracking and discrimination via data integration and multi-sensor fusion data integration.

In the years ahead we expect our adversaries to have midcourse countermeasures. The Multiple Kill Vehicle (MKV) program is developing a payload for integration on

midcourse interceptors to address complex countermeasures by identifying and destroying all lethal objects in a cluster using a single interceptor. This past year we delivered the initial models and simulation framework for testing sophisticated battle management algorithms and developed the liquid fuel divert and attitude control system.

Our strategy is to manage all future kill vehicle development under a single program office and acquire MKV payloads using a parallel path approach with two payload providers pursuing different technologies and designs. This strategy will allow us to better leverage industry experience and talent. The MKV approach leverages commonality and modularity of kill vehicle components on various land- and sea-based interceptors, to include KEIs, GBIs, and a Block IIB version of the SM-3. The goal is to demonstrate a multiple kill capability in 2011 through a series of component development and test events.

We are undertaking significant upgrades to the BMD Signal Processor in the Aegis BMD weapons system. Through our cooperative program with Japan, we are upgrading the SM-3 Block I interceptor with the SM-3 Block II to engage longer-range ballistic missiles. This faster interceptor will feature an advanced kinetic warhead with increased seeker sensitivity and divert capability. We also will implement upgrades to the Aegis BMD Weapons System. The first flight test is scheduled for 2012. The Far-Term Sea-Based Terminal program will expand upon the near-term capability provided by the SM-2 Block IV blast-fragmentation interceptor by engaging longer-range threats. This year and next we will define weapons system requirements as we work toward initial fielding as early as 2015.

We are developing the Space Tracking and Surveillance System (STSS) to enable worldwide acquisition and tracking of threat missiles. Sensors on STSS satellites will provide fire control data for engagements of threat reentry vehicles and, when combined with radar data, will provide improved threat object discrimination. In 2008 we will deliver two demonstration satellites scheduled for launch later in the year and a common ground station. We plan to use both targets of opportunity and dedicated targets to demonstrate STSS capabilities from lift-off through midcourse to reentry. The knowledge gained from these demonstrations will guide our decisions on the development of a follow-on space sensor constellation.

I believe the performance of the BMD system could be greatly enhanced someday by an integrated, space-based interceptor layer. Space systems could provide on-demand, near global access to ballistic missile threats, minimizing limitations imposed by geography, absence of strategic warning, and the politics of international basing rights. I would like to begin concept analysis and preparation for small-scale experiments. These experiments would provide real data to answer a number of technical questions and help the leadership make a more informed decision about adding this capability.

We have had to restructure some development activities and cancel others as a result of reductions in our FY 2008 budget. Reductions in funding for the European Site Initiative, STSS, ABL, and MKV programs will result in some schedule delays. Cuts in the system engineering work, including modeling and simulations, undermine our ability to develop and field an integrated system, which requires a collaborative effort by MDA and our industry partners that cuts across many disciplines and specialties. The ability to

do this cross-cutting engineering work will become increasingly important as we move, for example, towards developing common kill vehicles and common interceptors.

I remain deeply concerned about the future threat environment, and consequently believe each one of these efforts is critical to maintaining our defenses in the uncertain years ahead.

SETBACKS IN 2007

With our unprecedented success in 2007 came several setbacks. We experienced a target failure in our first attempt for FTG-03 as mentioned earlier. While this was only the second target failure in 42 flight tests, it was a signal that we needed to revamp our target program, which is underway. We are at a critical juncture in the target program transitioning from the legacy booster motors to the more modern Flexible Target Family, and I intend to make this a high priority in 2008.

In addition, we are investigating a nozzle failure that occurred in the second static firing of the KEI second stage. While investigation is underway, we plan to execute the first booster flight in 2009.

We also experienced some cost growth in the THAAD, Aegis and GMD programs which is being addressed within the overall missile defense portfolio. The THAAD cost growth was due to test delays, additional insensitive munitions testing and its deployment to the Juniper Cobra 09 exercise in Israel. Aegis cost growth was generated from extended work on the SM-3 Third Stage Rocket Motor and the Divert and Attitude Control System. This work also delays the delivery of the Block 1B interceptors by one

year. GMD cost growth was due to the modifications required for the 2-stage version, the additional missile field in Alaska, and repair of the water damage silos.

RETAINING INTEGRATED DECISION AUTHORITY

I would now like to turn to a topic very near and dear to me. I urge the Committee to continue its support of the integrated decision authority that the MDA Director has been given for the missile defense portfolio. As you know, working with the U.S. STRATCOM Commander, I have the ability to propose the evolution of the missile defense system based on all relevant requirements, acquisition, and budget information. This authority was necessary in light of the President's 2002 directive to begin deployment in 2004 of a set of missile defense capabilities that would serve as a starting point for improved and expanded missile defense capabilities later.

I present to you two telling quotes from the 2006 Defense Acquisition Performance Assessment (DAPA) report chartered by the Department.

> *"[T]he budget, acquisition, and requirements processes are not connected organizationally at any level below the Deputy Secretary of Defense. This induces instability and erodes accountability. Segregation of requirements, budget and acquisition processes create barriers to efficient program execution."*

> *"Acquisition programs need to deliver timely products. Our assessment is that the culture of the Department is to strive initially for the 100 percent solution in the*

first article delivered to the field. Further, the "Conspiracy of Hope" causes the Department to consistently underestimate what it would cost to get the 100 percent solution. Therefore, products take tens of years to deliver and cost far more than originally estimated."

Well, the DAPA report could have cited the one place in the Defense Department below the Deputy Secretary where requirements, acquisition, and budget authority comes together—the Missile Defense Agency. This authority has given me the trade space to make a balanced recommendation to the Deputy Secretary that has paid dividends for defense of our homeland, deployed forces, allies, and friends.

MDA has fielded an initial capability consisting of 24 Ground-Based Interceptors; 17 Aegis BMD warships capable of long-range surveillance and tracking, of which 12 are also capable of missile intercepts; 23 Standard Missile-3 interceptors for Aegis BMD warships; 18 SM-2 Block IV interceptors; an upgraded Cobra Dane radar; two upgraded early warning radars; a transportable X-band radar; a command and control, battle management, and communications capability, and a sea-based X-band radar. None of this capability existed as recently as June 2004. This rapid fielding would never have been possible unless I had the integrated decision authority over requirements, acquisition, and budget. I think it is fair to say that this capability would have taken 2 to 3 times longer to field under standard Department practices—if not the "tens of years" cited by DAPA.

Should this integrated decision authority be continued now that we have successfully met the President's injunction to quickly field an initial capability where no capability had previously existed? I would make four key points in favor of retaining this authority.

First, the Director of MDA is in the best position to know the program's progress and challenges. This does not mean that I make decisions in a vacuum. We work closely with the intelligence community, the war fighter, and the Services on the threat, capability needs, and available resources. In addition to the external oversight from your committee and others in Congress and, of course, the Government Accountability Office, I also receive significant Department-level oversight from Under Secretary AT&L, the Office of the Secretary of Defense Comptroller, and the Missile Defense Executive Board. However, it does mean that I have a degree of control and trade space that is not available to the managers of other major defense acquisition programs.

Second, because the ballistic missile threat is always evolving, we need to be as agile as possible in getting the latest capabilities to the war fighter. The integrated requirements, acquisition, and budget authority granted MDA's Director inevitably enables us to deliver a capability more quickly to meet the evolving missile threat.

Third, while some see MDA's flexibilities as undeserved special treatment, others view MDA's integrated decision authority as, in effect, a "test lab" for the Under Secretary of Defense AT&L to examine alternative, creative approaches to acquiring joint capabilities.

Fourth, ballistic missile defense is and always will be the quintessential joint program. No one Service could easily or naturally take responsibility for developing, testing, integrating, and fielding the BMDS. The trade space offered me as portfolio manager of the entire BMD program is considerably wider than it would be if MDA were wedded to one Service or merely an advocate within the Office of the Secretary or joint staff who is trying to negotiate with a myriad of individual program managers protecting their own turf.

On a personal level, I take my stewardship responsibilities very seriously. I will not be in this position forever, and I know how vitally important it is to put my successor in the best position to give the war fighter the capabilities needed to negate the threats to our homeland, deployed forces, allies and friends. The integrated decision authority granted me as MDA Director does just that, and I urge your continued support.

ORGANIZATIONAL REENGINEERING

MDA's reengineering goal is to transform the organization into a single, integrated high-performance team capable of sustaining its development and test successes and maximizing its efficiency and effectiveness in acquiring, fielding, and supporting an integrated, operational BMDS. To accomplish this goal, I have established policies and defined responsibilities for providing qualified matrix support to the program directors/managers (PD/PM) responsible for delivering BMDS capabilities to the COCOMs. Matrixing is an organizational concept that consolidates skills and resources under a functional manager who, in turn, allocates persons and resources among

executing organizations needing these skills. Matrixed support includes such functions as engineering, contracts, business/financial management, cost estimating, acquisition management, logistics, test, safety quality and mission assurance, security, administrative services, information assurance, and international affairs. The matrix management process aims to strengthen PD/PM capabilities by assuring their accessibility to all expertise available to MDA; increasing accountability for quality of functional staff work; and allocating personnel resources according to the Agency's needs.

MDA has established the following objectives to focus the reengineering efforts:

- Implement a full matrix management construct to strengthen functional responsibilities at both the BMDS and element level of program execution
- Establish key new or restructured organizations and centers to strengthen the implementation of an integrated system
- Establish key knowledge centers to focus MDA resources on and within critical mission technical areas[7]
- Complete an organizational alignment assessment to improve agency efficiency and effectiveness through elimination of redundancy of functions and infrastructure, multiple layers of management and non-critical functions, and a verification that resources are aligned with MDA priorities

[7] Knowledge centers for Interceptors, C2BMC, and Sensors were established in January 2008. Centers for Space and Directed Energy will be established later in 2008.

- Relocate MDA offices from the National Capital Region (NCR) to Huntsville and selected other locations to realize the benefits of a centralized control/decentralized execution strategy, facilitate leveraging all resources available in MDA and propagate better cross-flow of expertise and information.

BASE REALIGNMENT AND CLOSURE (BRAC)

The 2005 Defense Base Realignment and Closure Commission approved recommendations directing the realignment of several MDA directorates from the NCR to government facilities at Fort Belvoir, Virginia, and the Redstone Arsenal in Huntsville, Alabama. Specifically, a Headquarters Command Center for MDA will be located at Fort Belvoir, while most other MDA functions will be realigned to Redstone Arsenal. The transfer of government and contractor personnel from the NCR is already in progress; by the end of 2008, we will have transitioned some 1,100 personnel positions to the Arsenal. Also, construction will start in FY 08 on additional facilities to be opened in two phases in FY 2010 and FY 2011. Construction of the MDA Headquarters Command Center (HQCC) is also scheduled to begin in late FY 2008, with occupancy in FY 2010.

MISSILE DEFENSE AGENCY ENGINEERING AND SUPPORT SERVICES

Consistent with the Agency's reengineering, MDA has undertaken the task of improving how it procures contractor support services (CSS). The objectives of the change are to improve oversight, enable matrix management so the Agency can benefit more from cross-flow of information among different offices, enhance efficiency and

transparency, and more accurately account for our cost of doing business. I have determined that the best path forward is to develop a new Agency-wide procurement; the designation for this procurement is Missile Defense Agency Engineering and Support Services (MiDAESS).

We currently receive contractor support through a variety of different avenues, such as contracts, other government agencies, and General Services Administration orders. Over the next few years, the MiDAESS procurement will allow us to consolidate the CSS into a more efficient procurement, focused on the primary areas of technical, administrative, financial, and other support that our agency requires.

Beginning in March 2007, we began discussions with our industry partners regarding MiDAESS. Throughout 2007, MDA has received industry feedback and continues to refine the details of how competition and contracting within MiDAESS will function. We plan to begin initial contract awards under MiDAESS in 2008.

CLOSING

Mr. Chairman and members of the Committee, in closing, I again want to thank you for your strong support of our program. Since 2002 we have achieved dramatic program efficiencies and effectiveness because we have been able to consolidate missile defense expertise and integrate all missile defense elements into a single, synergistic system. We have made tremendous progress deploying missile defenses to protect our homeland, our troops deployed and our allies and friends. I also believe we have the right program in place to address more advanced threats we may face in the future.

Our investment in missile defense is significant, but our expenditures would pale in comparison to the overwhelming price this nation could pay from a single missile impacting America or one of our allies. We need your continued support to carry on the tough engineering and integration task of developing and enhancing worldwide ballistic missile defenses.

This concludes my statement. I look forward to your questions.

Mr. DICKS. General Campbell.

GENERAL CAMPBELL'S OPENING STATEMENT

General CAMPBELL. Mr. Chairman, Congressman Young, distinguished members of the Committee, thank you for your ongoing support of our warfighters and for your invitation to speak before you today. Today, I will primarily address the ballistic missile defense program from an operator's perspective. I intend to focus my remarks on the roles and the contributions the warfighters continue to play in the ballistic missile defense development testing process, and provide an assessment of missile defense capabilities to meet the present threat. I will also briefly address the Army's integrated air and missile defense construct. As the commander of the Joint Functional Component Command for Integrated Missile Defense, a subordinated command of the U.S. Strategic Command, I serve as the joint user representative working closely with the Missile Defense Agency, the services, and the various combatant commanders to ensure that our national goals of developing, testing, and deploying an integrated missile defense system are met in an operationally sound configuration.

From my role as the user's advocate, I am able to report with confidence that the combatant commander's input into the ballistic missile defense system continues to expand. Last year, I outlined a process established by U.S. Strategic Command named the Warfighter Involvement Process. As a result of the continued maturity of this program, we are seeing substantial warfighter requested modifications incorporated into the ballistic missile defense system. For example, warfighter input led to the Simultaneous Test and Operations capability for the ground-based missile-defense system. This capability allows the users to maintain the system in an operational status and conduct essential training while the Missile Defense Agency can continue with testing activity. Warfighter input has also led to dozens of software modification enhancements to the command and control system. Additional warfighter-initiated modifications will continue this year.

From a program and budget development standpoint, the Missile Defense Agency is recognizing the user's input and including the operator's desired system enhancements and modifications in the system development program. As we gain more hands-on experience in understanding of the systems' behavior, we are simultaneously improving our processes to capture the combatant commanders' desired changes to the fielded elements and the operational capabilities they need in the near and mid-term. We are working with the Missile Defense Agency to ensure those recommendations we make for changes to the systems' development program are adequately addressed in their programmatic decisions.

The operators have remained fully integrated in the Missile Defense Agency's test program. Our involvement spans from the development of test objectives to operators sitting at the consoles and executing the engagements. Involvement in the testing program allows us to gain more insight into the systems. And with the success we have seen, our confidence continues to grow in the elements we are currently operating in today. The flight tests attract the most attention, but they are just one aspect of a comprehensive testing

campaign. Our operators participate in more frequent ground testing hardware-in-the-loop testing. These ground and hardware-in-the-loop tests benefit the warfighter, the Missile Defense Agency, as well as the operational testing agencies. Warfighters are able to identify more effective methods for employing the systems and assist the testing cadre and developers in identifying problems long before we move to expensive flight tests. These tests, in turn, influence further program developments. The point is simply that the testing of these systems is a community effort.

Today there are more than 20 countries with ballistic missile technology, and the preponderance of their investment is in the short- and medium-range ballistic missile capability. Our operational commanders clearly recognize the threat we face today from both short- and medium-range ballistic missiles. Today we cannot meet all of the combatant commanders' needs. We work in close coordination with the Missile Defense Agency to ensure that missile defense investment portfolio addresses the warfighter needs for the near-term threats as well as for the mid- to far-term threats from these threat countries. Maintaining a balanced investment portfolio is critical. Although we understand the inventories of short- and medium-range missiles today are significant, we cannot lose sight of the qualitative improvements nations are making to their ballistic missile defense systems. Our investments for both the near and far term must be informed by both the quantitative and qualitative advancements our adversaries are making in their programs. The users are conducting analyses and presenting the Agency with recommendations for adjustments to the development program.

For example, a recent study not yet approved suggests the need for additional THAAD and SM–3 missile inventory to handle today's short- and medium-range ballistic missile threat. Ultimately, these findings will be presented to the Agency and DOD for a program decision. In summary, we certainly recognize the requirement to address not only the threat of today, but also the need to develop new technologies to deter potential adversaries from their continued investment in more advanced ballistic missile technologies. Given the resource realities, I believe the systems developer has struck a good balance.

Turning to my role as the Army's senior commander for missile defense, let me briefly outline our priorities. Our top priority within the Army air and missile defense community is the continued development of the Integrated Air and Missile Defense System of Systems. This integrated system will link systems such that we can improve our capability to execute terminal phase ballistic missile defense, cruise missile defense, and force protection. Our objective is to network the Army's air and missile defense systems, such as PATRIOT, THAAD, and MEADS so that we can leverage all the sensors and shooters we deploy on the battlefield and achieve a greater capability against an array of threat systems.

Mr. Chairman, the Army is a member of the joint team fighting an adaptive enemy, while transforming to meet future threats. We will continue developing and fielding an integrated missile defense for our Nation, for our deployed forces, and for our friends and allies. I appreciate the opportunity to speak on these important matters, ask that my written statement be submitted for the record,

and look forward to addressing any questions you or the members of the Committee may have.

Mr. DICKS. Without objection, all the statements will be made part of the record.

Mr. Francis from the GAO.

OPENING STATEMENT OF MR. PAUL FRANCIS

Mr. FRANCIS. Thank you, Mr. Chairman, Mr. Young, members of the subcommittee. I appreciate your inviting me here this morning to participate in the discussion of missile defense. I am not here as a technical expert or as an operator like General Campbell. I am the auditor. And we are required by law every year to report on the progress MDA has been making on the program. And the material I am going to present today comes from a draft report that we have over at the Department right now for comment. And that report will be issued in March 15th of this year. Some of the things I am going to say this morning are similar to what I had said last year, but I think there is some important new developments regarding oversight. And I think I am going to spend a little time on those as well.

First, I am going to talk about Block 2006 performance and cost. Block 2006 is the second increment of missile defense, and it was completed in December 2007. And under Block 2006, a number of additional assets were fielded. For example, more ground-based interceptors, more SM–3 missiles, more Aegis ships upgraded, and more radars fielded and upgraded. While there were a lot more assets fielded, not quite as many as were originally anticipated. In the area of testing, most test objectives I think for the block were achieved. There were some tests that were delayed. And we will have to pick them up probably in the next year or so.

We weren't able to assess the overall performance of the ballistic missile system against its overall objectives because testing done to date is still not quite enough to anchor the models and simulations that are used to project that performance. And there is not yet enough realism in the testing to enable the director of operational testing and evaluation to render a determination as to operational suitability and effectiveness, so I could not quite address that.

In the area of cost, the cost of the block increased by $1 billion. And that cost was accommodated by deferring some work out to the future and moving THAAD into a different block of missile defense. Deferring work does create some accountability problems in that work that is deferred is no longer counted against Block 2006. But the budgets did anticipate that work being done. So to the extent that work is deferred, the link between budget and work done does get weakened. And then we are not able to do a total cost estimate for Block 2006 because some of the work has moved out.

So the bottom line on the Block 2006, more capability fielded, not quite as much as we thought, and somewhat higher cost. Let me move now to the oversight issue. As the chairman noted, that MDA does have unprecedented flexibility in its ability to manage the program. And some of these things or indications of flexibility are the ability to change goals, they can defer work, missile defense can concurrently test and field assets, and it can produce end items and field end items with research and development moneys.

In addition, the decisions that missile defense makes do not have to get approved by anyone else in the Department of Defense. Other statutes that apply to major weapons system programs do not necessarily apply to missile defense. So for example, having a firm cost schedule and performance baseline is not a requirement for missile defense. Tracking unit costs vis-a-vis Nunn-McCurdy is not required. Independent cost estimates are not required, nor is independent operational test and evaluation.

Now, these flexibilities were given consciously to MDA, and they enable the Agency to be very agile with its decision-making. And I would have to say that Blocks 2004 and 2006 were fielded more quickly as a result of having this flexibility. It does create some challenges for oversight in that the decisions of MDA are not always as transparent as other programs. And it is more difficult to hold the program accountable for its original results. But this is an area where I think some real improvements are underway in the area of oversight. The new block structure that the chairman and General Obering mentioned, I think, is going to be an improvement over the previous one. It is more aligned with missions. The quantity and performance goals in the blocks will be baselined. MDA will track selected unit costs and report on substantial variances. And MDA will no longer defer work out of block. So that is going to improve transparency and accountability. There is a new Missile Defense Executive Board that has been set up. And I think it is more substantive than its predecessors, has higher level individuals on it, and I think a pretty strong charter for providing advice and recommendations on investments, strategies, and priorities. It does not quite have all of the powers that a defense acquisition board would have, for example. It won't necessarily approve decisions that MDA makes.

And the final area, I think, of improvement and oversight comes with a congressional direction that missile defense is to start using procurement funds to pay for operational assets. We think this will improve accountability significantly, because when you use procurement funds, you have to fully pay for an asset in the year that you start requesting money. And that is going to provide a lot of visibility over unit costs. And it is actually cheaper when you fully fund.

And I think fiscal year 2009 was going to be the first year that Missile Defense was going to start requesting procurement funds. And I think they were going to go for THAADs firing units 3 and 4. And I have seen the budget that those firing units have been deferred to fiscal year 2010. So at least in my reading of the budget I don't see procurement funds requested yet in '09.

I will just wrap up with there is a few things that we think MDA can do to further improve oversight of the program. One is while certain aspects of blocks will be baselined, the total cost of the blocks will not be baselined or independently verified. We think that they should be done. Now, I think there needs to be—there is some blocks that can reach so far in the future there needs to be a reasonable discussion about what you can do in estimating costs. I mean you can't be Draconian about something that is that far in the future. But I think a discussion can be had.

But other blocks are nearer term, and I think those costs could be estimated. Second has to do with the unit costs that MDA is going to report on. I think MDA will need to tell the Congress, or you will have to tell them what assets you want to track unit costs on, what criteria you will use to say what is a significant cost increase, and what vehicle MDA will use to tell you about the variances it is going to report.

And the final area, I think, is in testing evaluation. And there has been quite a bit done to make tests more operational, more realistic, but we think more needs to be done there. As I mentioned earlier, MDA's testing is fairly concurrent with fielding. And it does not provide for separate operational testing. Now ideally, we would like to see less concurrency there and more operational testing done. But short of that, we have to accept the fact then that the testing MDA does is going to serve two purposes: One is developmental. It has to show that the design of the system functions as desired. But also operational. There has to be enough information, I believe, to allow the director of operational testing and evaluation to render a determination of suitability and effectiveness.

And also the tests have to be robust enough for the models and simulations to be anchored so overall performance can be projected. So we think more work can be done there. Mr. Chairman, that concludes my remarks. I would be glad to answer any questions.

Mr. DICKS. Thank you very much.

MULTIPLE WARHEAD TESTING

Mr. DICKS. One of the things that I remember from a few years ago was when we talked about the robustness of the testing was a multiple warhead test, where they would launch and we would operate against multiple warheads. Have we done that yet? Has that been attempted?

General OBERING. Yes, sir. We launched on our Aegis program this past November, we launched two targets that were in the air simultaneously. And we intercepted them with two interceptors in the air simultaneously. So that demonstrated a multiple target capability and multiple interceptor in flight at the same time. In addition, on long range flight tests that we accomplished in September, the way that the target presented itself to the kill vehicle, the kill vehicle when it opened its eyes it actually saw multiple objects. It saw the warhead, it saw the third stage of that rocket, it saw debris from the separation that looks like very small—could be warheads. So we had to go through—it had to vote on what was the warhead and what was not. And I can show you video that shows it going through that voting routine. And it selected the warhead and hit that. So we feel very confident we are on a very good, strong path there with respect to that particular capability.

Mr. DICKS. Well, as somebody who was here on this Committee when President Reagan announced that we are going to have this capability, I think for me at least, this is one of the first times I really felt that we now have a deployed capability, that there is something real with Fort Greely and Vandenberg and all the Aegis ships, that we now have a real capability.

Now you both mentioned, though, that even with this capability that we have, that it is not enough to meet what the commanders

need, both in terms of short-range and long-range missile defense. How long will it take us before we will have a what you consider a robust capability for this? And General Campbell, if you want to answer this after General Obering.

SHORT-RANGE AND LONG-RANGE MISSILE DEFENSE CAPABILITY

General OBERING. Sir, if you look at what we have loaded in our budget for after the 2013 time frame, we will have a total of 54 of the long range interceptors. Forty-four of those will be based in the United States, and hopefully 10 in Europe and Poland. We would have about 133 of the sea-based interceptors. We would have 18 ships from which we could fire those interceptors. We would have up to three THAAD firing units, with about 80-plus missiles associated with them. So that would be a good start. Now, one of the things I think General Campbell will tell you is they recently conducted a study as to how much more do we need in terms of force structure, what they call the Joint Capability Mix Study. And we have committed to addressing that increase in numbers. It will roughly double the production rates for the THAAD and for the Aegis such that we can hopefully get to the numbers that they need to get to by the 2015 time frame. So that is what we would intend to pursue as part of our POM 10. And Kevin, if you want to interject.

General CAMPBELL. I think if you just add up pure numbers, if we look at threat countries we are never going to be in a one-on-one state. So what we do, in addition to looking at how many missiles do we need, we look at our offensive capability, we look at intelligence surveillance and reconnaissance and other means of attacking their systems. So it is a total solution. And I think what General——

GLOBAL STRIKE

Mr. DICKS. Which I think is critical. Deterrence is still a very important capability. Credible deterrence is something that we do have.

General CAMPBELL. Yes, sir. Exactly. And I think if you would listen to the commander of Strategic Command, he would tell you that he is interested in having a prompt global strike so that we can address some of these emerging threats. So it is a total package. And again, we will never be at the point where it is one on one or we have the majority of interceptors in our favor. But we will have offensive forces.

Mr. DICKS. When this thing was first started, we talked a lot about an accidental launch or two, that kind of a scenario. This system we have now would be capable against that kind of a threat, would it not?

General OBERING. Yes, sir.

General CAMPBELL. Yes, sir. Absolutely.

General OBERING. In fact, we could handle a fairly, I don't want to say substantial, but certainly an attack by let's say less than a dozen missiles from North Korea, the system would be able to handle that. And we do not believe they have those right now.

Mr. DICKS. Mr. Young.

SATELLITE SHOOT-DOWN

Mr. YOUNG. What do we say to the friendly countries that have accused us of using the shoot-down of the satellite as a coverup for some scurrilous testing for anti-satellite programs?

So we had to make all those capabilities. But to answer our critics, and I am sure—I am headed to Europe later this week, and I am sure I will be asked, we stated all along that while our system had an inherent capability, it was not designed for that, and we would have to make changes to accomplish this. And frankly, we are much more concerned about the ballistic missile threat from Iran primarily, and North Korea, which is what the system is designed for.

EUROPEAN SITE

Mr. YOUNG. I know that people all over the world were really impressed with what you were able to accomplish, and especially for those that recognized the tremendous technical challenges that you had to face. So congratulations again. I wanted to ask about the deployment of radar and interceptor sites in Europe. And I understand that Poland has now made a requirement that if we are going to put anything in Poland, we are going to have to agree to modernize their military. Is that a new requirement on the part of Poland, or is that something we have been dealing with all along?

General OBERING. Sir, it is a request that the Polish Government made of us as part of the missile defense negotiations. There had been talk earlier—there were always talk in the back of the negotiations about how are you going to protect this site, especially concern about the fact that they were exposing themselves, as they described it, to the Russians, and some other things. So there was always that talk in the background. But as the negotiations proceeded, and I think a key breakthrough came when their Foreign Minister, Radik Sikorski, came over several weeks ago and met with Secretary Rice, and they were able to come to an accommodation that said, look, Poland is part of NATO, and they have to remember that.

So the protection of NATO is part of the Article 5 protection of NATO. And I know that that was the gist of the discussion. We know we have to protect these sites, and there has to be defenses made. And so we agreed to separate that from the missile defense discussions. And then that discussion will take place in a separate venue.

Mr. YOUNG. How serious is the Russian objection?

General OBERING. Sir, when we pulled out of the 1972 Antiballistic Missile Treaty in 2002, the Russians didn't say a word, not a word. And in fact, we were in cooperative development agreements with them in terms of cooperation through the missile defense exercises and other things. When I announced to the Russians, specifically General Brzezinski, back in 2003 and 2004 time frame that we had intended to expand our coverage into Europe because we were very concerned about what we saw going on in Iran, I did not get any major pushback.

It was not until we announced it was Poland and the Czech Republic that Mr. Putin raised the flag and started making the objections. I will tell you, and I have been involved, I was in the two-plus-two discussions in Moscow in October, I have been involved in the discussions with the Russians, and in fact, just my chief engineer was with the Russians last week in Budapest, they do not have a technical objection anymore. They know that their argument about this changes the strategic balance between the U.S. and Russia is just not valid. And that has played itself out on the NATO stage. It is all geopolitical. That is all it is. And I say all it is, that is still significant, but that is what it has boiled down to for the Russians.

We have gone to extreme measures in my mind to address that. We stated that we would jointly monitor the threat, meaning that we would be willing to have Russians observe what we are observing with respect to the Iranian threat development. And would they allow us to have folks at their sites, for example, in Karbala in Azerbaijan. We talked about sharing of data between our radar systems and their radar systems.

And we talked about, I would propose that we build out these sites, we integrate them and test them, and then we would not bring them to an operational status unless the threat emerged from Iran. And that argument, which I made to the NATO Council and to the NATO-Russia Council, went over very well. And our allies very much supported that. But Russia still has not moved off the top dead center to try to jump into this cooperation.

Mr. YOUNG. Well, congratulations, again, on the very exciting shoot-down of the satellite. That was good news. Thank you, Mr. Chairman.

General OBERING. Thank you.

SATELLITE SHOOT-DOWN—FUEL TANK

Mr. DICKS. I also think, I don't know if you mentioned this, but the hydrazine was frozen. This was another aspect of this.

General OBERING. Yes, sir. What was so much concern here is that the hydrazine was solid as a rock. The whole space craft was dead. And they had no communication with it whatsoever. And so we did everything we could to try to understand and gain knowledge about it by imaging it and that type of thing with our radars. And of course, we did not know where it was going to come back in. We had no knowledge. And so but we were able to confirm with three different phenomenologies the fact that we did destroy the hydrazine tank. So we are very confident of that.

Mr. DICKS. We were just talking about the fact that you had to—didn't you have to get the satellite warmed up a little bit?

Mr. DICKS. Mr. Moran.

SPACE TEST BED

Mr. MORAN. Thank you, Mr. Chairman. There are a number of issues. I will try to touch on some that might be less likely to be asked. The space test bed, the Congress eliminated that program in the last year, and yet you are asking for new money in this

year's budget for it. Can you tell us why, when the Congress removed all the funding for the activity last fiscal year, you are coming at it again? Is it just quixotic or masochistic or programmatic?

General OBERING. Probably a little bit of all three, sir. It is because we do feel strongly that—first of all, we think that this country needs to look ahead. We cannot always be looking in the present, and we have to continue to look ahead. And we think it is important that as you have the debate on Capitol Hill here as to where this Nation goes with respect to its defense strategy, that that debate be informed. And so we were just proposing to have experimentation so that we could understand—you know, we may be having a false debate. We may be thinking we can build a capability that, in fact, we cannot because it is technically not achievable. So that was the purpose behind it.

Mr. MORAN. All right. That is a good answer.

Mr. DICKS. Would the gentlemen yield for just a second?

Mr. MORAN. Sure.

Mr. DICKS. Tell us a little about the space test bed again.

Mr. MORAN. Take your time, because this doesn't come out of my allocation.

Mr. DICKS. It does not. An unlimited reservoir.

General OBERING. There are a lot of unanswered questions as to whether you could actually accomplish an intercept from space. By the way, just to clarify, we intercept in space all the time. That is where we live. Whenever you engage an ICBM, or an intermediate-range ballistic missile, or a medium-range ballistic missile, or even a short-range ballistic missile in the mid-course phase, that phase is in space, whether you are at 80 kilometers or 380 kilometers.

So we live in space already with our intercepts. But there is an advantage to having a space-based interceptor that would have the flexibility and mobility and global coverage, so to speak, so that you could address emerging threats where you had not anticipated them from before. Now, but there is, like I said, there are questions about this.

First of all, there is long-term storage of propellant on space. What is the command and control concept? Could you actually do the seeking and the sensing that you need from looking down in terms of boosting missiles or for a mid-course intercept. A lot of questions. So we were trying to understand what is possible, what is not possible so that we can, again, inform this debate as we move to the future. Because I do believe that first of all, a lot of people do not realize it, but when they swipe their credit card at the gas station, that is typically through a satellite. When you use your credit card at WalMart, that is typically through a satellite. So we rely on space very heavily. And we are a space-faring nation. And historically if you look back, nations that do not protect themselves, especially their lines of communication that they depend upon do so at their peril. So I think it is important that we continue this experimentation.

Mr. DICKS. Thank you, Mr. Moran.

THAAD FIRE UNITS

Mr. MORAN. Thank you, Mr. Chairman. I thank you for that answer. I actually agree with you. I do think that is an important

area for research in particular. And so it would be helpful for you to keep the Committee informed, assuming that the Committee does not try to eliminate it again. But again, looking for inconsistencies, the Congress allowed your agency to continue to use research and development funds in fiscal year 2009 to incrementally fund previously approved missile defense assets, and we expected that you would continue in other words procurement, spending procurement funds for the THAAD.

And—but in this budget, there is no money for procurement for the THAAD fire units or the Aegis BMD, SM–3 1A missiles. And the 2008 National Defense Authorization Act required it, and yet there is no procurement funding in this budget. So maybe you could clarify that.

General OBERING. Sir, there is a couple issues. The first one was in terms of the THAAD, the procurement—I think the direction was after the first two fire units that we procured with RDT&E, the next two, 3 and 4, that was delayed because of cost growth in the program that I mentioned earlier. We delayed the delivery of those units. But more importantly, by the time that we were able to build a budget, the ability for us to be able to generate the procurement program elements (PEs), which is not done by us, it is done by the comptroller for the Department, it got to be a bridge too far in being able to do that for this budget. So our intent is that we would package this for the 2010 proposal in terms of what would be procurement in the RDT&E.

Mr. MORAN. So that was a matter of timing?

General OBERING. Yes, sir. It was awfully late when we got the direction. And we already built the budget by then.

GROUND-BASED MIDCOURSE DEFENSE SYSTEM

Mr. MORAN. All right. Well, that explains it. I wanted to ask about—and I guess this would go to you, too, General, the Ground-Based Midcourse Defense System has a rudimentary capability, we are told, to defend U.S. citizens against a limited ballistic missile attack. Could you give us your assessment of the training and personnel readiness to use such a system in defeating a limited ballistic missile attack against U.S. citizens?

General OBERING. Yes, sir. And Kevin probably could—General Campbell could probably step in here. My view of the training and readiness from a manpower personnel perspective is it is very, very good. The operators know what they are doing. They know how to operate the system. We test that in a series of demonstrations, readiness demonstrations as well as war games and simulation. When we say that we handle a rudimentary capability, what we are talking about is we can handle a limited attack.

And we are going to fly against those. We have flown against them in the past, and we are going to fly against them in our next flight test for the long-range system. What I am talking about is when you get into very complex countermeasures, and I can't go into that level of detail here, but things that really could begin to fool the radar and the kill vehicles. That is when we need a combination of the very powerful algorithms that we are building to

net our sensors together and the Multiple Kill Vehicle capability so that we basically have a shotgun effect on each one of these interceptors. And that is what we are talking about.

Mr. MORAN. That is good. Could I ask one other quick one?

Mr. DICKS. Sure.

ISRAEL MISSILE DEFENSE PROGRAM

Mr. MORAN. Thank you, Mr. Chairman. Israel is currently developing its own program to focus on the same kind of threat that the THAAD currently defends against, and I have heard partially with our funds, but they say that the U.S. has not shared sufficient information as to the capabilities of THAAD, and so that is why they need their own program. Would you explain any legitimate concerns that would prevent the U.S. from disclosing such information? And if so, what would those concerns be?

Mr. MORAN. Put one of our missile defense——

General OBERING. Yes, sir.

Mr. MORAN. Similar to the way we are putting one in Poland and Czechoslovakia?

General OBERING. Well, no, this is temporary, and it is part of an exercise. We do this all the time in other areas.

Mr. MORAN. So it is more mobile. It is not a permanent facility, as it is in Europe.

STANDARD MISSILE–3

General OBERING. Right. And I have had some success in convincing them that they need to look at some of our capabilities, that they could use them, for example, our Standard Missile–3 capability and how we could land base that. That would be very powerful for the Israelis. And we are working through the nondisclosure policy, which we do not control, but we have to go through that within the building to make sure that any system technology can be protected, or at least protected long enough so that it is not a threat to the United States. So we are working through that right now. But we do not need to be funding a multi-billion dollar interceptor development program that we end up funding quite a bit of when we have capabilities like THAAD and SM–3 that could suffice for that.

Mr. MORAN. So it is true, we are actually, at least partly or in whole, funding their development of an alternative missile defense system comparable to the one THAAD we already have.

General OBERING. That is not my intent to do that.

Mr. MORAN. I understand. But that is, in fact, what is happening. Thank you. Thank you, Mr. Chairman.

Mr. DICKS. Mr. Hobson.

EUROPEAN SITE AND NATO

Mr. HOBSON. Thank you, Mr. Chairman. Gentlemen, thank you for being here. I have a couple of problems. It looks to me like in the European thing, here we go again. We are going to wind up paying for it. Europeans are not going to pay for it. NATO is not going to pay for it. We are dealing kind of outside of, inside of

NATO as we go deal with one NATO country or two. They are not really excited about it. But again, we wind up holding the bag protecting Europe when they won't protect themselves. I have great frustrations with them right now in Afghanistan because they are not playing their role the way they should. And I do not understand why we keep doing this.

This is part of one long question, but why not use the SM–3 Block IIA missile that is under development rather than doing this? And why do we not get NATO more involved in what we are doing if we are going to be defending them?

General OBERING. Okay, sir. First of all, let's go to the solution as to why did we select 10 interceptors in Poland and radar Czech Republic? Why not used the sea-based capabilities? Two reasons primarily. One, the sea-based is not going to be there for several years. We would not be able to deploy that until probably 2016 or beyond. That is a major development that we are just now kicking off. So there is no guarantee that that missile is going to be available. In addition, it will cost more than the 10 interceptors that we are talking about in Poland and the radar in Czech Republic and the forward deployable radar, it is about double the price because of where you would have to put the ship locations.

Let me give you an example. The interceptors that we have in Alaska and California, of which we would have a two-stage version for Poland, is about 60 feet long. It is about 55 inches wide. It is a very big interceptor. It has a lot of capability. You need that when you are going against an ICBM. We would not have had, for example, from a Delta, what we call a capability to engage a threat, we would not have had the same issue with the GBI that we have with these used on the satellite shoot-down because it is capable of intercepting those speeds of targets. Now, if I could go back, the SM–3 Block IIA missile is 21 inches. So it is less than half the diameter, and it is only about 18 feet long. So there is a size difference here that matters in terms of its ability to deal with the threats.

So consequently, you have a much more reduced defended area. Even if we wanted to use the sea-based SM–3 Block IIA, we would still need the radars in the Czech Republic, and much more forward deployed in Southeastern Europe or the Caspian. You have to have those or the SM–3 does not have a chance either of being able to provide a defended area of significant coverage to even be an alternative. So when you go through the calculations, it is more expensive, there is no guarantee it is going to be there. The missile that we are proposing for Poland, the two-stage version of the three-stage we are flying today is a very minor change, it is less than a $15 million modification to those interceptors to be able to make them into a two-stage version.

So it was a matter of programmatics in terms of convenience and the most cost-effective. Now, to your other point about NATO, we are engaged with NATO. I have briefed them probably six or seven times, the North Atlantic Council, we are taking our system, our command and control and battle management system, and it will be integrated with the NATO Air Command and Control System, NATO ACCS, that will form the backbone of their NATO Active Layered Theater Missile Defense Program. So we are making

plans, in fact, we are going to have a demonstration in June to pass radar data back and forth between the two systems.

Mr. HOBSON. But who is going to pay?

General OBERING. We are paying for the interceptors in Poland, we are paying for the radar in the Czech Republic, and the forward deployable radar. Now, what do we gain from this? First of all, we gain defense of our forces in the region, of which there is substantial number, against this growing Iranian threat. We also are benefitting because we are able to cover the radars in Fylingdales and Thule, Greenland, which also provides protection for the United States homeland against Iranian attack, and it gives us a third interceptor site from which we can protect the United States as well.

The coverage from Iran extends all the way for the majority of the continental United States. So those are the benefits that we are receiving from this arrangement. We are working with NATO, and we intend to have this integrated within the NATO architecture such that we can take advantage of NATO radars and they can take advantage of our radars.

Mr. HOBSON. I bet we will end up paying for all of it. That is the problem I have. Let me ask one other thing. The Russians offered—I mean, it is interesting, you say to me we are willing to have the Russians come in and be on our site, and we are willing to exchange information with them. The Russians offered that to us in doing our thing. And I do not understand what the Russians offered to do as an alternative to our situation. We turned that down. Would you explain that to the Committee?

General OBERING. Yes, sir. They never offered to participate in a what we call a joint regional architecture, which is what we would like to do. They never did. What they said was they would offer us data from their radar in Quubala to show that the Iranians do not have the ability to be able to strike Europe or he United States.

EUROPEAN SITE—JOINT OPERATION

Mr. HOBSON. They never offered you a joint operational situation as you offered them?

General OBERING. No, sir. No, sir. Not to where we would actually have set up a joint regional architecture where we share data with them, they share data with us, we actually plug our systems together. No, sir, they never did that. And it is very frustrating with the Russians.

Mr. HOBSON. They normally are.

General OBERING. There was a launch in November that occurred a day before the Russian talks here in Washington.

A 2,000-kilometer missile which one of the Russian experts even admitted that if they had gone that far, they had the ability to go much farther. And when we were meeting with them here in Washington, they refused to acknowledge—at the beginning of the talks, they refused to acknowledge they had even flown the thing. And by the end of the talks they said, well, yeah, we know they flew it, but we were not going to tell you. There is a lot of disingenuousness between the Russians and where we are right now.

Mr. HOBSON. Thank you, sir.

Mr. DICKS. Ms. Kaptur is recognized.

MISSILE DEFENSE CAPABILITIES

Ms. KAPTUR. Thank you, Mr. Chairman. Welcome, gentlemen. If I were to ask you in the offensive missile capability for various ranges, what are our most dependable missiles, how would you answer that?

General OBERING. Offensive?

Ms. KAPTUR. Offensive. I know you are defensive, but I am just asking. If you were to pick your workhorse missiles, what would they be?

General CAMPBELL. I do not know if I am qualified to answer that. I have some time at U.S. Strategic Command, but if you look at the operational readiness rates of our ICBM force and our submarine force, they are extraordinarily high.

Ms. KAPTUR. What about the Harpoon?

General CAMPBELL. I do not know. I would have to get back to you, ma'am.

[The information follows:]

Harpoon is an all weather, over-the-horizon, anti-ship missile system. The missile is capable of being launched from Ticonderoga Class Cruisers, flight one and two Arleigh Burke Class Destroyers, F/A–18 aircraft and P–3 aircraft. The Harpoon weapon system, a longtime venerable workhorse for the Navy, is currently being upgraded to a Block III configuration. The Harpoon Block III program improves the surface warfare mission area with data link and GPS capabilities. The additional capabilities further increase Harpoon's accuracy, target selectivity and provide for in-flight target updates. Through the Department's foreign military sales program, approximately 30 foreign nations possess earlier versions of the Harpoon missile system.

Ms. KAPTUR. Offense, I was just questioning. Okay. So then on the defensive side, since this is the largest research program at the Department of Defense, do we have any capability now?

General OBERING. Yes, ma'am. We do have. We have the capability on very short notice to activate the system. We have done so many times in the past. We can shoot down a missile launched at the United States from North Korea. We can destroy that weapon. And we are confident that we can do that.

SEA-BASED CAPABILITY

Ms. KAPTUR. From a sea-based capability?

General OBERING. No, a land-based capability for a long-range missile. That is the only capability we have today. The sea-based would be capable of shooting down the shorter range missiles. Let me give you an example. When the North Koreans launched the seven missiles they did in the summer of 2006, they had a very long-range weapon, the Taepo Dong 2, which was multi-stage, ICBM-capable, which they did not tell us what was on top of it, they did not tell us anything. And that system, had that been a threat to the United States, we could have destroyed that with the missiles, the interceptors that we have put in Alaska and California. There were shorter-range missiles, though, that were launched the day after.

And you may hear them call an extended-range Scud, a No Dong, that type of thing. These are missiles that are within 1,000- to a

3,000-kilometer range, in that range. They could have been destroyed by the sea-based missiles, the interceptors that we deployed to the Sea of Japan and in that region. So there is a layering that we are doing between our interceptors to try to match the offensive capability as well.

THREATS

Ms. KAPTUR. Okay. Then explain to me in layperson's terms where is our vulnerability?

General OBERING. Well, first of all, this strictly is geared toward a North Korean and Iranian threat. So for example, if you had the impression that——

Ms. KAPTUR. The issue is range, General? Range? Where is the——

Ms. KAPTUR. Do they have the range capability yet, Russia?

General OBERING. Oh, yes.

Mr. DICKS. They have ICBMs, just like we do.

General OBERING. Right. We believe that the North Koreans have range capability. We believe they have the ability to reach the United States. .———.

Ms. KAPTUR. So the real threat is numbers?

General OBERING. Numbers, yes, ma'am.

Ms. KAPTUR. All right. Let me ask you for our current research program on the defense side, how do you assure, because you have so many contractors, that we actually protect our intellectual property and our security? Dr. Clyde Prestowitz has written quite a bit about how some of our most sensitive defense technologies, particularly in rocket boosters and electronic systems have been—we have been required to use technologies from other countries and other suppliers. How do you assure that we protect the technology that we have and the intellectual property that we have? Is this a concern of yours?

General OBERING. Yes, ma'am, it is. And of course, one thing you want to make sure is you are not reliant on a foreign supplier, for example, that could be put at risk or could put your program at risk. We actually——

Ms. KAPTUR. Do we face that in your program?

General OBERING. Pardon me?

Ms. KAPTUR. Do we face that in your program?

General OBERING. There was a gyro, as I recall a laser diode that was used in one of our green laser gyros several years back, and we discovered that we were relying on a Russian provider for that. We qualified an American supplier and came off of that dependence.

Ms. KAPTUR. Do you monitor your subcontracts carefully to assure that?

General OBERING. Yes, ma'am. That is part of what we try to do. In fact, we have a whole organization set up that looks at componentry and production of components in that regard.

Ms. KAPTUR. All right. So you have a pretty high confidence level there?

General OBERING. I don't know if I have a high confidence level because you never know what you do not know, but it is something we are trying to guard against, yes, ma'am.

RESEARCH PROGRAMS

Ms. KAPTUR. Okay. So in our research programs they are not infiltrated through the contracting process. You have high confidence level in that?

General OBERING. I would not say high confidence level, because again, I do not know what I do not know, but I can tell you we try to take safeguards to address that.

PATRIOT SYSTEM

Ms. KAPTUR. All right. May I ask a question on this when Hezbollah was showering Katyusha rockets down on Israel, what technology didn't they have to shoot those down? What was the problem there? Too many?

General OBERING. First of all, the PATRIOT system that they have deployed is not effective against a Katyusha because a Katyusha is such a short-range rocket that it is not airborne basically long enough, nor is it cost-effective to be engaging a very cheap rocket with a very expensive interceptor.

So one of the ways that—or one of the initiatives that we are pursuing with the Israelis is how do we do that? How are we able to take out these short-range rockets? And we have a program called David's Sling that we are actually co-managing with the Israelis to try to do that. So it is to try to get a very inexpensive interceptor that we could use against that type of threat.

Ms. KAPTUR. I did not hear what you said, sir. What was the name of it?

General OBERING. David's Sling.

DAVID'S SLING

Ms. KAPTUR. Oh, sling. David's Sling program. Can you tell the Committee anything you learned about Iran's capabilities based on, as you looked at what happened in Lebanon in terms of their missile capabilities? This is offensive, obviously.

General OBERING. The biggest lesson that I learned there, frankly, personally is they did not fire—they did not fire—Iran did not fire, obviously, any long-range weapons at Israel, anything that we would be concerned about. But they did provide Hezbollah with missiles, with the shorter-range missiles, and that was very well documented in the intel community. And that is of concern. When you have a state government providing a nonstate actor, in this case, Hezbollah terrorist group, with those missiles what is to stop the ranges of those increasing and the capabilities of those increasing?

One of those concerns is obviously having a very capable missile getting in the hands of these type of organizations and being used against us, the homeland or against our allies. That is one of the things I am very worried about.

Ms. KAPTUR. I am sure there is a lot of trading that goes on in the world in those components, isn't there, in those not just manufacture, but trading arms trading, right?

General OBERING. Yes, ma'am.

Ms. KAPTUR. Missiles of that size. Do I have time for one more question, Mr. Chairman?

Mr. DICKS. I think the time has expired.

Mr. KINGSTON. We have to get everybody through here.

EUROPEAN SITE—RADAR

Mr. KINGSTON. Thank you, Mr. Chairman. General, I wanted to ask you in terms of obtaining permission to build the long-range interceptors and the fixed radar in Europe, you have to get obviously the people in Poland and Czech Republic to agree to it. Where is that in the process?

General OBERING. Currently, we do not have any more negotiating sessions scheduled with the Czechs because we basically, as far as I know, resolved all the remaining issues there. And so I would think that an agreement that could be signed by their government and our government would be imminent.

Mr. KINGSTON. And is that negotiated on kind of an executive branch level in both areas? And I know you have to have congressional approval here once that is done, right?

General OBERING. It is negotiated at the executive branch level, so it is—the State Department is leading those negotiations. We are just supporting. We are in a support role. The Department of Defense is in a support role. The State Department is leading those negotiations with the Czech and Polish Government. But the discussions with the Czechs are going very well. The discussions with the Poles were going very well. We had the change of government. It slowed down the negotiating process somewhat. That has now picked up again. So I do believe there is going to be an agreement in at least the next couple of months.

APPROVAL OF EUROPEAN SITE

Mr. KINGSTON. And when you say in your testimony, you have to have congressional approval, does the Senate have to sign on or does it actually go through both Houses?

General OBERING. I do not believe there has to be Congressional approval, per se. You guys own the budget, the funding of it. That is how you approve what we do is through the funds. But this would be—and I understand—and I am not an expert here, so you probably need to get the expert about what Congressional approval would be needed for this agreement.

Mr. KINGSTON. Is that something, Mr. Chairman, do you know does it have to be authorized? Because in your testimony, you say assuming we can obtain agreements with Poland, Czech Republic, and obtain Congressional approval to proceed. I was just wondering——

Mr. DICKS. Staff says the MILCON site has to be authorized.

EUROPEAN SITE—MILITARY CONSTRUCTION

Mr. KINGSTON. So it is a funding issue more than an authorizing?

Mr. DICKS. Authorizing. You have to authorize it and then fund it.

General OBERING. Yes.

Mr. KINGSTON. Okay. But there is not—I just wanted to see if there was some sort of a vote that took place free-standing or anything like that.

Mr. DICKS. If somebody offered an amendment or in the Committee or in the full committee or on the floor there could be a vote.

Mr. KINGSTON. Well, that might be where Mr. Hobson could have a vehicle for discussion of the European gratitude or participation or whatever. There would be an opportunity for people of his view, which I think a lot of us share, at least partially, to have a bite at this apple.

Mr. HOBSON. If I might add, I am advised that the MILCON part is at least $2 billion, so that is a pretty good slice of MILCON.

Mr. DICKS. Is that accurate?

Mr. HOBSON. On the low side by MILCON standards.

Mr. KINGSTON. If you know, for example, an amendment like that is going to be offered so there is opportunity to talk about European participation do you have enough, you know, firepower in terms of the political scene to come back and make the case as strongly as you can? Because frankly, you know, when I listened to you, I think you gave a very good answer, but I would also sort of love to hear more that, hey, this is all about us a lot more than them.

General OBERING. Well, again, we derive benefit from this, substantial benefit from this. The thing that we do not want to have happen that we have already seen is the ability for the Iranians to begin to coerce our allies and to start peeling them off from us. We saw a little bit of that with respect to al Qaeda and the Spaniards in Iraq. Now imagine if you had that happen on a nation-state scale where you are holding entire cities or nations hostage, how that could disrupt the alliance.

TARGETS

Mr. KINGSTON. General, I want to ask about the number of MDA targets for the test program. Do you have enough targets? And where do you get them?

General OBERING. We have enough targets for fiscal year 2008, 2009. As I mentioned earlier, we have had some difficulties in our targets program. We were using—we were trying to save taxpayers' money. We were using the last vestiges of the old Polaris motors that you remember from the old SLBM, Submarine Launched Ballistic Missile. Now that we are getting to kind of the bottom of the barrel there, we were transitioning to a more modern, flexible target family. So we do have enough targets to handle '08 and '09. We are looking at '10 and beyond as part of our POM 10 activity and how we can even more robust our targets program.

AEGIS BMD CAPABILITY

Mr. KINGSTON. Okay. I wanted to ask one more question, Mr. Chairman. In terms of the Aegis BMD-capable ships, they are all in the Pacific, right?

General OBERING. Currently they are, yes.

Mr. KINGSTON. And there is two that are going to be upgraded in the Atlantic?

General OBERING. Yeah, but that is not our decision. That is a part of the combatant commanders and the Navy's decision.

Mr. KINGSTON. But that is because there is so much focus on North Korea?

General OBERING. Right. And you could move those ships if need be to the Mediterranean. And we have done that. We have actually moved some of these Aegis missile defense-capable ships into the Atlantic and the Mediterranean region.

Mr. KINGSTON. But you are comfortable, and I understand that decision is not yours, but that we are okay in terms of the Atlantic side.

General OBERING. Yes, I am. And again, another initiative that you may not be aware of is we are funding what we call open architecture, which will allow every Aegis ship to be ballistic missile defense capable. We are doing that with the Navy. So that would tremendously expand the number of ships available to the warfighters as we proceed with that.

Mr. KINGSTON. What kind of ship does it have to be?

General OBERING. It is an Aegis, we use Aegis both destroyers and cruisers. It is a certain configuration for these Aegis ships, the 18 that we have.

Mr. KINGSTON. How many potential are there?

General OBERING. There is more than 80 when we go the open architecture.

Mr. KINGSTON. How long is the conversion? How long does it take?

General OBERING. It would be several years.

Mr. KINGSTON. How long per ship, though, would it take?

General OBERING. I would have to take that for the record. I will get back to you.

[The information follows:]

The Navy and the Missile Defense Agency (MDA) are engaged in a joint effort to integrate the Aegis BMD capability through the Aegis Modernization Program's Open Architecture (OA) environment. In this collaborative effort, the Navy is responsible for the development of the OA computing environment including replacing Military Specification (MILSPEC) equipment with Commercial-Off-The-Shelf (COTS) equipment and COTS-based Multi-Mission Signal Processor (MMSP) integration with the SPY–1 radar. The MMSP merges Anti-Air Warfare (AAW) and Aegis BMD Signal Processor (BSP) functionality into a single common processor. The MDA is responsible for migrating the Aegis BMD 4.0.1 weapon system computer program into an open architecture computing environment and integrating BSP functionality into the MMSP, resulting in BMD 5.0 weapon system computer program.

The end result of this joint program is a more robust, multi-mission capability fielded in modernized Aegis ships. The Aegis OA program is key to expanding the Aegis BMD capability to the entire fleet of Aegis ships, with a proposed eventual total of 84 ships. The modernization program also provides the foundation for the potential implementation of Aegis BMD in allied navy ships.

The first Aegis destroyers are scheduled to commence their modernization upgrade in FY 2012. The modernization upgrades include not only OA but also other

combat system and engineering improvements funded by the Navy, requiring about one year to complete installation.

Mr. KINGSTON. Well, thank you.

Mr. DICKS. Mr. Boyd.

MULTIPLE KILL VEHICLE

Mr. BOYD. Thank you, Mr. Chairman, and thank you, gentlemen. I know these are very expensive programs that we are talking about. And we really are chasing some technology that leads us into uncharted waters in a lot of ways I am sure. I want to focus my time on an issue that the Chairman brought up in his opening question, and that is the issue of the Multiple Kill Vehicle, the MKV. MDA is, as I understand, you explained the deployment, operational—I mean, an operational capability in the 2017 time frame.

General OBERING. Yes, sir.

Mr. BOYD. Is that correct? And you have awarded a contract to Lockheed Martin to develop a carrier vehicle. And you expect to have the research done sometime in the 2010 time frame as to whether this technology can be developed?

General OBERING. Yes. That is about right.

Mr. BOYD. It is my understanding that—and Mr. Francis, this question might be more appropriately addressed to you, that MDA has awarded two contracts for the development of the carrier vehicle, but we don't know—for multi-kill purposes—but we do not know yet whether we can—that technology is going to work. What is the thought process about awarding two contracts before we know whether the technology is going to work or not?

General OBERING. Let me take that.

Mr. BOYD. Okay. General Obering?

General OBERING. That is exactly what you want to do. Let me give you an example. When we started the ground-based midcourse system, we had two versions of our long range booster. We had an orbital version, what we called an OBV, and we had a BV Plus version built by Lockheed. The reason we had two is because we were not confident that either one of those configurations would work. And we wanted to have a fallback position in case one of them ran into some trouble.

Well, sure enough, we ran into trouble on the BV Plus. We had an explosion out in Pratt & Whitney Chemical Systems Division in California, and it wiped out our inventory of those BV Plus configurations. When we gained enough confidence in the OBV configuration, which we had flown two or three times at the time of the explosion, we were able to jump from that to the OBD configuration.

The same principle is true here. What you always want to have is not have all your eggs in one basket. So if I could have two kill vehicle suppliers, in this case, Lockheed Martin and Raytheon, because they are the primary kill vehicle suppliers, I can continue a competition between those, an ongoing alternative source so to speak, and it really motivates each one of the contractors. And we have seen that already when we were running into problems with the kill vehicle for the long-range system in terms of deliveries, supplier management, supply chain management, that type of thing.

As soon as we awarded the Multiple Kill Vehicle to Lockheed, the first in a demo contract, we saw the behavior of Raytheon change to the good. So we want to continue that behavior with both these contractors as we move to the future.

Mr. BOYD. Okay.

Mr. FRANCIS. Mr. Boyd, if I may, I think you raised a good question on MKV. And as General Obering said, he is trying to have multiple ways to solve a problem and not have all of his eggs in one basket. I think the question that you asked, though, is a good one in terms of what we can afford and how many options we can pursue. Because I think right now we are looking at—I mean we do have an EKV that is a unitary system that we are improving the discrimination on. In MKV, we are now going to pursue two approaches to that. My understanding, and I will defer to General Obering on that, is that it is not necessarily going to be a competition, that we are going to keep both of those going. And if they do not work, then we may go back to a unitary system. So I think from a capability standpoint you want to keep as many options as you can open. But then you have to look at affordability, which how many things—how many options can we afford to keep open?

MISSILE DEFENSE—A BALANCED CAPABILITY

Mr. BOYD. Okay. Thank you. I want to move to sort of a related area. And again, I am just baffled by the cost of this. Since 9/11, obviously the world has changed in so many ways. And we were pursuing these efforts prior to 9/11 and everything was going along pretty well, and all of our forces were in—services were in good shape. But today that situation is different.

General Campbell, the Army is in serious, serious need of recapitalizing forces and equipment. Those are well documented, documented every hearing we have in this room. And we all know that we face constant evolving and increasing threats. How can we afford the same unconstrained approach to missile defense that we did prior to 9/11 that is not possible for the other services? Can you speak to that or did I——

Mr. KINGSTON. Will the gentleman yield a second? Will the gentleman yield? Because there was, I wanted to say, a lot of criticism of the GAO in terms of the accounting, and the fact that so much of this is very difficult for Congress to have oversight the way you do your, is it element-based accounting or nonelement based? But I read some of the GAO comments, and it is very difficult to follow, and I just wanted to kind of, you know, underscore what Mr. Boyd is saying.

General CAMPBELL. I am not sure if I understood your question. You talked about the Army, and we are out of balance in that we are putting everything into counterinsurgency operations and we have to bring balance back so that we have a fully capable force across the spectrum of conflict.

Mr. BOYD. That is correct. That is the gist of the question.

General CAMPBELL. And the Army has done a good job, in my view, of balancing their investment portfolio so that we can get back to that balance. It is possible to do that. But as far as getting into any detail with you, I am not prepared to do that, to talk broad general purpose forces.

ALLOCATING MISSILE DEFENSE ASSETS

Mr. BOYD. And that really the general, the broad area of how we allocate our resources given the occurrences and events of the last—2001—7 years now almost, or 6½ years, and the circumstances being completely different, and most of our services, particularly the Army, in such dire need of reset dollars and those kinds of things.

General OBERING. Could I address that, if you do not mind? I am glad you brought up 9/11, because if you look at all the money we spent on missile defense, going back to Ronald Reagan in 1983, it is about a hundred billion dollars as of last year. The damage caused from 9/11 alone to New York was $83 billion. And that wasn't a weapon of mass destruction. That was not SCUD on a tub, on a ship off the coast coming into New York City. If we had that, it would be in the hundreds of billions of dollars, trillions of dollars, and tens of thousands of lives.

So to protect us against that, I think that spending much less than 2 percent of our budget is reasonable in terms of the overall strategic view. The other thing, if you stop and think about it, is just think what would change if you have a nuclear-tipped Iran providing an umbrella. We know they are already sponsoring terrorist forces around the world. We know that. Imagine if they had the ability to strike the homeland with a nuclear weapon and how that would change some of the calculations that we face in the future and not have a protection against that, which is what we are building out to.

So I think from a strategic view and perspective, I think it is reasonable to spend this amount of money on this protection for not only our homeland, but our deployed forces, not the least of which the last time we engaged in Iraqi Freedom, for example, we had to defend ourselves against these missiles.

The same thing occurred in the original Gulf War. More and more countries around the world are saying ballistic missiles are our Air Forces. So I think it is very prudent this Nation invest a very small amount in terms of what that is. And if I may to your point, sir, I respectfully—and I respect the GAO, but I think that we do account for our costs. And we can show you. In fact, the billion dollars that they talk about the growth in Block 2006, that represents a 5 percent increase over the life cycle of that. That is not significant. In fact, our entire cost variance for all of our programs are less than 6 percent. So there is some that are worse performers than others, like the Space Tracking and Surveillance System, but overall, we account very closely for those. What we are trying to do is move through this new Block structure that the Chairman talked about. And they actually—they recommended the new Block structure last year. We have gone to that now to help them understand what our accounting is as well.

Mr. DICKS. It may help us as well. Mr. Rothman.

IMMINENT THREATS

Mr. ROTHMAN. Thank you, Mr. Chairman. Gentlemen, thank you for being here, thank you for your service. You have an awesome responsibility, and we appreciate it. Continue the diligence, please,

and Godspeed. My first question has to do with the boost phase, or the defense against—during the boost phase. The notion being that when do you know that you are going to go after a particular missile that has been launched and is in boost phase? The problem being you can have the greatest weapon in the world, but if you do not permit yourself to fire it, there is some deterrence in having the greatest weapon, but it loses its deterrent value if everyone knows you are going to be so uncertain about using it that you will never use it.

So how do you know, for example—is it the policy, for example, that if a missile is launched from Iran that we are going to take it out? Or do we first have to determine its trajectory, the object that it is supposed to hit, the country it is supposed to hit, and by that time, can we hit it in boost phase?

General OBERING. That is an outstanding question. That is part of why we like to lay in what we call knowledge points to determine what is the knowledge that we need to be able to advance our programs. But to get to your point specifically, what I envision for a boost phase defense is number one, if we get a shot from the blue that Ahmadinejad wakes up one morning and says I am going to launch a missile to New York City, that would not be a boost phase defense in my mind because of all the complications that you just talked about, not understanding whether that is a space launch initially or just a test launch or whatever. But very rapidly, we would know that it would be——

Mr. ROTHMAN. But would he make a public announcement I am going to New York?

General OBERING. No.

Mr. ROTHMAN. So you wouldn't even know where it is headed.

General OBERING. That is right. So for something like a bolt out of the blue, I think a boost phase defense would be problematic. Where it would be more appropriate is when you have indications and warnings that there is activity or that there is hostilities, that type of thing, in which you know that there is going to be—you know, you can tell, in fact, the way we execute with the Aegis ships, for example, is we say, okay, you have to defend this area and for any threats come out of this location. Okay. That type of thing.

So there is going to be some indications and warnings, and then a boost phase capability can be very effective in being able to destroy those weapons while they are still in boosting phase. There is another aspect that there is more telltale signs than you believe. For example, one of the things we were looking for out of North Korea is the injection angle. If you are going into a space launch, for example, that injection angle is very flat. If you think about the shuttle when it launches, it rolls over and then it starts immediately to pitch over, because it wants to convert all that energy into orbital velocity.

A ballistic missile does not do that. It goes much steeper. And so you get indications very quickly as to whether it is a space launch or a ballistic missile launch, and then you can propagate those through the command and control system.

Mr. DICKS. Also we have satellites that let us know almost instantly when a launch has occurred.

General OBERING. Yes, sir. We do.

Mr. ROTHMAN. The question was would we attack it without knowing where it was headed? But the general was saying there are these telltale signs and specific areas of responsibility so to speak that——

General OBERING. Plus, if we were—let me just use a concrete example. The Iranians launch from their northwest to the southeast. That is their typical launch ranges. If we see something coming out of there heading up north over Russia or heading up over Europe, we know it is not one of their launches.

Mr. ROTHMAN. Let me ask you this. If we saw a launch from Iran and it were not—we determined quickly that it was not launched against any of our forces in the region or the United States, are there circumstances where we would go after that missile if we determined it was headed against one of our allies? Or—any one of our allies?

General OBERING. Yes. If it was determined to be headed into one of our allies, one of our defended areas, meaning Germany or Great Britain or Prague, whatever, yes, we would go after it.

Mr. ROTHMAN. Is Israel included in that umbrella?

General OBERING. Israel would be included in a different umbrella, but still part of the missile defense shield, yes.

Mr. ROTHMAN. On the Iranian-transferred missiles to Hezbollah, part of missile defense presumably is the intelligence work and other defensive exercises, endeavors that would, for example, blow up the component parts before they ever got assembled, or once they got assembled, or once they got to the factory or on the ship, et cetera, et cetera. Are you involved in that or is another agency?

General OBERING. No, sir. I am not involved in that.

Mr. ROTHMAN. But that is certainly a big—that is, as you fellows would say, a robust part of our defense operation, I would assume. I would hope.

General OBERING. I would certainly say that that—you know, if you are looking at a holistic approach to missile defense, being able to use what we call nonkinetic means are important.

IRANIAN THREAT

Mr. ROTHMAN. Okay. Why then do we permit, or one would imagine then with our robust intelligence services and all these nonkinetic elements of our defense forces that we would have—and satellites and humans, et cetera, we would know when the Iranians are literally transporting these devices to Hezbollah or to anybody. And so the question is why don't we ourselves or assist others in the destruction of those missiles before they get to the bad guys, the other bad guys?

General OBERING. Sir, that is not my area of expertise, and I do know that I believe that the United States has initiatives that we are trying to do that type of interdiction. But let me give you an example of some of our shortfalls. When the North Koreans launched their missiles in the summer of 2006, we had almost every intelligence asset known to this country looking at that country, and yet they were able to roll out several of their shorter-range missiles and fire them before we ever were able to pick that up.

So this idea that we have some type of an omnipotent ability to interdict in the supply chain or even just before they launch is not very proper.

Mr. ROTHMAN. May I just follow up with that? Do we accept as a given that we will always not know what we do not know, and never have that complete capability of being able to anticipate a launch and then simply rely on other redundant forces or whatever to cover that, or is it simply a matter of providing more resources in order to address that shortfall?

General OBERING. Sir, I think you have to do the whole spectrum. I think you have to invest in resources to do that interdiction that you talked about. I think you have to invest in other nonkinetic means by interrupting their command and control chains, that type of thing. And but you cannot rely on that solely, because when you have a warhead in the air, you have got to do something about it.

Mr. ROTHMAN. Thank you. Thank, Mr. Chairman.

Mr. DICKS. Mr. Bishop.

ISRAEL AND THAAD

Mr. BISHOP. Thank you very much. Thank you, gentlemen, for being here, for sharing your knowledge with us. I am going to touch on two areas basically with our relationships with foreign governments. Israel, for example, is interested in developing a new program to focus on the threat that the Terminal High Altitude Area Defense currently defends. One of the issues that they have raised is that the U.S. has not shared information with them as to the capabilities of THAAD, and thus they do not know if THAAD will work for them.

Can you give us an update on the U.S.-Israeli cooperation and tell us to what extent the national disclosure policy is preventing us from sharing missile defense information and technology with our allies? What is the extent that that national disclosure prevents us from sharing? And tell me whether or not there are legitimate concerns based on that national disclosure policy that would prevent us from disclosing certain information and what those concerns would be?

Mr. BISHOP. What are the concerns that would prevent us from disclosing information under the national disclosure policy?

General OBERING. Well, obviously we have a concern about any sharing of information or technology that the Israelis would, in turn, share with other countries. That is one thing that is of concern. I know that we are also concerned that their industry may take advantage of that technology vis-a-vis our own industry to establish a competitive advantage. So there are any number of reasons why people are concerned.

Mr. BISHOP. I was wondering what those were.

General OBERING. Well, there were certain things that we would never, I mean, what we call the family jewels we do not share, some of the detailed algorithms that we use in our radars to distinguish warheads, some of the algorithms that we use in our kill ve-

hicles to do the discrimination that we use today. Those are the types of things that we consider to be very sensitive.

JAPAN COOPERATIVE AGREEMENT

Mr. BISHOP. Okay. With regard to Japan, over the past several years the U.S. and Japan have conducted cooperation in the missile defense area which has included the deployment of an X-band radar in Japan and a joint fifty-fifty cost share development of the Standard Missile–3 Block IIA missile. What is the status of our cooperation with Japan and are you considering moving the second forward deployed X-band radar to Japan? And thirdly, recently the MDA decided to incorporate a modular kill vehicle into the Block IIA even though Japan has only agreed to use the unitary warhead. How would that impact our cooperation with Japan?

General OBERING. I would say our cooperation with Japan is extremely healthy and very robust. As you said, they share, they were willing to host the Shariki radar in the Amori district in the northwestern portion of the country. That is proceeding very well, and we are sharing data from that radar with the Japanese as well. With respect to our co-development of these SM–3 Block IIA, we have a systems requirement review that is scheduled for this March, or next month, that we began the U.S. only requirements review for that system.

And again, that is proceeding very well. There was some concern early on by the Japanese about the Multiple Kill Vehicle program that you mentioned and whether it would impact our development of the SM–3 Block IIA, and I am pleased to report that I just got a letter yesterday from the Government of Japan saying that they do not have any problem with our approach on MKV. And so I think we put that all to bed now in terms of that concern.

TESTING INFRASTRUCTURE

Mr. BISHOP. Okay. With regard to your testing infrastructure, the Committee has been informed that one of the key elements limiting current missile defense test programs is the lack of infrastructure. What specific actions can be taken by us to improve the Missile Defense Agency testing infrastructure and what are the costs associated with these steps?

General OBERING. Sir, first of all, the full support for request for the money for our testing targets would be very helpful. And I believe that, as I said, we are going to come back for our next budget request in 2010 for our POM and we are going to be focusing on targets and the test infrastructure as a priority. But right now, many aspects of our test infrastructure are not funding limited, it is primarily the fact that we are maxing out the capabilities that we have. And just in terms of tempo.

But targets has been a shortfall. That has been an area that we need to invest more in. And that is what I said we are okay for '08 and '09, but starting in 2010, we are going to be requesting more emphasis there.

TARGETS

Mr. BISHOP. How can you improve the number of targets?

General OBERING. By increasing the funding for those, for targets.

Mr. BISHOP. Thank, Mr. Chairman.

Mr. DICKS. Thank you. And I want to thank Mr. Tiahrt for being patient and a good sport and all the other attributes.

Mr. TIAHRT. Thank you, Mr. Chairman.

Mr. DICKS. Mr. Tiahrt.

AIRBORNE LASER

Mr. TIAHRT. First of all, I want to congratulate you on the tremendous success the programs had as far as ABL especially, but the MDA in total. But the ABL, I think, has really now shown all the key subsystems are working, and we are looking forward to the lethal shot shootdown in 2009. Just talking about open source information, we recently had a decaying orbit on a satellite and we used a kinetic capability to try to knock it down or effectively make it less dangerous. And I think that we were successful. That kinetic capability is sort of a backup for what the ABL is supposed to do. And in terms of the launch capability, kinetic as a backup takes a long time to get there compared to the speed of light.

So there is a big difference there. And I think the need was verified again by this successful shootdown. But what was not told, and just using common sense, the ABL also is a backup for what was done by the previous or by the kinetic weapon. So I think there is a great capability here that we are developing. And that laser just does not point down, it points up as well. And I think we kind of forget the real tremendous tool this is to keep our country safe. I am a little concerned about how we are funding it, though. And I have some firsthand knowledge, because you know, in a typical program you have this big bulge in front of manpower and talent, and then as the first product becomes more secure and more technically complete, then you start seeing this talent go off to other areas.

And we are experiencing that in the modification area in Wichita, where a lot of the engineers that worked on the first unit and have gained a lot of great experience now are being taken to other companies, other parts of the country, other parts of the company. And those who want to stay are even going to commercial ventures because we have not acted on tail number 2.

And so I am very concerned if you look at the request that we made for this program in 2006 versus the request we are making in 2009, we are seeing that a lot of the plan that we had to move that second tail number in is being pushed way out to the right. And I am concerned about that because of the loss of talent. That alone will cost the program more money because you have people that have to get back up to speed. They are going to be back up higher on the learning curve that than they were. And we are about 250 million behind this year where we were planning to be in 2006. So we have got 3 years more of information, but why are we reducing such a big amount on a program that is doing so well, and why are we delaying tail number 2?

General OBERING. Okay, sir. As I stated before, first of all, thank you very much for your support for overall program, and especially for ABL. We base these programs on knowledge points and their

achievement of knowledge points. Airborne Laser has achieved everything that we have asked them to do so far. The big one left is to be able to put that high energy laser on the aircraft, which we have got the six modules loaded on today at Edwards, and then to get all the rest of the installations on board and then get back in the air by the end of this year, first part of next year to go forward with a lethal shoot-down.

Now we have already learned, what maybe is not evident is that we have a workforce, as you said, in Wichita that did a lot of the modifications that supported the flying aircraft for the low power flight testing. It is almost unavoidable that we are going to lose some of those people in this transitory period. Because we are learning tremendous amounts on almost a daily basis, especially when we get back into our testing, that is going to indicate that we are going to have to go into a transition period not unlike what THAAD did. I will tell you I think that is what we are facing right now is that we are going to go into a transition period like THAAD where we flew in '99 and 2000, and we stood down for about 4 or 5 years, and we assembled all that we learned, and we totally remanufactured the THAAD program to where it is today, very successful, very affordable, and moving ahead. And I think that we are going to have something similar on ABL.

So it was premature for us to order tail 2 until we get through this period of the lessons learned from the shoot-down, how we can do and incorporate those lessons learned into a more affordable design, and a more produceable design as we move out for the fleet. So I think it is what I call a transition period. And I wish I could say that there is ways we could maintain that workforce, but in my mind, it is almost unavoidable because we are not funding paced here, we are technically paced.

Mr. TIAHRT. Well, there is a long lead time on the aircraft, you know, just a green airplane, and you have got to get a place in line, and then it has to be built, it has to go through flight check before it is delivered.

General OBERING. Yes, sir.

Mr. TIAHRT. If you wait until 2009 to order, you will be sitting on your hands that much longer, because there is a demand for this aircraft. I am very concerned about that. And I hope you have factored into your schedule a second airframe. I don't see an ability right now to change airframes, or a need to. So the airframe itself, that long lead time should be calculated into your churning the data and coming in, and so——

General OBERING. Yes, sir. I understand. The 747 8F is what we are looking at.

Mr. TIAHRT. It is a good airplane, and I think it is a right choice, and it provides capability that you need. The GAO ran a report, I was not going to mention it, but the gentleman from Georgia did, but after going through the report, there is some things that, you know, the GAO says this is how we do business according to what is written. And in a lot of respects that is old school procurement that is out of date and needs to be revised. And some of the things I thought they were good, you establish a base line as soon as you possibly could, which I think that is good advice. But on some of the others, the only—I think one of the comments they made is in-

clude only blocks—include in blocks only those elements that will field capabilities during the block.

Well, if you do that, then you can't shorten your schedule when you have the ability. It is very rigid. And so I think the way that you have managed the program is much better than the way—the process the GAO wants you to follow would be. So I want people to understand that GAO, I have great respect for them as well, but they also are very confined in their recommendations to what is written. And there is no thought about what it should be. It is what it is.

And I think, you know, quality is a dynamic thing. And improving procurement is a dynamic thing. We can always do a job better. And successful corporations in America today do that. They continue to look for a way to do the job better, whether it is a small coffee shop or an aerospace company.

So I want the people to know here that we have I think a good management team in place. And I think you are doing a very successful job. One last thing I would like to mention, because I am very concerned about this, in delaying this program we continually see new people come on not only in the private sector with the engineering staff, but also the public sector. General, you have had a great track record here and have done an excellent job, but even here on the Capitol on the Hill, we have new staffers that come in like in HASC, and they question the program. We have to reeducate them over and over again.

You know, every year it seems like we have to face somebody on an authorization committee that needs to be up to speed on this program. And it is a complex program. And it takes a long time to get their security clearances, it takes them a long time to understand the program. In the meantime they say, well, we are not going to fund this because it is really not that important. And it is a very important program. So as this program gets delayed, I mean that is another reason for us to keep it moving, keep the momentum up, keep the success going. Thank you, Mr. Chairman.

Mr. DICKS. Thank you, Mr. Tiahrt. Mr. Bishop has an additional question.

AEGIS BALLISTIC MISSILE DEFENSE

Mr. BISHOP. Thank you very much. I thank the Chairman and the Committee for the indulgence. General Campbell, I understand that all of the Aegis ballistic missile defense-capable ships are currently assigned to the Pacific. And the Missile Defense Agency only plans to upgrade two Atlantic fleet ships to missile ballistic defense configuration.

What is the rationale for that decision, and do you have any plans to upgrade additional Atlantic fleet ships? If not, why not? And for General Obering, if all of the BMD-capable ships are in the Pacific, what is the plan for using Aegis ballistic missile defense to defend our troops and allies in the CENTCOM area of responsibility.

General CAMPBELL. Let me address this by saying no matter what asset we are talking about, there is a process within the Department where a combatant commander can come in and request a force, whether it is a tank battalion, an Aegis ship. We have a

process such that we can shift an asset that is in the Pacific to the CENTCOM AOR. So we do that as a routine, sir. So these Aegis ships that are in the Pacific, and as General Obering mentioned, we have already moved one before into——

Mr. BISHOP. There is a time lag in that transition, though, isn't there?

General CAMPBELL. There is a time lag. It has to transit, obviously. But again, out of context it is hard to answer the question. But within the context of I have indications and warnings that I need that ship in an AOR, we will begin moving that ship as soon as possible to get it to that particular area.

General OBERING. And sir, one of the things that we could move a ship into CENTCOM, and in fact, their area of responsibility, and in fact, we have, but I want to use your question, if I may, to make a major point. We have asked over the years to fund systems engineering integration. What that means, and I will give you an example, is we know now that if we put a THAAD radar, if the THAAD unit that we are going to put in Israel in on Juniper Cobra, if we tie that radar to the Aegis ship the way that we tied the radars into that Aegis ship to shoot down the satellite, we could actually have that ship stand off from the coast outside of Silkworm missile range and still protect all of Israel with its SM–3 interceptors.

That is the power of this integration that we talk about between our land and sea-based components. That integration comes at a price in terms of our systems engineering and the ability to do that. So there is no reason why we can't take those ships from the Pacific and use them in the CENTCOM AOR or the EUCOM AOR. And there is no technical limitation there. And we are trying to design the system to integrate it so we can get the most from each of these components by doing this integration.

Mr. DICKS. I think you are concerned about the East Coast of the United States. Now, can you explain how the existing system that we have deployed can protect the east coast of the United States?

General OBERING. Yes, sir. The SM–3 missile, the PATRIOT missile has the ability to protect the east coast from short range attack. Not from long range attack, but from short range attack. So it has the ability to do that today. It is a matter of if we chose to deploy them and to do that.

Mr. ROTHMAN. Mr. Chairman, can I ask one follow-up question?

Mr. DICKS. Yes. Mr. Rothman.

NORTH KOREA AND IRAN

Mr. ROTHMAN. Generals, you have given an extremely impressive bit of testimony about our capability to deal with missiles from Iran and North Korea and projecting other threats in the future such that one would imagine that if the North Koreans and the Iranians were rational actors, big assumption, and knew of our capabilities they would be sufficiently deterred from bad conduct. And we must plan for then for irrationality, so that is off the table, because we will never know whoever has their finger on the button whether they are going to be rational or not. But are these actors, the Iranians and North Koreans aware of our capability——

Mr. DICKS. Oh, yeah.

Mr. ROTHMAN [continuing]. Such that they understand that there would be a very—not only a very limited chance of success of any offensive effort on their part, but of course, the devastating response that they would feel?

General OBERING. I have thought a lot about that. And I will tell you my own personal view. You stated initially a very important assumption is that if they are rational in their decision-making. And one of the things we are counting on, frankly, is that they are rational to the extent that if we field effective missile defenses they will choose to no longer invest in ballistic missiles because they realize there is a defense against them. I think that has been the problem historically is we have not had a missile defense system or capability, and therefore countries like Iran and North Korea, Libya and others chose to invest in those missiles. We would like to be able to defer them or deter them from even investing in those missiles to start with in the future.

But the one scenario I am really worried about is that you have a group within Iran or within North Korea, or you could almost pick another country that decides that they want to strike a blow for radical Islam or whatever, and they are willing to incur the potential retaliation that would come their way and then they launch. I mean, that is what—when that happens, you have to have the ability to shoot that down. You can't talk to anybody, you can't offensively take it out, you have got to have the ability to shoot that down. And if we can prevent that from just one American city we would pay for this program many times over.

Mr. ROTHMAN. No questions. Thank you, Mr. Chairman. Thank you.

STSS

Mr. DICKS. General Obering, please update the Committee as to the present cost schedule and technical performance of the STSS program.

General OBERING. Yes, sir. We are launching two what we call demonstration satellites this year. It is based on what we call legacy hardware that was left over from the SBIRS low program, frankly, from many years ago. I think we are investing about $300 million, as I remember from the request, the budget request.

Mr. DICKS. The cost of this program has gone up. Isn't that right?

General OBERING. Yes, sir.

Mr. DICKS. There has been some discussion of a Nunn-McCurdy breach. I guess maybe you are exempt from that.

General OBERING. Yes. Well, the cost variance at the completion of that particular contract is about 20 percent, which would break a Nunn-McCurdy type of a tripwire. But the program that we are going to launch this year is not the program that we are going to build for that constellation. These are demonstration satellites that demonstrate the functionality. If it works, if we can show that we can do—and for the rest of this Committee, what this is is right now all we do from space is early warning. We get it, we say there is a rocket launch, a missile launch, it is headed toward New York or whatever. And that is it. We do not have—we do not have any precise knowledge of the track. What we want to be able to do is

precisely track that missile from space the same way we precisely track missiles with a radar.

And so that will allow us to engage them then. The satellite constellation that we have envisioned after a 90-day study that I had chartered says that we can provide——

---

and provide the same coverage that we were originally envisioning with the STSS program. And it would be the same functionality that we are demonstrating in the satellites this year. So while we have had cost, schedule, and performance technical delays with the program, it is on track to get in the air this year. And we are restructuring that to take advantage of frankly more modern technology and a more modern approach as to how we do this constellation.

Mr. DICKS. STSS is basically SBIRS low as you suggested, right?

General OBERING. That is what is going up this year.

Mr. DICKS. Now SBIRS high, tell us about that.

General OBERING. That is not my program. That is an Air Force program.

Mr. DICKS. But I thought you know everything.

General OBERING. Can I take you to my wife?

Mr. DICKS. Right.

General OBERING. SBIRS high is to replace the Defense a Support Program satellites.

Mr. DICKS. DSP?

General OBERING. Yes, sir.

Mr. DICKS. What does SBIRS high provide over DSP?

General OBERING. That gives us the early warning capability to a better degree, and it is much more capable in terms of sensitivity and that type of thing, but it still does not get us the precise tracking that we need with the Space Tracking and Surveillance System.

Mr. DICKS. So we are going to have a follow on to STSS?

General OBERING. Yes, sir.

KEI

Mr. DICKS. Okay. Now, I want—about the Congressional plus-up on the KEI program in '08. Please tell us what you are doing to restore KEI to a full up weapons system and capitalize on the mobility aspects in the program, or are you?

General OBERING. Yes, sir, we are. In fact, the major knowledge point that we had for airborne laser is it has got to go shoot down a boosting missile. The major knowledge point that we have for KEI is that it has to achieve a very, very high acceleration booster flight in 2009. And we had taken that program to a booster-flight-only program, frankly, because we had not gotten the funding support on the Hill in the previous years, and so we had to reduce it to that.

With the plus-up that we got last year, the 115 million net plus-up, we are taking about 15 million of that to protect our booster flight in 2009 because we ran into some problems on the second stage firing, .———.

But we also took about $40 million of that to reinvigorate the weapons system engineering and the mobility options aspect. What that means is this is like a PATRIOT or THAAD on steroids.

So it is a much larger missile. It will still be in a canister. It is still mobile. So we are using a lot of that money to be able to do the weapons systems engineering. We are also looking at taking about $37 million out of it toward the—to accelerate the objective design, otherwise how we actually do the land-based version of this capability. And then about $20 million out of it goes to a kill vehicle development that Raytheon is under contract for.

Mr. DICKS. How is Raytheon performing on that particular contract?

General OBERING. Well, we had actually pulled them back very severely when we went to the booster only program. And they have not been performing per se on the KV, on the kill vehicle piece of that. Now they have responsibilities for the overall interceptor for this, and they are the prime contractor for the interceptor, reporting to Northrop, who is the prime contractor for the entire program. So far so good with respect to their performance. But again, the jury is still out on the kill vehicle portion.

Mr. DICKS. We understand that you plan to spend 20 million on a kill vehicle for KEI. Is that what you are talking about?

General OBERING. Yes, sir. Yes, sir.

Mr. DICKS. Will that 20 million be under the current KEI contract?

General OBERING. Yes, sir.

Mr. DICKS. General, if the KEI program achieves a successful booster flight in 2009, will you accelerate the program?

General OBERING. Yes, sir. I do not know if "accelerate" is the proper word, but we would certainly go for the full funding for initially a land-based mobile capability, because we believe that provides the most promise in the near term. And eventually we could even sea-base the capability if we so choose to.

Mr. DICKS. Mr. Francis, anything else you would like to add again? Talk about these blocks again. What again are your concerns? You say they are going part way in the direction GAO wants. But if you could convince them to do everything you wanted, what would the final two or three things be?

Mr. FRANCIS. Mr. Chairman, I think that the main thing would be to develop a total cost estimate for those blocks that I think are close enough along where you could reasonably do that estimate and have those estimates independently verified. I also think that, as I had mentioned before, for Missile Defense to clarify what unit costs it is going to track, what criteria they will use to report on those and how it will report.

And I also think that to help the Missile Defense Executive Board out there needs to be some things done on technology development efforts in missile defense, which could comprise about half of the budget. Right now they are not amenable to a very strict baseline, but we think some things need to be done to help the executive board get a good gauge on not only technical progress, but matching technical progress with budget and cost as well. So some kind of a construct to facilitate oversight of technology capability.

Mr. DICKS. Okay. You want to comment on that, General?

General OBERING. Yes, sir, if I may. First of all, the GAO's report is draft. And we are still commenting on the report that they have submitted. And there is a couple of things that we are going to comment on. One is we do plan to provide total cost estimates for the blocks to include life cycle costs. And in fact, we engaged the CAIG, the Cost Analysis Group at OSD to be able to do that. And we want to be very careful on how we are reporting out on our unit costs primarily because of just like I said before, we want to make sure that we continue to do this as an integrated weapons system.

And so we want to make sure that we do not have the situation where we are reporting out on the costs of the tires of an aircraft, for example, to put an analogy, as opposed to reporting on the entire aircraft. And so we are going to be careful as to how we report that out and what those variances are. But if you will allow me a little bit of leeway, I want to proceed carefully with the GAO's recommendations, because if we are not careful, and Mr. Tiahrt kind of alluded to this, we will end up looking like every other program in the Department.

And I do not think that is what we want to do. I think we have shown the ability to get things out the door faster. And I think we have shown an amount of cost accountancy that is reasonable for the Department, and flexibility that is necessary in the uncertain future. So I want to be careful as to what we incorporate and what we do not.

Mr. DICKS. Well, and I can understand that. I think in looking back on programs that we have done well in the classified area, because a lot of times the flexibility and the ability just to go forward and do it, like the F–117 stands out in my mind, is a very important thing.

Now, General Campbell, in your statement, you talked a little bit about the conditions up at, is it Fort Greely in Alaska?

General CAMPBELL. Yes, sir.

Mr. DICKS. Tell us about that. What are your troops faced with up there in operating that base in the remote areas of Alaska?

General CAMPBELL. Mighty cold days and cold nights. But if we go back——

Mr. DICKS. What can we do to help them?

General CAMPBELL. We have worked with our own Installation Management Command on the mission support side. And the one lesson I have walked away with as we look at that, when we go to Europe that you want to make sure that the mission support side of this business is at the same level as the missile defense capability. I think it is foolish not to invest in both. The soldiers, the men and women that operate this are just as vital to that system as the missile that is in the silo.

So each time I go up there, we are continuing making progress. The missile defense system is in good shape. They are well trained. But on the mission support side, we still have a little ways to go in providing them with the things that I enjoy in Huntsville, Alabama. It shouldn't be really any different in Fort Greely, Alaska, for that.

Mr. DICKS. Could you be a little more specific about what the deficiencies are?

General CAMPBELL. The type of deficiencies on the support side usually relate to soldier care and family care. For example, this post was a closed post, Fort Greely, in 1995. It was brought back to life so we could support the missile defense complex. So areas such as a community activities center for families that had been closed years ago, so we have to go in and get money to build a new one.

Mr. DICKS. You have families living up there?

General CAMPBELL. Absolutely. Yes, sir. On Fort Greely. As well as the Missile Defense Agency has folks living right there at Fort Greely. So this is a vibrant place. There is a lot of activity there. And we have to catch up on the mission support side for these folks.

Mr. DICKS. I take it Vandenberg, that is pretty easy?

General CAMPBELL. I am not—we have a very small element at Vandenberg, on the order of seven soldiers to manage the silos that are there.

Mr. DICKS. Why is that? Why is it different between Fort Greely and Vandenberg?

General OBERING. Colorado Springs is where we have the fire control element. That is the backup for Fort Greely.

General CAMPBELL. Right.

Mr. DICKS. But you have interceptors there, too, right?

General CAMPBELL. No. Not at Colorado.

General OBERING. Just at Vandenberg. We had interceptors at Vandenberg and fire control at Colorado Springs. It just so happens we have interceptors and fire control at Fort Greely.

Mr. DICKS. I got it. I got the difference. So the next major test for you, General Campbell, will be in this European scenario, if that goes forward. And again, give us some ideas—I am on the military construction subcommittee as well. Give us some of the ideas of what you are going to need over there.

General CAMPBELL. Yeah. We have taken a look at it. And right now, until the negotiation is complete, we envision that we could have as few as 33 U.S. soldiers at the interceptor site all the way up to 255. And those are estimates based on what we have seen at Fort Greely. We do not know yet how much the Poles will assist us with base security, for example, or how much they will put into support infrastructure on the base for the living quarters and those other support activities diction.

Mr. DICKS. Is there an existing facility there?

General CAMPBELL. There are buildings there from the Polish force on that site. I personally have not been over there yet. I do not think we have been on the site at all yet, even the Missile Defense Agency, so we have not had a site survey done to determine if we can refurbish those. But again, I will go back to lessons learned at Fort Greely, if we find that those are substandard, to me it is worth the investment to put in the right barracks, the right dining facilities and support facilities for those troops that we put there.

Mr. DICKS. Okay. Now, looking out into the future, where would you have—where would be the potential place for future bases? I mean, you have got Fort Greely, you have got Vandenberg, you

have got maybe the European site. What would be out in the future in the kind of robust system that you are talking about?

General OBERING. Sir, I believe that once we get the layer of the 44 interceptors in the United States in Alaska and California and the 10 in Europe, I think that is all we need to do respect to silo-based defenses.

Mr. DICKS. Okay.

General OBERING. I think what we need to invest in, and you will see that ramped up more and more in the budget, is in mobile flexible defenses. So KEI, for example, and the ability to move that around as you need to, the ship-based SM–3s, and the SM–3 Block IBs and IIAs and IIB, frankly, which is that Multiple Kill Vehicle variant. Having the flexibility to move these defenses around as you need them I think is the way to go. And the Secretary of Defense has asked me that before in the past.

And I do believe we have enough with the silo-based shield to provide that protection, that initial shield in terms of an urgency with respect to North Korea and Iran. And then where we may face in the future we don't know. It could be coming from any azimuth. And to be able to have that flexibility would be very useful.

Mr. DICKS. Mr. Bishop, do you have anything further? All right. The Committee will stand adjourned. Thank you very much. The Committee is adjourned until Wednesday, the 27th, at 10 a.m., for a hearing on shipbuilding.

General OBERING. Thank you, sir.

[CLERK'S NOTE.—Questions submitted by Mr. Murtha and the answers thereto follow.]

NRO SATELLITE MISSION

Question. On February 20th, the Missile Defense Agency (MDA) shot down a non-functioning National Reconnaissance Office satellite. MDA used a network of sensors to track the satellite, and then a modified Standard Missile–3 from the AEGIS cruiser, USS Lake Erie. Most of the debris from impact was expected to burn up on reentry within 24 to 48 hours and the remaining debris is expected to re-enter within 40 days.

Did this test prove the effectiveness of a U.S. anti-satellite capability?

Answer. No. The satellite engagement was not a test of an anti-satellite capability. The President decided to destroy the satellite to prevent terrestrial damage or loss of life. His advisors presented him with a range of options, including one involving the missile defense system. Existing missile defense capabilities were subjected to an extensive, one-time modification, and were employed in a manner for which they were not developed to accomplish the mission. System modifications to the Aegis ship used for the test were reversed, and the unused interceptors were returned to their BMD configuration. MDA does not maintain, nor is it developing, an anti-satellite capability.

Question. In a briefing to the press, Gen. James E. Cartwright, the vice chairman of the Joint Chiefs of Staff noted that important elements of the sensors for the nation's missile defense system had been used. Could you describe the sensors that were used to conduct this test?

Answer. The Missile Defense Agency (MDA) Sensors program was responsible for the BMDS sensor activities conducted during all phases of the NRO Satellite intercept mission, including pre-mission planning and analysis, real-time mission execution, and post-flight hit and kill assessment. MDA sensors directly supported STRATCOM during all phases of the mission. Multiple BMDS ground-based and mobile assets participated, including 3 AN/TPY–2 X–Band radars, the Sea-Based X–Band (SBX) radar, and the Ground-Based Radar-Prototype (GBR–P) X–Band radar.

The AN/TPY–2 radars provide homeland and regional defense and can be integrated into the THAAD Weapon System. During this satellite intercept, one radar participated from Vandenberg Air Force Base (VAFB), CA. A second AN/TPY–2 radar was located at the Pacific Missile Range Facility where it is currently sup-

porting THAAD flight testing. The third radar was located at White Sands Missile Range (WSMR) for Limited Environment Testing and New Equipment Training prior to fielding THAAD Fire Unit #1.

The SBX radar is mounted on a mobile, ocean-going platform that was located in the vicinity of Hawaii for this mission. The radar provides a unique capability to detect, track, and discriminate complex and challenging threats. The radar is currently undergoing BMDS-level testing to demonstrate operational capability.

The GBR–P was originally developed as part of the three year National Missile Defense development phase to support flight testing and system integration. It is located at the Reagan Test Site (RTS) in the Kwajalein Atoll.

The External Sensors Laboratory (ESL) located at the Missile Defense Integration and Operations Center was established to take advantage of sensor systems that other agencies operate and apply those sensor data to the BMDS mission. During this mission, ESL tasked several electro optical sensors to observe the intercept point. Based on these observations, ESL was able to confirm the hit within seconds of the actual event. Further, the ESL provided some of the first confirming analysis that the hydrazine tank had been breached.

Question. Has the conduct of the satellite shoot down, harmed, in any way foreign cooperation with the Missile Defense Agency?

Answer. There have been no negative impacts on MDA's foreign cooperation efforts as a result of this satellite shoot down. The Director of MDA briefed information on the satellite shoot down during a 5 March 2008 NATO North Atlantic Council (Reinforced) meeting (Allies reinforced from capitals) and the feedback from the Allies was positive.

Question. Did the Missile Defense Agency have other options for intercepting the satellite, and were those options considered?

Answer. The Missile Defense Agency and the Combatant Commands examined options to include the Ground-based Midcourse Defense (GMD) long-range interceptor element and also the Terminal High Altitude Area Defense (THAAD) element. It was determined that the inherent flexibility of the Aegis Ballistic Missile Defense element to place a Standard Missile–3 equipped ship in an optimal position in the Pacific Ocean was the best way to effectively engage the de-orbiting satellite.

Question. What was the relative size of the intended target (tank) on the satellite as compared to the "sweet spot" on a ballistic missile warhead?

Answer. The physical sizes of the satellite's hydrazine tank and a ballistic missile warhead are roughly comparable. The relative size of the sweet spot on a warhead is roughly similar to the relative size of the hydrazine tank as part of the larger satellite.

Question. In the event of an incoming missile, about how much time would the Aegis program have to be alerted and prepare to fire? About how much time did the Aegis program have to prepare to fire on the satellite?

Answer. The amount of time available for Aegis alertment and firing preps is dependent upon a variety of factors, especially the availability and quality of off-board sensor inputs. Available time could range from seconds to hours or days or longer.

In the case of the satellite, the Aegis units involved had on the order of several weeks advance notification of the need to engage, and tens of seconds to actually initiate the successful engagement.

Question. How does the launch window for the satellite differ from the launch window for a ballistic missile?

Answer. The actual launch window to shoot the SM–3 to intercept the satellite was not significantly smaller than what would be expected for intercepts of ballistic missiles, especially when deployed forward for ascent phase intercepts.

On the other hand, while the NRO satellite mission was planned in advance, there would likely be limited warning and preparation time in the case of a hostile ballistic missile launch.

Question. The Aegis element required modifications before it could fire on the satellite and successfully intercept its target. How long did it take and what was the cost of making these modifications?

Answer. Aegis BMD was assigned the Satellite mission on 4 January 2008 and less than seven weeks later the satellite was successfully intercepted. The total cost was $112.3M of which $93.4M was for the Aegis BMD Program.

Question. Please describe the total cost of conducting the mission to shoot down this satellite including missiles, modifications to the Aegis and other systems, and any other costs directly related to this mission.

Answer. The total cost of the mission has been assessed at $112.361M and includes expenditures by the U.S. Pacific Fleet, the Aegis BMD Program Office, and other MDA radar and test assets. Detailed expenditure information is below.

Item	Description	FY08 Cost
Missile Hardware	Replacement of 1 Production Round	$14.100
Missile Modifications	Modifications; Certification & Simulation; Shipping and Software Analysis.	10.675
Aegis Weapon System	Software Testing; Installation & Checkout; Analysis; Combat System Engineering Development Site (CSEDS) Usage.	6.055
Data Analysis	MDIOC and Aegis BMD	2.102
Ship	Mission Support and Training	1.364
Pacific Fleet Costs	Fuel, Tanker Availability and Personnel	11.300
Aegis BMD Developmental Program	Buy back estimated 2 month schedule delay to Blk IB development and increased risk to test program.	59.145
Sensor/Radar Utilization	SBX, TPY–2's and GBR–P	2.920
Airborne Sensor Utilization	HALO–I Mission Costs	2.537
Other Costs	Test Range, Situational Awareness and Communications Nodes	2.163
Engineering	Lethality Analysis	
		112.361

U.S. Taxpayers Paying for the Defense of Europe

Question. Based on the Administration's current plan, it seems that the U.S. taxpayers will be picking up the costs of defending Europe from ballistic missile threats.

Have you discussed this issue with the Europeans?

Answer. Yes. The Allies are aware of the large financial commitment that the U.S. is making to the European deployment, which will also provide additional protection to the U.S. while protecting the European population and also providing protection for our deployed forces in the European theater.

Question. If so, what type of contribution are they likely to make?

Answer. The United Kingdom and Denmark (host of the UEWR radars in Fylingdales and Thule, Greenland, respectively) as well as Poland (host of the GBI site) and the Czech Republic (host of the European Midcourse X-Band Radar) will provide a substantial contribution to the U.S. BMDS and the Alliance by hosting these missile defense assets on their territory.

Additionally, NATO Allies already have or are pursuing short- and medium-range theater missile defense capabilities that will be integrated into the Active Layered Theater Ballistic Missile Defense (ALTBMD) Program to protect deployed forces, including acquiring/upgrading PATRIOT PAC 2/3 systems and co-developing the Medium Extended Air Defense System. This will provide a significant contribution to U.S and European security.

Question. How many missiles is Poland planning on procuring?

Answer. The Ground Based Interceptors deployed in Europe will be procured by the U.S. These missiles will provide protection to the European population and additional protection to the U.S. homeland and our deployed forces in the European theater.

Question. What has NATO agreed to do with regard to missile defense in Europe?

Answer. NATO Missile Defense Systems.

NATO agreed to develop the Active Layered Theater Ballistic Missile Defense (ALTBMD) Program that will have a command and control capability to link Allies' short range missile defense assets for protection of deployed forces. In 2011, the ALTBMD Program plans to deliver what it calls a "lower layer" capability (i.e., Patriot like system). Future capabilities will include "upper layer" systems like THAAD and SM–3. The Final Operational Capability for the ALTBMD systems is scheduled for 2017.

NATO Missile Defense Policies

Secondly, at NATO's Prague Summit in 2002, NATO Heads of State and Government (HOSG) agreed to conduct a study (the Missile Defense Feasibility Study (MDFS)) to examine the feasibility of a system to protect European territory and populations from long-range threats. The MDFS was completed in 2006 and concluded that such a system is technically feasible.

When the HOSG reviewed the MDFS at the Riga Summit in November 2006, it was decided that further work was needed to address remaining questions in the policy, military, and technical areas of the MDFS. These "Riga taskings" along with NATO Defense Ministers' June 2007 tasking to assess the implications of the US European Capability form the basis of a report that will inform the discussion at

the Bucharest Summit planned for April 2008. This report on the Riga and Defense Ministers' taskings concludes that the US European Capability will provide substantial coverage for most of NATO territory.

The NATO Secretary General, Mr. Jaap de Hoop Scheffer, attested to the level of NATO agreement in his 19 April 2007 remarks:

"There is absolutely a shared threat perception between the Allies. Allies all agree that there is a threat from ballistic missiles."

"The Allies are united on the issue, on the threat, and on the way ahead."

EUROPEAN SITE AND NATO ALLIES

Question. Several NATO allies have expressed concern about the Administration's decision to deploy missile defense on a bilateral basis (i.e., with Poland and the Czech Republic) rather than through a NATO process.

Why did the Administration decide to move forward on a bilateral instead of a multilateral process with NATO?

Answer. Forces operating under NATO auspices are not typically NATO assets but force/capability contributions made by NATO members. This is the common model that the U.S. has chosen to follow for the European Deployment. We held significant discussions with our North Atlantic Treaty Organization partners on a way forward to strengthen Trans-Atlantic unity and improve protection for all NATO countries against longer-range missile threats.

Question. What impact will this decision have on NATO?

Answer. The European deployment will provide protection to most of Europe from the long-range ballistic missile threat posed by Iran. Further, the planned interoperability of the U.S. Ballistic Missile Defense System and the European Active Layered Theater Ballistic Missile Defense (ALTBMD) will greatly enhance the effectiveness of both systems, reaffirms the indivisibility of U.S. and European security interests, strengthens deterrence and promotes regional stability by giving U.S. and European leaders more options, limits the ability of hostile governments to coerce European allies thereby indirectly holding the United States hostage, and devalues the utility of ballistic missiles.

Question. Could this potentially become a divisive issue within the Alliance?

Answer. The U.S. is working hard to ensure a common understanding among NATO allies of the proposed European deployment. On September 3, 2007, NATO Secretary General Jaap de Hoop Scheffer stated publicly that there is "absolutely a shared threat perception between the Allies." At the Bucharest Summit, NATO allies are fully expected to reach agreement on a way forward for cooperation between the European Deployment and NATO Missile Defense efforts.

Question. Could you provide us an update on our consultations with NATO to date?

Answer. Public Diplomacy/Pol-Mil:

The U.S. has been actively engaged with its NATO partners on this issue in a number of fora, both political and technical. We have participated in and briefed on the proposed deployment in every North Atlantic Council and NATO Russia Council Meeting since February 2007. We have also played an active role within the Executive Working Group as NATO moved forward to develop a position on the proposed deployment.

Technical:

Under the auspices of the Conference of National Armaments Directors, we have played a leading role on the Missile Defense Project Group to ensure that accurate and comprehensive reports have been developed for NATO's decision makers:

In June 2007, the NATO Defense Ministers tasked the Council of National Armaments Directors (CNAD) via the North Atlantic Council and NATO's Executive Working Group to study the implications of the U.S. proposed European Site.

In October 2007, the CNAD agreed to a report, the Defended Asset Analysis Report, which indicated that the proposed U.S. European Site provides substantial coverage to the Alliance against ballistic missile attacks.

In March 2008, the NATO Missile Defense Project Group (tasked by the CNAD to lead the June 2007 tasking), issued agreement on the Executive Summary of the Report on the Riga and June 2007 Defence Ministerial Taskings on MD and a corresponding Annex with limitations and assumptions of the report and noted the 215 page report main body. This Executive Summary supports that the European Capability will provide substantial coverage to most of NATO territory.

Question. Is there currently a formal NATO endorsement or approval of the proposed deployment?

Answer. The NATO Heads of State will meet in early April in Bucharest. They are expected to issue a report that is supportive of the European deployment.

In June 2007, the NATO Defense Ministers tasked the Council of National Armaments Directors (CNAD) via the North Atlantic Council and NATO's Executive Working Group to study the implications of the U.S. proposed European Site.

In October 2007, the CNAD agreed to a report, the Defended Asset Analysis Report, which indicated that the proposed U.S. European Site provides substantial coverage to the Alliance against ballistic missile attacks.

In March 2008, the NATO Missile Defense Project Group (tasked by the CNAD to lead the June 2007 tasking), issued agreement on the Executive Summary of the Report on the Riga and June 2007 Defence Ministerial Taskings on MD and a corresponding Annex with limitations and assumptions of the report and noted the 215 page report main body. This Executive Summary supports that the European Capability will provide substantial coverage to most of NATO territory.

Question. What formal requirements does NATO have for missile defense in Europe?

Answer. NATO currently has a requirement to protect deployed forces against ballistic missiles with a range of less than 3000 kilometers.

While NATO currently has this single requirement for protection of deployed forces, it is also currently studying architecture options and requirements for the defense of territory and population.

EUROPEAN SITE AND POLISH AND CZECH RELATIONS

Question. Until recently, there had been strong public support in Poland and the Czech Republic for deploying U.S. missile defense capabilities in their respective territories. However, over the past several months, public support for the potential deployment has decreased.

What have been the key reasons contributing to the change in public opinion in Poland or the Czech Republic?

Answer. The U.S. is sensitive to the concerns of the citizens of Poland and the Czech Republic and has assisted the host governments, when requested, with information to inform their citizens and provide a better understanding of our plans to base U.S. missile defenses in their countries. We are complementing these efforts by engaging the wider European community on our missile defense plans to communicate how our efforts contribute to overall regional security.

Despite criticisms of the proposed deployment by some, the host nation governments continue to support U.S. missile defense basing plans. We are moving forward with plans to complete negotiations in the next few months. These negotiated agreements ultimately must be approved by the Polish and Czech Parliaments.

Question. Have the different political parties in Poland or the Czech Republic have an influence over the negotiations?

Answer. We have enjoyed a productive working relationship with our Czech and Polish counterparts regardless of their party.

Question. What impact will this have on our decision to move forward?

Answer. It has not impacted our decision to move forward. We have made good progress in negotiations with both the Czechs and the Poles.

Question. What impact do the local entities have over the negotiations (i.e. mayors and local politicos)

Answer. The Ministry of Foreign Affairs in both Poland and the Czech Republic are responsible for negotiation of these agreements. We are unaware of any direct influence from any local entities in either country.

USE OF THAAD AND AEGIS TO DEFEND EUROPE

Question. One of the Administration's key rationales for deploying a GMD site in Europe is to protect our forward deployed radars in Europe. That said, if Iran decided to attack our European radars they would use medium and intermediate-range missiles, the type of missiles that THAAD and the SM–3 are designed to counter.

Why can't we use THAAD and the SM–3 missile to protect Europe, especially the radars, from medium and intermediate range missile threats? Isn't that what these systems are designed for?

Answer. Yes, we could use THAAD and Aegis BMD with SM–3 interceptors to protect locations in Europe, especially the radar sites, from medium (MRBM) and intermediate (IRBM) range missile threats. However, the number of ship stations, total number of ships and/or total number of THAAD Fire Units to protect Europe on a 24/7/365 force alert posture would be cost prohibitive and could be susceptible to increasingly complex threats. Aegis BMD and THAAD are ideally suited as a complementary capability option to the European Interceptor Site (EIS) to provide

layered defense of key areas, defend the parts of Europe that EIS cannot or provide some protection while the EIS is being built. Each is designed for this capability.

For complete coverage of Europe and redundant coverage of the U.S., the best BMDS solution is a mix of THAAD, Aegis BMD and EIS working together with land and space based sensors.

Question. Couldn't the SM–3 Block IIA missile, which we are currently co-developing with Japan, protect most European population centers from medium and intermediate range missile threats?

Answer. ———.

Question. What are the implications for the Navy's or the Army's force structure requirements if an SM–3 or THAAD alternative were to be pursued?

Answer. ———.

TWO-STAGE GROUND-BASED INTERCEPTOR FOR THE EUROPEAN SITE

Question. When MDA submitted its fiscal year 2008 budget, it requested funds to continue the acquisition of GBIs for the European site, but this time it stated those interceptors would have a two-stage booster. The fiscal year 2009 budget submission continues this effort.

Has MDA conducted a study of the feasibility of using a 2-stage booster at a European site? If so, what were the results of the study? Has MDA conducted a test of a two-stage booster?

Answer. Yes, the MDA has conducted studies of the feasibility of using a 2-stage booster at a European site. The results of this study show using a 2-stage vice 3-stage booster is required to better defend Europe against Iranian threats.

The 2-stage booster is being developed primarily to meet the needs of the defense of Europe, but also expands protection of the U.S. homeland with its capability to intercept long range ballistic missiles targeting the U.S. Its shorter minimum engagement time is better suited to engage threat ranges in the European Theater. The European Interceptor Site (EIS), combined with mid-course and forward-based radars, provides considerable redundant coverage of the U.S. and, depending on the threat, defends Western and Central Europe and most of Eastern Europe.

The 2-stage booster is a configuration of the currently deployed and flight-tested 3-stage booster at Fort Greely and Vandenberg Air Force Base. The booster contractor will complete design modifications to eliminate the third stage rocket motor and repackage the booster electronics that were located on the third stage. Additionally, navigation and guidance software changes will enable the interceptor to perform mission profiles for two stages of flight versus three. The common components between the 2-stage and 3-stage booster have undergone significant ground, flight, and qualification testing as part of the 3-stage development effort. Because the 2-stage interceptor planned for Europe has fewer components than its 3-stage predecessor, the 2-stage variant is a less complex version of the successfully tested and fielded 3-stage interceptor.

The Ground-Based Midcourse Defense (GMD) 2-stage development activity has started and a Program Critical Design Review is scheduled to occur in December of 2008. Two flight tests will be conducted, both from Vandenberg Air Force Base in California, prior to the deployment of the interceptors at the European site. The two flight tests include a booster verification flight with an Exo-atmospheric Kill Vehicle (EKV) mass simulator and an integrated flight test with an EKV and a threat-representative target vehicle. These tests are scheduled to be completed in 2009 and 2010 respectively. The GMD Fire Control (GFC) and Command and Launch Equipment (CLE) software adapted for the 2-stage interceptor will also be included in the 2-stage intercept flight test.

MDA has successful prior experience in modifying 3-stage boosters to fly 2-stage missions. The Payload Launch Vehicles (PLVs) flown in the GMD program's first ten Integrated Flight Tests (January 1997 through December 2002) were 2-stage variants of the standard 3-stage Minuteman boosters. The 2-stage interceptor reliability will be demonstrated through rigorous component qualification, integration testing, ground testing and flight testing.

Question. What is the cost of retrofitting the booster from a three-stage to a two-stage configuration?

Answer. The estimated cost for retrofitting an on-hand booster stack from a 3-stage to a 2-stage configuration is $4.5M. The estimated cost for retrofitting an emplaced 3-stage Ground-Based Interceptor (GBI) to a 2-stage configuration is $8.83M.

To date, MDA has not retrofitted a booster from a 3-Stage GBI to a 2-Stage GBI, therefore the estimates provided here are based on a combination of actual costs for tasks already performed as part of the ongoing 3-Stage interceptor program, engineering estimates and estimates derived from similar activities already performed.

Additionally, the cost of retrofitting shown below assumes a level of manufacturing similar to the current program. If the manufacturing rate drops, retrofit costs could be substantially higher.

The $4.5M estimate assumes the starting point is a completed 3-Stage booster stack on hand at the Orbital Sciences Corporation (OSC) Missile Assembly Building (MAB) at Vandenberg Air Force Base (VAFB), CA. Three additional 2-Stage-related hardware items are necessary for the retrofit:

- Booster Avionics Module (BAM) adapter ring ($200k)
- Wire harness installation modification ($350k)
- 2-Stage shroud (with relocated cutouts for the Attitude Control System (ACS) thrusters ($750k)

The total estimated cost for additional 2-Stage specific hardware is $1.3M.

Required work at the OSC MAB to convert from a 3-Stage to a 2-Stage booster stack includes:

- Disassembly of the booster stack to remove the third stage ($500k)
- Reintegration/retesting of the 2-Stage booster stack to include the BAM adapter ring and the wire harness installation modification ($2.7M)

The total cost of the booster stack disassembly and reintegration work at the OSC MAB is $3.2M.

The $8.83M estimate assumes the starting point is an emplaced 3-Stage Limited Defensive Capability (LDC) GBI, additional activities are required to complete the de-emplacement, retrofit, and re-integration, and re-emplacement of a 2-Stage interceptor. For example, assuming an emplaced Fort Greely, AK (FGA) LDC GBI is the starting point, a complete retrofit would incur the following additional costs:

- Interceptor removal from silo and transportation to the FGA MAB ($150k)
- De-mate of the 3-Stage booster stack from the Payload Avionics Module (PAM) ($100k)
- Transport 3-Stage booster stack from FGA MAB to OSC MAB ($183k)
- Upon completion of retrofitting [$4.5M described above], return transportation for the reconfigured 2-Stage booster stack from OSC MAB to FGA MAB ($183k) [Transportation costs to other re-emplacement sites will vary depending on location, with European Interceptor Site (EIS) costs being the greatest; however, EIS transportation costs have not been determined.]
- Reintegrate booster stack and PAM at FGA MAB ($3.3M)
- Transportation from the FGA MAB to silo, emplacement, and return to operations ($550k)

These additional costs total $4.33M.

NEW BLOCK STRUCTURE

Question. MDA established a new block acquisition approach in response to Congressional concerns about transparency and accountability. Whereas previously MDA developed capabilities in two-year increments, it now plans to develop and field capabilities based on specific threat sets. Five blocks are currently defined:

- Block 1—Defend the U.S. from limited North Korean long-range threats;
- Block 2—Defend Allied/Deployed Forces from short-to-medium-range threats;
- Block 3—Defend the U.S. from limited Iranian long-range threats;
- Block 4—Defend Allied/Deployed Forces in Europe from limited Iranian long-range threats; and
- Block 5—Expand defense of Allied/Deployed Forces from short-to-intermediate-range threats in two theaters.

In its recent draft report, GAO noted that the new block structure does not address whether the assets included in a block will be transferred at the block's completion to a military service for production and operation. Officials across DOD recognize that transfer criteria are neither complete nor clear given the BMDS's complexity. Without clear transfer criteria, MDA has transferred the management of only one element—the Patriot Advanced Capability–3—to the military service for production and operation. MDA and the military services have been negotiating the transition of responsibilities for the sustainment of fielded elements—a task that has proven arduous and time consuming.

How have the block priorities been determined?

Answer. MDA has three strategic objectives that drive our block construct and budget priorities. The five blocks and non-block (Capability Development) funding category are associated with the strategic objectives as follows:

1. Maintain and sustain an initial capability to defend the U.S., allies and our deployed forces against rogue nation attacks:

   a. Homeland defense against long-range missiles from North Korea (Block 1.0—Defense of the U.S. from Limited North Korean Long-Range Threats)

b. Develop initial defense for deployed forces and allies in regional conflicts (Block 2.0—Defense of Allies and Deployed Forces from Short-to-Medium Range Threats in One Region/Theater)

2. Close gaps and improve this capability against rogue states:

a. Expand homeland defense against Iran (Blocks 3.0—Expand Defense of the U.S. to Include Limited Iranian Long-Range Threats and 4.0—Defense of Allies and Deployed Forces in Europe from Limited Long-Range Threats/Expand Protection of the U.S. Homeland)

b. Defeat larger and more complicated attacks (e.g., decoys, multiple warheads) (Block 3.0 and Capability Development)

c. Extend deterrence, enhance defenses for deployed forces and allies, and increase international cooperation (Blocks 4.0 and 5.0—Expand Defense of Allies and Deployed Forces from Short-to-Intermediate Range Threats in Two Regions/Theaters)

d. Extend U.S. decision time and complicate enemy planning (Block 4.0 and Capability Development)

3. Develop options to dissuade and stay ahead of current and emerging threats:

a. Leverage technological advantage to increase defense effectiveness (Capability Development)

b. Build a foundation for global access and response (Capability Development)

Question. How is this new block structure reflected in the budget request?

Answer. MDA's budget is organized for FY 09 and through the period of the Future Years Defense Program (FYDP) based on the existing program element (PE) structure subdivided according to the new block structure. For example, the BMD Midcourse Defense Segment PE has budget projects for Ground Based Midcourse Defense (GMD) Blocks 1.0 (Defense of the U.S. from Limited North Korean Long-Range Threats), 3.0 (Expand Defense of the U.S. to Include Limited Iranian Long-Range Threats), and 4.0 (Defense of Allies and Deployed Forces in Europe from Limited Long-Range Threats/Expand Protection of the U.S. Homeland).

Also, BMDS program funding that does not fit into existing blocks (1.0 through 5.0) is assigned to four general categories:

- Capability Development—technology programs that are maturing and being considered for future blocks (Block 6.0, etc.); for example, the defense of the United States against complex countermeasures might draw on multiple kill capabilities from the multiple kill vehicle (MKV) program
- Sustainment—operations and support of weapon systems, sensors, and command and control, battle management and communications (C2BMC) components
- Mission Area Investment—activities that support multiple blocks and capability development activities and cannot be reasonably assigned to a specific block or capability development program (e.g. intelligence and security; modeling and simulation; systems engineering and testing cores; safety, quality, and mission assurance)
- MDA Operations—activities that support the Agency, such as Management Headquarters and Base Realignment and Closure (BRAC)

Question. How does the new structure meet the stated goal of addressing Congressional concerns?

Answer. MDA's new block structure was designed to address Congressional concerns about accountability and transparency and to better communicate to the Congress, Military Departments, GAO, and other stakeholders our plans and baselines and the continuing improvements in BMDS capabilities that are expected to be delivered to the war fighter.

Congressional concerns such as the movement of program content from one block to another and our development program being schedule-driven rather than vent-driven are addressed by the new block structure, which has several key tenets:

- Blocks will be increments of BMDS capabilities—rather than biennial time periods—being fielded against particular threats. They will represent a discrete program of work.
- When MDA believes a firm commitment can be made to the Congress, blocks will have schedule, budget, and performance baselines. Schedule delays, budget increases, and performance shortfalls will be explained as variances.
- Once baselined, work cannot be moved from one block to another.

Question. Given that at the end of each block, MDA plans to have fully-mission capable components, when does the agency plan to transition and transfer such components to the military service?

Answer. In accordance with 10 U.S.C. 224, Ballistic Missile Defense Programs, minimum criteria for the transfer of responsibility for elements of BMDS from the MDA Director to the Secretary of a military department is established by the Sec-

retary of Defense. At the very least, the criteria established for such a transfer shall address the technical maturity of the program, the availability of facilities for production, and the commitment of the Secretary of the military department concerned ensuring procurement funding for that program, as shown by funding through the FYDP and other defense planning documents.

Current status of planned transition and transfer for BMDS components to identified Lead Military Departments is detailed on the attached slide, "Integrated Ballistic Missile Defense Scorecard." Several dates are currently undefined, as element progress is event-based vice time-based. As the BMDS meets MDA Director approved Knowledge Points, it will progress through and be potentially available for Early Capability Delivery, Partial Capability Delivery, and Full Capability Delivery. After Commander, United States Strategic Command has completed a Military Utility Assessment; USSTRATCOM will declare Partial Mission Capability and Full Mission Capability. Actual transfer dates will be agreed upon after close coordination between MDA and the designated Lead Military Department.

MISSILE DEFENSE FORCE STRUCTURE

Question. What efforts has the Department undertaken to assess missile defense force structure requirements?

Answer. The Missile Defense Agency (MDA) has initiated a number of analyses, embodied in the "MDA Summer Study" effort and elsewhere, to determine what baseline force would be required to counter long range ballistic missile (LRBM) threats. These studies have been updatd periodically to accommodate changes in the potential threat, technology advances, and changes in National guidance.

Joint Integrated Air and Missile Defense Organization, previously named Joint Theater Air and Missile Defense Organization, led a Joint Capabilities Mix (JCM) Study in 2006 to assess BMD force structure and missile inventory needs in Major Combat Operations. This study evolved into the Joint Capabilities Mix Study series, an iterative opportunity for the joint communities of interest to explore weapon and force structure options for the global BMDS. This effort includes the Services, Joint Staff, combatant commands, MDA, Defense Intelligence Agency, OSD Program Analysis and Evaluation (PA&E), Space and Missile Defense Command, and Program Offices.

In addition to the Joint Capabilities Mix Studies, MDA, in conjunction with the Services, developed the Ballistic Missile Defense System Transition and Transfer Plan that specifies the roles and responsibilities of various Defense organizations in the development of BMDS force structure requirements, including Memoranda of Agreement (MOA) with the Military Departments and Services providing for force structure development. This plan includes Annexes for each element of the BMDS that specify roles and responsibilities, programmatic linkages, transition and transfer objectives and milestones, and contract status.

Missile defense force structure is also explored within the Department's Analytical Agenda effort using various Defense Planning Scenarios and Multi-Service Force Deployment studies.

The Department also established the Missile Defense Executive Board (MDEB) to "oversee implementation of strategic policies and plans, program priorities, and investment options" for the BMDS.

Question. What are the military's force structure requirements for current and future missile defense capabilities?

Answer. Current force structure requirements for missile defense capabilities are found in applicable Service source documents, i.e., Navy Activity Manning Documents, Army Table of Organization & Equipment, and the Air Force Definition of Operational Capability. Current Service capabilities that map to the applicable source documents are Patriot PAC–3, AEGIS Standard Missile 3, Ground Based Interceptor (GBI), Upgraded Early Warning Radars, and the Cobra Dane Radar. Ongoing processes that will help define the requirements for future missile defense capabilities such as the European Component, X-Band AN/TPY–2 Radar, Terminal High Altitude Area Defense system, and Airborne Laser are: (1) The Warfighter Involvement Process which provides the important interface between the materiel developer and warfighter identities of missile defense solutions that facilitate effective development and employment of missile defense capabilities; (2) The Missile Defense Executive Board (MDEB) which oversees implementation of strategic policies and plans, program priorities, and investment options concerning missile defense capabilities necessary to protect our Nation and our allies from missile attack and makes recommendations to the Deputy Secretary of Defense; (3) The Joint Capability Mix (JCM) studies led by the Joint Staff J–8 Joint Integrated Air and Missile Defense Organization (JIAMDO) which help inform missile defense force structure

requirements for various scenarios and environments; (4) the Commander, United States Strategic Command (CDRUSSTRATCOM) Military Utility Assessment used to evaluate the operational effectiveness, interoperability and operational suitability of the current fielded system and, (5) the Warfighter Prioritized Capabilities List, developed by USSTRATCOM (based on combatant commander input) articulates warfighter capability desires and is used to help the materiel developer, the Missile Defense Agency, understand the warfighter's needs. The Missile Defense Agency in turn develops the Achievable Capability List which identifies what capability can be provided. This exchange informs the materiel decisions that will ultimately impact force structure that is delivered.

BOOST PHASE DEFENSE

Question. The Department has indicated that it will make a down-select in 2009 as to whether to proceed with the Airborne Laser (ABL) or the Kinetic Energy Interceptor (KEI) as the prime boost phase defense system.

What specific criteria (e.g., affordability, operational effectiveness, etc.) will the Department use to make the down-select decision between ABL and KEI?

Answer. MDA will consider criteria that will include affordability, operational effectiveness, technology maturity, producability, ground and flight test data, technical performance during build-up activities, and other factors. Data and knowledge gathered during the build-up and execution of ABL's "shoot-down demonstration" and the build-up and execution of KEI's "high acceleration booster demonstration" will be used to support any decision.

Directly comparing the two programs for a down select decision is difficult because each program is designed to satisfy a Boost Phase Defense capability with a dramatically different approach. A review will require a very broad Ballistic Missile Defense System (BMDS) view that encompasses not only these two programs, but also the scope of work and maturity of other related technology and development programs within MDA. Other factors external to these programs may influence a decision. These factors may include other investment opportunities, program timing, total funding availability, BMDS functionality, as well as dynamic warfighter requirements.

Question. Both ABL and KEI have key milestone tests planned for FY09. If ABL fails to conduct the scheduled September 2009 shoot-down demonstration or KEI fails to complete its booster flight test, what impact will that have on the down-select decision?

Answer. A knowledge-based down-select decision is dependent on data and knowledge from each program as well as data from external sources. If either program fails to meet its scheduled milestone date, a broader Ballistic Missile Defense System (BMDS) view will be taken to determine if there is sufficient knowledge to make a decision at that time. Several outcomes are possible: a decision to maintain both programs until sufficient knowledge is obtained from the build-up and outcome of the key milestone events, a decision to proceed with only one program based on data and knowledge obtained to date, or a decision to proceed with neither program due to other external factors such as funding availability, technical viability of a third alternative, and dynamic warfighter requirements.

ASYMMETRIC DEFENSE

Question. General Obering, we are very concerned about the potential threat of asymmetric attacks on the U.S. homeland. Based on these concerns, this Committee has added funding for the last two years specifically for a review of asymmetric threats and our capabilities against these threats. Future opponents will have many options for attempting to deter, disrupt, or defeat U.S. use of military power. Four broad options could be part of an asymmetric response to current and foreseeable U.S. superiority in regional combined-arms warfare capability. An example of an asymmetric threat is the acquisition of weapons of mass destruction (WMD) and long-range ballistic or cruise missiles. Even without operational use, the mere presence of such capability would act as a regional-strategic shadow and might weaken the commitment of key allies to any future U.S. military response to regional aggression.

Please discuss current threats.

Answer. ———.

Question. Can you discuss the work you have conducted with these funds?

Answer. In FY08, the HAC–D provided $10M to MDA to conduct experiments, develop prototypes, test CONOPS, and recommend deployment options for an integrated asymmetric missile defense capability that would protect population centers from a ballistic or cruise missile launched from a ship off of the U.S. coastline. Pre-

vious funding was received in FY06 ($10M) and FY07 ($4.1M) to address the same Asymmetric Defense Issue. Starting in FY06, MDA initiated, with Congressional support, a three-phased approach to solving the problem. First the MDA initiated an architecture study which assessed existing cruise and ballistic missile capability that could be used to augment the existing air defense architecture and provided recommendations for further development. Second, MDA leveraged a planned Joint Integrated Air and Missile Defense Organization (JIAMDO) test in the National Capital Region (NCR) in June 2007 to evaluate the Lockheed Martin Silent Sentry III passive surveillance system against surrogate ballistic and cruise missile targets in a realistic urban environment. Third, MDA funded an Operator-In-the-Loop (OITL) experiment with participation from NORTHCOM, STRATCOM, JIAMDO and the services in order to assess capabilities and develop CONOPS for defense of the homeland against the asymmetric threat.

MDA is using the FY08 funding to build upon previous architecture studies, surveillance prototype testing, and OITL experiments to initiate a multi-year effort to design and prototype an Element architecture in the NCR to defend against asymmetric missile attacks. This effort leverages the existing air defense infrastructure in the NCR, called the Enhanced Regional Situational Awareness (ERSA) system. This year, we are designing an upgrade of the existing ERSA infrastructure to support necessary interfaces to additional sensors and the integration of surveillance fusion processing necessary to support surveillance and fire control functions for countering cruise and ballistic missile threats. We are also designing threat conditioning and intent assessment logic to assist the warfighter in timely identification of positive-hostile threats. We are continuing to conduct experiments and develop prototypes of surveillance technologies that will support detection, tracking and fire control capability for engagement of ballistic or cruise missile threats. We are continuing associated systems engineering studies and assessments necessary for overall integration and will continue to assess options for future capability spirals. We are building upon the OITL experiment completed in FY07 and will jointly fund an experiment in FY08 with JIAMDO which builds upon the FY07 experiment to continue assessing architectures and developing CONOPS with warfighter participation.

MDA has brought together a team of experts from MIT Lincoln Laboratory, NORTHCOM, STRATCOM, JIAMDO, as well as the Army and the Navy to assess the architectures being developed with this funding. This work is being done in a collaborative environment with warfighter and service participation. Additionally, MDA has also been requested to write a report summarizing the results of our efforts to date. This report was written in a collaborative fashion with the same team. The report is in MDA's final Staffing process and we expect delivery to Congress on or before June 2, 2008.

Question. What are our current capabilities? What about future capabilities?

Answer. Shortly after the attacks of September 11, 2001, an initial air defense architecture, called NORAD's Integrated Air Defense System (IADS) was established in the National Capital Region (NCR). The Command and Control connectivity of the IADS sensors and ground based air defense assets is provided by the Enhanced Regional Situational Awareness System (ERSA), which is an augmentation of the existing Operation Noble Eagle. The details of this system are classified SECRET, but will be provided in the Asymmetric Threat report to Congress that will be delivered in June 2008 (please see response to Question 38 for more specifics). In addition to the NCR IADS, a Deployable Homeland Air and Cruise Missile Defense (D–HACMD) capability was assembled by NORAD as an extension to Operation Noble Eagle. This capability consists of AWACS surveillance aircraft, FAA and Sentinel radars, fighter aircraft, Avenger surface-to-air missile systems, and a mobile command and control capability, and, with adequate warning can be deployed to a specific location for a heightened state of alert or National Special Security Event. Integration of Patriot and Aegis into the D–HACMD has also been demonstrated in a test event.

The future capabilities being proposed by the Missile Defense Agency, in conjunction with NORTHCOM and STRATCOM, will leverage the sensor and command and control infrastructure that currently exists. We will add sensors for surveillance and fire control that will be integrated into the existing IADS system in the NCR. Additional threat conditioning and intent assessment logic will also be required in order to assist the warfighter in timely identification of positive-hostile threats that will be necessary to support the stressing timelines required for the engagement of a short range ballistic or cruise missile threat. This capability, once developed and demonstrated in the NCR will form the basis for an architecture used to protect other population centers. MDA (in consultation with NORTHCOM and STRATCOM) has developed a Tiered structure to characterize the capabilities required to protect

a single population center, a region, a coastline, or protection of the entire U.S. (or North America). The details of these proposed architectures are classified as SECRET, and will be provided in detail in the congressional report that will be delivered in June 2008.

Question. How is DoD and MDA countering asymmetric threats?

Answer. It is assumed that this question is referring to the definition of an asymmetric threat that is provided in the FY08 HAC–D tasking, that being a cruise or short range ballistic missile launched from an aircraft or a ship off of the U.S. coastline.

The Missile Defense Agency is rapidly prototyping, developing, testing and fielding capability to protect the U.S., our deployed forces and allies against ballistic missiles at all ranges and in all phases of flight.

An air defense architecture was established in the National Capital Region (NCR) following the September 11, 2001 terrorist attacks to provide a limited defense against airborne threats. Currently, this air defense system has very little capability against cruise missiles since they can fly low and have small radar cross sections, and has no capability against short range ballistic missile threats that could be launched off of the U.S. coastline. The Congressional funding mentioned in the response to question #38 has provided MDA with the resources to develop architectures and to prototype technologies and CONOPS that can be used to implement a defense against asymmetric cruise and ballistic missile threats, should this requirement become a national priority. The FY08 effort is focused on the design and initial prototyping of such a capability in the NCR. The details of this capability are SECRET, but will be provided in the MDA's report to Congress on the Asymmetric Threat, which will be delivered in June 2008.

LACK OF PROGRAM TRANSPARENCY

Question. In its February 2008 report, GAO recommended that to improve the transparency of the Ballistic Missile Defense System (BMDS) program, MDA should establish cost, schedule, and performance baselines for those elements in system development and demonstration and report against those baselines. MDA partially concurred with this recommendation, but was concerned that an element-centric approach would detract from its efforts to develop a single integrated BMDS. GAO continues to support its recommendation because the element-centric reporting approach reflects the way MDA requests funding and contracts for development of the BMDS.

What reporting basis would MDA recommend to provide a similar level of transparency as reporting against element baselines would provide?

Answer. Pursuant to Section 234 of the Ronald W. Reagan National Defense Authorization Act for Fiscal Year 2005 (Public Law 108–375), MDA established schedule, budget, and performance baselines for each block configuration being fielded (biennial Blocks 04, 06, and 08 under the previous block structure) and reported variances annually in the agency's Statement of Goals (SOG).

In 2007, MDA established a new block structure to address concerns about transparency, accountability, and oversight and to better communicate to Congress and other key stakeholders our plans and baselines and our continuing improvements in BMDS capabilities. Blocks will be based on fielded capabilities—not biennial time periods—that address particular threats, and each block will represent a discrete program of work. When blocks are established, schedule, budget, and performance goals will be defined for each block. These goals, revised as necessary, will become baselines when MDA can make a firm commitment to the Congress because we have a high level of confidence that the baselines can be achieved.

MDA has established schedule, budget, and performance baselines for Blocks 1.0 (Defense of the U.S. from Limited North Korean Long-Range Threats), 2.0 (Defense of Allies and Deployed Forces from Short-to-Medium Range Threats in One Region/Theater), and Block 3.1/3.2 (Expand Defense of the U.S. to Include Limited Iranian Long-Range Threats). We have established goals, not baselines for Block 3.3 (Expand Defense of the U.S. to Include Limited Iranian Long-Range Threats—Improved Discrimination and System Track), Block 4.0 (Defense of Allies and Deployed Forces in Europe from Limited Long-Range Threats/Expand Protection of the U.S. Homeland), and Block 5.0 (Expand Defense of Allies and Deployed Forces from Short-to-Intermediate Range Threats in Two Regions/Theaters). In the SOG that accompanied the President's Budget for FY 2009, we presented these baselines and goals.

In each subsequent year's SOG, we will explain any significant variances from schedule, budget, and performance baselines and the reasons for re-defining block goals. We will also explain changes in year-to-year funding plans for each block over

the period of the Future Years Defense Plan (FYDP). This level of reporting is a significant enhancement to transparency.

MDA has also begun establishing unit cost baseline estimates for BMDS capabilities being acquired and delivered to the war fighter. Our approach is to build these estimates from the level of selected components to be fielded (such as the Terminal High Altitude Area Defense Fire Unit) to the element (THAAD) level and eventually to the block level. This latter calculation will be a full block cost baseline estimate. Before establishing cost baseline estimates, MDA will request an independent review by the Cost Analysis Improvement Group (CAIG), DoD's independent cost estimating unit.

Once the estimates are established, MDA will report any significant cost variance to the Congress. This information will supplement the reporting of acquisition cost at the BMDS level in the agency's annual SAR. We are now in the process of determining the thresholds to report such cost variations and will incorporate them in a MDA directive.

While our capabilities-based, spiral development program may not provide the identical kind of information and baselines generated under DoD Instruction 5000 for traditional acquisition programs, our intention is to fully meet the transparency, accountability, and oversight needs of Congress and other stakeholders.

Question. Would MDA adjust its budget requests and contracts to match its reporting approach?

Answer. We are re-considering the current program element (PE) structure that organizes our budget request. As of this time, however, we intend to continue our practice of subdividing the existing structure into budget projects tied to the five new blocks and non-block Capability Development category. As for contracts, our intention is to restructure contracts as appropriate to reflect the new block structure, cost reporting requirements, and the transition to multiple appropriations.

USE OF RESEARCH AND DEVELOPMENT FUNDS BY MDA TO INCREMENTALLY FUND PROGRAMS

Question. MDA has approval to acquire assets with research and development (R&D) funds, which allows MDA to incrementally fund procurements. This is unlike any other program at DOD.

Has MDA completed analysis to determine the overall effect of incremental funding? That is, has MDA determined whether incremental funding will result in a reduction of financial obligations in the early years, but a greater outlay of funds in future years?

Answer. Yes. MDA has completed an analysis that compares the impact of incremental funding to the full funding required when using procurement funds. The results of that analysis show that in the near term (FY09/10), fully funding the BMDS would result in budget shortfalls that would require significant adjustments to our program plans that would lead to delays in delivery of missile defense capability to the warfighter. Separately, incremental execution fits well with the spiral upgrade approach that MDA is employing for BMDS development.

Question. Is there any reason, other than freeing-up funds for other uses, that funding for the GMD interceptor has been stretched from 3 to 5 years?

Answer. The funding profile for the GMD interceptor has not been stretched to free up funds for other uses. Funding has been distributed across fiscal years to fit within the available program allocation and at a level to meet program requirements. The extended profile exists because of the duration between the purchase of long lead for the initial European Capability GMD interceptor in 4QFY09 and the final GMD interceptor emplacement in 2QFY13. This results in a total funding span of approximately four years and, from a budgetary standpoint, a funding span which includes a total of five fiscal years. During this period, the individual interceptor manufacturing time remains at approximately three years and the complement of ten interceptors, #45–54, are emplaced in Europe.

Question. Can you give examples of new threats that MDA was able to address because it is incrementally funding fielded assets?

Answer. The Ballistic Missile Defense System (BMDS) program is focused on the threat from North Korea and Iran. But the threat can never be predicted with certainty, and MDA has used incremental funding in a flexible "capabilities-based" strategy to exploit technological opportunities and place capability in the war fighters' hands far more quickly than could have occurred under a traditional acquisition approach. This strategy has enabled us to field a BMDS capability that currently provides a limited defense of the U.S. against intercontinental ballistic missiles from North Korea and an initial defense of deployed troops, allies and friends against regional ballistic missile threats. We expect to continue using this capabilities-based

strategy to improve the performance capability of the BMDS by fielding additional components as they are completed and developing new capabilities to respond to the emerging threats of the future.

GMD FLIGHT TEST DELAYS

Question. LTG Obering, GMD had planned a flight test in December 2006 that was delayed until June 2007 based on findings from the September 2006 flight test. A ground test was completed in the 1st quarter of 2008 and subsequent tests have been rescheduled.

What happened in September that would drive a delay in the test program?

Answer. FTG–02 was a successful intercept test conducted in September 2006. However, five observations related to the Exoatmospheric Kill Vehicle (EKV) were subsequently identified that necessitated program attention which resulted in the delay of the follow-on intercept mission (FTG–03) until May 2007. The five issues involved: (1) EKV discrimination performance, (2) Divert Attitude Control System (DACS) rough combustion, (3) sensor debris management, (4) secondary infrared focal plane temperature management, and (5) focal plane infrared reflections. After extensive ground testing and analysis, all five issues were addressed via an EKV software update, a change to the DACS fuel mixture, and a modification to the cleaning process for the infrared focal plane cooling system. These mitigation efforts were successfully demonstrated during the FTG–03a mission in September 2007. These modifications were not exercised in the FTG–03 attempt in May 2007 due to a target anomaly during that mission.

Question. Can you explain reasons behind the rescheduling of the three 3rd quarter 2008 tests?

Answer. In the April 2007 Integrated Master Test Plan (v.08.05), the test scheduled for the 3rd quarter CY 2008 included the following:

- FTG–05 (Ground-Based Midcourse Defense (GMD) Flight Test)
- FTT–10 (THAAD Flight Test)
- FTK–01 (Kinetic Interceptor Booster Test)
- STSS Space Vehicle Launch (SVL)
- GTD–03 (Distributed Ground Test)

In the March 2008 Integrated Master Test Plan (v.08.10), the tests scheduled for the 3rd quarter CY 2008 are as follows:

- FTG–04
- FTT–10
- NFIRE–2b (Near Field Infrared Experiment)
- GTD–03

The April 2007 schedule had one GMD flight test scheduled for 3rd quarter CY 2008, not three. FTG–04 was rescheduled from the 2nd quarter CY 2008 into the 3rd quarter CY 2008 due to required target hardware modifications and the failure of a test-specific component in the Exoatmospheric Kill Vehicle (EKV) that prevented the transmission of telemetry. FTG–05 and FTG–06 were rescheduled into the 4th quarter CY 2008 and 2nd quarter CY 2009, respectively, due to the rescheduling of FTG–04. FTT–10 is on schedule for execution in the 3rd quarter CY 2008. FTK–01 is delayed for 2nd quarter CY 2009 due to Kinetic Interceptor technical issues. SSTS SVL is now scheduled for 4th quarter CY 2008 due to schedule issues with other non-MDA launches and technical issues with the satellite payloads. NFIRE–2b was rescheduled due to higher priority missions and is on schedule for execution in the 3rd quarter CY 2008. GTD–03 remains on schedule for execution in the 3rd quarter CY 2008.

Question. What issues remain to be resolved?

Answer. None of the issues experienced during FTG–02 (September 2006) remain unresolved. The mitigation efforts were proven effective on FTG–03a.

Question. How will this impact the current test plan for GMD?

Answer. None of the issues experienced during FTG–02 (September 2006) are impacting the current flight test program. The mitigation efforts for the issues experienced during FTG–02 were demonstrated on (September 2007) FTG–03a.

STRATCOM AND THE NUMBER OF GROUND-BASED INTERCEPTORS

Question. We understand the Missile Defense Agency currently plans to terminate production of the GBI interceptors at 54 missiles.

Is this true?

Answer. The Missile Defense Agency intends to complete fielding of 54 Ground Based Interceptors (GBIs) in 2013, representing the currently planned full complement of operational GBIs. However, manufacturing will continue beyond delivery of the 54th operational GBI in order to permit GMD (and overall BMDS) perform-

ance and upgrade testing (ground and flight) and stockpile reliability testing (ground and flight) in 2013 and beyond. Additional manufacturing is required to ensure adequate spares and line-replaceable units (as part of the refurbishment program).

Question. If so, what role did STRATCOM play in MDA's decision to terminate production at 54 interceptors?

Answer. There has been no decision to terminate manufacturing of GBIs. Manufacturing will continue beyond the delivery of the 54th operational GBI. The Missile Defense Agency intends to complete fielding of 54 Ground Based Interceptors (GBIs) in 2013, representing the currently planned full complement of operational GBIs. However, manufacturing will continue beyond delivery of the 54th operational GBI in order to conduct GMD (and overall BMDS) performance and upgrade testing (ground and flight) and stockpile GBIs for reliability testing (ground and flight) in 2013 and beyond.

Question. What analysis has STRATCOM done to identify future GBI requirements given current and future threats?

Answer. STRATCOM conducts an annual Military Utility Assessment (MUA) of the fielded Ballistic Missile Defense System (BMDS) against the current enemy threat. The MUA identifies the capabilities and limitations of the fielded BMDS, including issues associated with missile inventories. In the MUA 2008, identified limitations are being linked, for the first time, to the recently developed STRATCOM Warfighter Involvement Process (WIP). The WIP is the collaborative mechanism by which the Warfighter feeds back desired BMDS modifications and future capabilities to the BMDS developer, MDA.

In addition, NORTHCOM is currently conducting a GBI study. This study contains three phases.

Phase I—Provide USNORTHCOM/J31 with an analytical basis for recommendations to MDA regarding future GBI-basing decisions at Vandenberg AFB, CA.

Phase II—Assess performance trade-space between 2 and 3 stage Orbital Boost Vehicle GBI based at VAFB and FGA "what is the right capability mix?"

Phase III—Quantify the operational benefits of an east coast GBI site in the context of the projected 2012–2015 BMDS capability.

Question. Can you share that analysis with the Committee?

Answer. Although MDA works with U.S. Northern Command (USNORTHCOM) and U.S. Strategic Command (USSTRATCOM) reviewing and conducting analysis with respect to Ground-based Interceptors (GBIs), USNORTHCOM is leading the study on GBIs. According to USNORTHCOM, the study is not complete and they have not drawn any conclusions. We believe USNORTHCOM should provide Congress with the analysis.

MULTIPLE KILL VEHICLES

Question. MDA is developing the Multiple Kill Vehicle (MKV) to allow a single interceptor to engage a number of credible objects that an enemy missile might deploy. The agency expects to deploy an operational capability in the 2017 timeframe. In January 2004, MDA awarded a contract to Lockheed Martin to develop a carrier vehicle that directs multiple kill vehicles with planned deliveries in 2014. This concept, if successful, would benefit GMD and KEI. MDA also proposed in the FY08 budget to have Raytheon develop an alternate concept in which a lead kill vehicle would direct other kill vehicles. This concept, if successful, would primarily benefit SM–3. In the third quarter of fiscal year 2010, MDA will determine whether a carrier vehicle with multiple kill vehicles is feasible or whether the program will move forward with a unitary carrier vehicle.

If MDA finds that multiple kill vehicles are not feasible, how will this impact the GMD and Aegis BMD programs and the kill vehicle planned by the KEI program since you plan to stop all work on unitary kill vehicle work this year?

Answer. BMDS Kill Vehicles will deliver both a unitary kill vehicle for the SM–3 Blk IIA Cooperative Development missile with Japan and multiple kill vehicle payloads for all midcourse weapon systems of the future (Ground Based Midcourse Defense, Kinetic Energy Interceptor, Aegis Ballistic Missile Defense Standard Missile–3 Blk IIB).

To ensure delivery of kill vehicles to the BMDS, our evolutionary acquisition strategy emphasizes use of proven technologies, early development of key components and capabilities, realistic knowledge-point testing and demonstrations. We began developing engagement management algorithms, key payload components (sensors, divert and attitude control systems), and a hover test bed to prove out these key technologies and inform the Missile Defense Agency Knowledge Point de-

cisions. This early component development and testing will mitigate technical, schedule and cost risk and prove out the kill vehicle capability.

If through the component development and testing and knowledge point decisions the Agency decides multiple kill capability is not achievable in the near term, we will work with the Agency's System Engineer to determine the best kill vehicle payload for the Ground Based Midcourse Defense, Kinetic Energy Interceptor and Aegis Ballistic Missile Defense SM–3 Blk IIB weapon systems until multiple kill vehicle is ready.

KINETIC ENERGY INTERCEPTOR (KEI) COMPARED TO AIRBORNE LASER (ABL) FOR BOOST PHASE DEFENSE

Question. MDA awarded a contract in December 2003, which was to continue through January 2012, to develop and test the Kinetic Energy Interceptor (KEI). At that time, MDA stated that KEI was being designed as a mobile capability to destroy intermediate and long-range ballistic missiles during the boost/ascent phase of their flight. In 2005, MDA selected the Airborne Laser (ABL) as its primary boost phase capability, but continued development of KEI. We understand that a very comprehensive study was conducted by DoD's Office of Program Analysis and Evaluation (PA&E) that looked specifically at boost phase programs.

Have there been any studies that conclude KEI is the better choice for a boost phase capability? If so, why has MDA chosen to continue to pursue ABL as its primary boost phase capability? Can you provide us with the PA&E study?

Answer. The MDA submitted a Boost Phase Intercept study Report to Congress in April 2006 that described in detail the different boost phase capabilities and limitations of the ABL and KEI. There was no finding in this report that KEI was a better choice than ABL as a boost phase capability. The development of this Congressional report included significant interaction with PA&E and a detailed review of their independent study results. MDA openly shared our technical and programmatic data with the PA&E team, and we conducted several technical interchanges with them to review and discuss findings. These discussions with PA&E led to modifications of the MDA Report to Congress. We recommend that Congress get the latest PA&E boost phase study results from the PA&E team, to it is the most current and accurate version of their study.

The ABL is our primary boost phase capability because it is the only capability that can intercept all ranges of threat in the boost phase. KEI boost phase intercept is limited to long range threats that burnout in the exoatmosphere (greater than 100 km altitude). The ABL has the potential to greatly augment our ability to defeat large raids of short range and medium range ballistic missiles (our adversaries have large quantities of these missiles) by significantly thinning that threat in the boost phase.

The 2009 Knowledge Points for ABL and KEI, along with parallel objective BMDS engineering and planning work, will provide us with the performance, cost, schedule, and risk information we need to refine our BMDS acquisition strategy for boost phase capabilities.

Question. Has KEI been redefined as a midcourse capability instead of a boost/ascent phase capability?

Answer. No. The Agency recognizes that booster vehicle performance required for boost phase intercepts is more than adequate to provide midcourse intercept capability. KEI's mobility makes it attractive for both BMDS mission areas. A decision on KEI's role(s) in the BMDS will not be finalized until after its knowledge point event (first flight) and the Airborne Laser's knowledge point event (lethal shootdown).

Question. Will the contract extension increase termination costs should MDA decide to terminate KEI's contract in 2009 or is contract termination not a possibility even if ABL remains the primary boost phase capability?

Answer. Termination costs will not increase as a result of a contract extension. Termination liability will not change in 2009 from the current amount unless contract effort is increased or decreased, in particular the number of contractor personnel performing the contract and amount of material ordered. Potential contract termination costs are appropriately tracked and funded not only for the basic contract, but for any and all extensions. MDA plans to continue to execute its evolutionary acquisition strategy for KEI consisting of knowledge point events (the first knowledge point: Booster Flight—Development Verification Test scheduled for 2009). MDA will determine or adjust the future course of KEI based upon outcomes of knowledge point events.

Question. In 2009, the KEI program will flight test the interceptor's boosters, a critical technology, to determine if they will function as intended. In 2009, MDA will

use the results of the booster test and the results of ABL's lethality demonstration to decide the future of the KEI and ABL programs. However, in 2005 MDA directed the KEI program to incorporate the capability to engage missiles during the midcourse phase of flight and KEI's contract is being extended until September 2015. In testimony before the House Armed Services Committee on the fiscal year 2008 budget, MDA's Director said that the mission of KEI has not been redefined. KEI is still an alternative for ABL should ABL fail in its lethality demonstration.

Does the FY2009 budget request reflect either the advancement of evolution of the KEI program?

Answer. Yes. The plan in the FY08 President's Budget request was to conduct as booster-only System Design Review in FY2009, but with the additional funding appropriated by Congress in FY08 the KEI program has been adjusted and it will now be a full KEI Weapons System Design Review.

The FY2009 budget request includes two major components; element engineering and interceptor. The element engineering work planned for FY2009 is for requirements development for full mobile weapon system for incorporation into the BMDS. The FY2009 budget request also includes the effort necessary to complete preparations for and conduct of the KEI knowledge point event (first flight). In accordance with the Agency knowledge point acquisition approach, successful completion of the knowledge point event will enable the advancement of the system into full mobile weapon system development.

The Agency recognizes that booster vehicle performance required for boost phase intercepts is more than adequate to provide midcourse intercept capability. KEI's mobility makes it attractive for both BMDS mission areas. A decision on KEI's role(s) in the BMDS will not be finalized until after its knowledge point event (first flight) and the Airborne Laser's knowledge point event (lethal shootdown).

KINETIC ENERGY INTERCEPTOR

Question. The FY2009 budget request contains $387 million for the Kinetic Energy Interceptor program, which MDA has designated as a replacement for the current GBI booster deployed in Alaska and California. Previous budgets planned on KEI being a boost phase defense platform.

Why are we planning to replace the GBI when we just began deploying that system 4 years ago?

Answer. The Agency is not planning on any near term replacements of the GBI boosters with KEI boosters. The Agency plan is to pursue GBI booster spiral upgrades in close coordination with the KEI booster development team. The GBI and KEI boosters provide different and complementary capabilities to the BMDS. The MDA Engineering, GM and KI Program Offices are developing plans for the coordinated acquisition of common, core standards compliant booster avionics for the KEI and future GBI capability spirals. This enables us to save significant dollars through the integrated development of high cost components needed by both KEI and GBI.

The MDA plan is to efficiently sustain and spiral upgrade the GBI while adding new KEI capabilities to the BMDS such as boost phase intercept or mobile midcourse.

Question. What is the expected lifetime of the GBI?

Answer. ———.

Question. In a midcourse role, how much more capability does KEI provide as opposed to the GBI?

Answer. The high acceleration and mobile KEI complements the GBI by providing the Warfighter additional midcourse engagement capabilities in a layered BMDS. A forward-based KEI (based closer to threat countries than fixed GBI sites) disrupts and limits our adversaries' ability to selectively time the deployment of countermeasures by expanding the midcourse intercept battlespace to shortly after threat burnout. Furthermore, a forward-based KEI with a multiple kill vehicle payload, reduces the number of credible threat objects (and threat complexity) left for the later GBI layer to handle. The KEI can be flexibly-based to defend Friends and Allies in Japan, Southern Europe (forward of the European Site) or the Middle East against medium range ballistic missile threats. The longer burn, silo-based GBI is not designed to counter this threat set. The Agency is focusing the KEI development and test program on the realization of layered BMDS capabilities.

Question. If the objective for KEI is a mobile system, why invest significant resources in a silo-based KEI system?

Answer. We are not investing significant resources in a silo-based KEI system. At this point, silo-basing for KEI is best viewed as a potential capability, much like a sea-based KEI is a potential capability.

Question. If ABL and KEI are supposed to compete as a future boost phase weapon, why have you removed everything but the booster portion of KEI from this year's budget?

Answer. Boost phase weapon selection is based on two capability demonstrations or knowledge point events; the Airborne Laser's lethal shootdown and the KEI booster vehicle's first flight. The FY2009 budget request for KEI includes funding to prepare for and conduct this flight test as well as significant funding for requirements development for the full mobile weapon system for incorporation into the BMDS. In accordance with the Agency knowledge point acquisition approach, successful completion of the knowledge point event will enable the advancement of the system into full mobile weapon system development.

AIRBORNE LASER (ABL) COSTS FOR FULL DEPLOYMENT

Question. After a schedule delay, the Airborne Laser is now expected to demonstrate a lethal shoot-down in 2009. Based on the demonstration, you will make a decision on development of Tail 2.

What is the requirement with respect to the number of ABL's needed?

Answer. The final BMDS architecture to include number of ABL's has not been defined. This decision will occur subsequent to the knowledge point event (lethal shoot-down).

Question. For 24/7 coverage, how many orbits of ABL's and how many ABL's per orbit are required? Is this similar to the requirements for JSTARS and AWACS?

Answer. The number of orbits required will depend on the wartime scenario. According to the Air Force Air Combat Command's Operational Concept for Airborne Laser dated 1 Jan 2007, ABLs will be tasked to engage ballistic missiles originating from one or more Named Areas of Interest (NAIs). Once established in theater, the ABL will operate one or two Combat Air Patrols (CAP) based on relative size and location of the NAIs. Also according to the Operational Concept, five ABL aircraft will be able to sustain two near-continuous 24/7 orbits, or three ABLs will be able to sustain one near-continuous 24/7 orbit.

Similar methods are used for JSTARS and AWACS, but because these are sensor and command and control platforms, the criteria are different from the ABL weapon system.

Question. What is the basing concept for ABL? What is the plan for delivering the chemicals into a forward-based location?

Answer. According to the Airborne Laser (ABL) Operational Concept, developed by the Air Force Air Combat Command, dated 1 January 2007, operational ABLs will be primarily based in the Continental United States (CONUS), where the Main Operating Base (MOB) will be equipped to handle and service the ABL aircraft and its unique weapon system. An operational ABL will be able to deploy to Forward Operating Locations (FOLs) world-wide. FOLs can be located at any operational location where heavy cargo aircraft operate. Runways, taxiways, and instrument approach requirements are similar to those for other heavy aircraft.

ABL will utilize common support equipment available at bases in theater wherever possible to reduce the size of the deployment package. ABL will require peculiar support equipment, such as Aerospace Ground Equipment (AGE) to service the laser weapon. Transport of this equipment will require military airlift. Exact airlift needs have not been established. Aircraft hangars will not be required at the FOL. Required maintenance will be accomplished on the flight line or in back-shops. Sufficient workspace, shelter, and messing facilities will be required for deployed operations and maintenance personnel. FOL security personnel will be augmented with ABL security personnel, as required. The amount of equipment and personnel will depend on the operational scenario.

Pre-positioning of ABL laser fuels at pre-designated FOLs would also hell ensure the immediate availability of chemicals upon arrival of ABL aircraft during operational deployments. Air mobility or sea transportation can then be used to replenish laser fuel farm reserves as they are consumed. Options for transportation of extra chemicals are currently being explored. Prior to mixing the chemicals and loading them on the ABL the shelf life is unlimited.

Question. Do you have an independent cost estimate for an operational ABL? What about the cost of forward basing?

Answer. The Airborne Laser (ABL) Program Element is a Capability Development within MDA. As such, MDA has not requested the OSD Cost Analysis Improvement Group to perform an Independent Cost Estimate for ABL. MDA intends to request an independent cost estimate for ABL at a later time, when programmatic uncertainties are reduced and prior to a decision to commit resources for procuring and sustaining an ABL capability.

ABL has a comprehensive Program Office Operations and Support Estimate from 2002. We have worked closely with the U.S. Air Force, Air Combat Command (ACC) on the update of their Operational Concept and are in the process of gathering data to develop an updated cost estimate for the operational ABL and forward basing. Initial estimates will be available later this year.

Question. Can the taxpayer afford to buy the number of ABL's required?

Answer. The affordability of ABL assets, along with the boost-phase defense capability this BMDS Element would provide, will be among the many factors that will be weighed by the Department in considering a commitment to including the ABL capability in the BMDS. The ABL Element of the BMDS has significant upfront investment costs. However, the engineering estimate indicates a cost per shot which will be insignificant relative to the cost of an equivalent missile intercepting and destroying an enemy ballistic missile potentially armed with weapons of mass destruction. At this time, however, no conclusive decisions have been made on affordability or other issues associated with ABL.

AIRBORNE LASER (ABL) AGAINST POTENTIAL THREATS

Question. Even if ABL is successful in its lethality demonstration in 2009, there are still many questions about how it would be employed.

What is ABL's capability against potential threats from China and Iran with respect to ICBMs? What about other nations?

Answer. ———.

Question. What about potential overflight of a hostile nation?

Answer. Decisions about ABL flights over a hostile nation will be the responsibility of the regional combatant commander with input from the air component commander. This decision will take into effect the operational environment, including factors such as hostile air-to-ground defenses, friendly air support, and mission priorities at the time of the potential overflight.

Question. Are there other programs currently in development at MDA that are possible better options for boost phase defense?

Answer. As part of a layered defense strategy the Kinetic Energy Interceptor (KEI) is the only other Element currently in development capable of a Boost Phase mission. One additional benefit of the Kinetic Energy Interceptor program is its potential multiple use application. The Kinetic Energy Interceptor could provide the Ballistic Missile Defense System a strategically deployable, land and sea-based capability to defeat medium to long range ballistic missiles in the boost, ascent or midcourse phase of flight. However, as a BMDS boost phase defense asset, ABL has several characteristics that are unique. As an airborne asset, ABL can be forward deployed quickly. Once deployed, ABL will also be able to provide missile track information to cue other U.S. and NATO assets. In addition, ABL's chemical laser provides a relatively low cost per kill (less than $20k per kill).

Question. Are there other missions for ABL?

Answer. ABL has the potential to conduct many missions including: Defensive Counter Air (DCA), High Value Airborne Asset Protection (HVAA), Cruise Missile Defense (CMD), Counter Surface to Air Missile (SAM), Intelligence, Surveillance, and Reconnaissance (ISR), and Command and Control (C^2).

The ABL program office is developing capabilities to support three adjunct missions: Tracking debris from successful ABL missile engagements, extended ballistic missile engagement ranges, and engaging post-boost vehicles. The ABL program plans to conduct a series of experiments and demonstrations proving the technical feasibility of these adjunct missions following the ABL's lethality demonstration.

AIRBORNE LASER (ABL) COUNTERMEASURES

Question. One concern with the deployment of ABL is the potential impact of countermeasures that some countries either already have or are developing.

Can we expect countermeasures to ABL?

Answer. Any fielded weapon system is likely to cause an adversary to investigate potential countermeasures. There is currently little to no evidence that potential threat countries have fielded countermeasures likely to impact ABL. MDA is however actively investigating the effectiveness of likely potential countermeasures and methods for negating them. The details are protected within special access channels.

Question. What are the types of countermeasures that countries may develop to counter a laser weapon like ABL?

Answer. In general, adversaries may choose to develop countermeasures that increase a missile's resistance to heating effects of laser weapon systems. These countermeasures typically decrease the effective range and/or lethality of an adversary's missiles because additional weight is added to shield the missile from laser systems.

Alternatively, adversaries could attempt to decrease the effectiveness of the ABL's tracking systems.

Question. Do certain countries already have countermeasures?

Answer. There is little to no evidence that potential threat countries have fielded countermeasures likely to impact ABL. MDA is however actively investigating the effectiveness of likely potential countermeasures and methods for negating them. The details are protected within special access channels.

Question. How do we counter the countermeasures?

Answer. MDA's investigation of potential countermeasures will determine the effectiveness of those countermeasures and guide the development of any necessary counter-countermeasures. The ABL has various options for decreasing the effectiveness of an adversary's countermeasures. The details are protected within classified/special access channels.

AIRBORNE LASERBEAM CONTROL/FIRE CONTROL COMPONENT

Question. This year the Airborne Laser program was late in achieving one of its knowledge points—a ground test meant to prove-out the operation of the element's Beam Contral/Fire Control component. ABL's Program Manager signed-off on the completion of the test in December 2006 after a 3½ month delay, but he did so with two caveats. First, the software was not performing as intended and second, the low-power laser, which is a surrogate to the element's high-power laser in early flight tests, did not put enough power on the target. ABL's Program Manager said these problems would have to be corrected before the low-power system integration active flight testing begins. The delay in achieving this knowledge point pushed ABL's planned lethality test from 2008 to 2009. Now that we are in the FY 2009 budget cycle:

Have the software and low-power laser problems been corrected? If not, when do you expect them to be resolved?

Answer. Yes. During the Low-Power Integration Ground testing, MDA collected data which ultimately led to determining the root cause of the issues and correcting them. The software was upgraded as required to complete all of the testing with no caveats, the surrogate's high-power laser and other optical components were re-aligned, and multiple successful aerial engagements were demonstrated. During these engagements, adequate laser power was put on target; had the actual High Energy Laser been used instead of the surrogate under the same engagement conditions, a missile would have been destroyed.

Question. Is it likely that ABL's lethality test will be delayed further?

Answer. The ABL element is on track to achieve a lethal demonstration in 2009. The Airborne Laser successfully completed its Low-Power System Integration flight testing in 2007, which culminated in using all three of the aircraft's laser systems to detect, track, and then engage a "non-cooperative" target aircraft. Since then, the Airborne Laser element of BMDS and its contractor partners have been aggressively refurbishing low- and high-power optics, sensors, and laser systems and installing all of the hardware in the Airborne Laser Aircraft required to begin High-Power System Integration ground testing in the fall of 2008 and begin High-Power System Integration flight testing in early 2009.

Question. Has MDA determined the cost impact of the recognized delay in the lethality demonstration? What is the cost of the delay?

Answer. ABL rebaselined its Boeing contract in May 07 adding $250M and 1 year to the schedule. The program was able to absorb the cost of this delay within the President's Budget by reducing activities that were not directly related to shootdown and assuming a higher level of risk for the program.

Question. Did the contractor's failure to fully meet the objectives of the 2006 knowledge point affect the fee awarded to the contractor?

Answer. Yes. The Airborne Laser element of BMDS award fee plan is structured to evaluate contractor program and cost management, mission success, and Knowledge Point execution. Knowledge point execution is weighted the heaviest among the three areas. The award fee was adversely affected as the challenges experienced during the 2006 Knowledge Point completion were considered in the overall assessment and resulted in a reduced award fee.

CONTRACTED LOGISTICS SUPPORT

Question. MDA contracts with prime contractors for fielded elements to provide logistics support for the elements and to collect and report reliability data, including data on the frequency of breakdowns and the cost of repairs.

What is MDA learning about the cost of sustaining fielded elements?

Answer. Sustaining fielded Ballistic Missile Defense System (BMDS) capabilities until they are transferred to the Military Services remains one of our highest priorities, and we have learned that sustainment costs are comprising an increasing portion of program funding for each block. As additional elements of the BMDS have been fielded (or are planned for future fielding) we are seeing sustainment costs grow from about $105 million in FY05 to a projected total of almost $956 million in FY13. We have also learned that we can more efficiently manage sustainment costs when assets to be sustained are grouped under a single contract vehicle rather than separate contract vehicles. This advantage may be diminished or eliminated in future fiscal years if the restructuring of contracts is required to accommodate the use of multiple appropriations.

Given these significant costs, we are working through the Missile Defense Executive Board to establish a set of business rules that will govern the smooth transition of BMDS capability to the Services. Our goal is to ensure that fielded capability is fully sustained during this transition and to work closely with the Combatant Commanders and Services to ensure the Services have significant lead time and program information to continue operations and maintenance budgeting requirements for the capabilities they will be responsible for operating.

Question. Is MDA appropriately considering the cost of supporting an element as the element is being designed?

Answer. Yes, MDA does consider the cost of supporting a system during initial design and all subsequent associated reviews. Sustainment is a key design element in both the System Requirements Review and the System Design Review. Additionally, the early use of Business Case Analyses of test system design and other factors for life cycle affordability are part of the process that provides feedback for improvement. Currently, Contractor Logistics Support has been the common strategy for our fielded systems. As systems mature, an updated Business Case Analysis is conducted to determine other support strategies.

Question. How do award fees built into contracts affect support?

Answer. Award fees are used to influence favorable contractor performance in support of MDA's logistics objectives, and can positively affect targeted support provided by the contractor. In our cost plus award fee contracts, the contractor earns a fee only when successfully meeting contract performance objectives pertaining to program and cost management, satisfactory accomplishment of key events, and adherence to program mission success before fee can be earned. For example, the Ground-Based Mid-Course Defense (GMD) program has established metrics which are reflected in its award fee plan to measure performance for system availability, cost, training and support to service transition and transfer. The THAAD program's award fee plan includes a key event that requires contracted logistics support products be sufficiently mature to support maintainability demonstration and the achievement of user and contractor logistic support test objectives. These features incentivize the contractor to provide better than satisfactory logistic support to the Ballistic Missile Defense System and its components.

THAAD AND ENHANCED PERFORMANCE

Question. The Committee understands that THAAD's performance could be enhanced/increased by adding a second-stage to the current interceptor.

Have you done any modeling examining the contribution that an upgraded THAAD could make to the overall missile defense mission?

Answer. ———.

Question. Does MDA plan to put any money into exploring this option?

Answer. MDA has no present plans to fund any significant upgrades to enhance the performance of the THAAD System.

Question. If not, why?

Answer. Existing funding constraints have made it difficult to fund enhancements to existing development Elements of the BMDS. MDA is provided a ~$1.5B/yr "wedge" for fielding and sustaining the BMDS. Fielding and sustainment costs in FY09 are estimated at $3.6B, with estimates of ~$3B/yr over the FYDP. The difference between the estimated fielding and sustainment costs and the wedge reduces the funding available for the further development of Elements. The reduction in funding for development efforts makes it difficult to sustain existing efforts, let alone provide funding for new BMDS program enhancements and new capability development efforts.

Question. If performance could be enhanced by this capability, would it decrease the number of THAAD Fire Units that would be required?

Answer. Yes, if the THAAD interceptor was enhanced it would decrease the number of THAAD Fire Units required. However, THAAD enhanced performance is not

a substitute or a replacement for the defense provided by the European Interceptor Site.

FOREIGN MILITARY SALES OF TERMINAL HIGH ALTITUDE AREA (T) DEFENSE (THAAD) TO ISRAEL AND OTHER COUNTRIES

Question. Israel is interested in developing a new program to focus on the same threat that THAAD currently defends. One issue they have raised is that the U.S. hasn't shared information with them as to the capabilities of THAAD and thus do not know if THAAD will work for them.

Can you provide us an update on current U.S.-Israeli Cooperation?

Answer. There are currently 3 significant US-Israeli initiatives: baseline system for defense of Israel (Arrow Weapon System–AWS), defense against short-range ballistic missiles (David's Sling Weapon System–DSWS), and discussion of an upper-tier component of this defense architecture.

Arrow System Improvement Program (ASIP): The program's focus is to upgrade the AWS to counter evolving longer range and more sophisticated ballistic missile threats. In April 2006, Israel declared Block 3.0's Initial Operating Capability (IOC). Block 4 is in the final design stages and is scheduled to be ready for fielding in early 2009. The current ASIP program ends in FY09; however, due to increased regional threats, Israel requires an upper-tier system and received FY08 $20M to perform risk mitigation and preliminary design. Israeli Aircraft Industries (IAI) has proposed an Arrow III.

Short Range Ballistic Missile Defense (SRBMD/David's Sling): The 2nd Lebanon War between Israel and Hezbollah underscored the strategic effect of short range, inexpensive ballistic missiles to civilian populations. In 2006, Israel selected the DSWS proposed by Rafael/Raytheon for their SRBMD solution. The goal is $350K per missile cost (as compared to the $2–3M per Arrow or Patriot missile). Israel is expected to request an additional $28M above the $45M PB09 to accelerate the development and production. MDA plans to aggressively engage Israel to make the DSWS a true joint international development program and assess the military utility of this system for the U.S.

Upper-tier alternatives: Discussions continue which respond to the evolving longer-range threat and provide for a layered defense with multiple shot opportunities. Interceptor options discussed with Israel include Arrow III (based on Israeli technology), the THAAD missile, and a land-based version of the Standard Missile 3 (SM–3). Formal approval has been granted (via EXCOM and National Disclosure Policy channels) for disclosure of data and possible FMF sale for THAAD baseline and extended range to Israel. In addition, sharing of SM–3 data has been authorized to facilitate the ongoing discussions toward a possible sale.

After the data sharing and joint discussions with Israeli, it was agreed that THAAD does not met Israel's Upper Tier Requirements. MDA's analysis of alternatives shows SM–3 to be the most effective answer, but Israel is pushing for their indigenously developed Arrow III solution. At this time, Israel has no interest in procuring THAAD FMS. However, from a joint warfighting perspective, the Defense Policy Advisory Group for which OSD (Policy) is a chair, directed the creation of the Architecture Enhancement Plan that includes the deployment of U.S. owned and operated THAAD in Israel as part of a joint combined missile defense architecture.

Question. To what extent is National Disclosure Policy preventing us from sharing missile defense information and technology with allies?

Answer. National Disclosure Policy does not prevent us from sharing missile defense information and technology. It does prescribe a process for ensuring appropriate interagency review occurs prior to sharing information in order to protect national security and economic interests. The length of the overall disclosure process is increased when a separate LO/CLO (Low Observable/Counter Low Observable) EXCOM ruling is required prior to gaining an exception from the National Disclosure Policy Committee (NDPC).

Question. What needs to be done to fix this?

Answer. Advance planning and clear articulation about what we propose to share are the most important factors in ensuring timely approvals in support of international programs. As a general rule, review, assessment, and planning for release of U.S. systems and technologies to specific partners and allies need to occur during the development stage vice production/fielding.

Question. Are there legitimate concerns that would prevent the U.S. from disclosing certain information, and if so, what would those concerns be?

Answer. Yes, when advanced systems and technology are being discussed, there are legitimate concerns that would prevent the U.S. from disclosing certain information. In order to protect both national security and economic interests, it is nec-

essary to ensure that technology is protected and that discussions are tailored to support specific military and foreign policy objectives. The concern over the potential for reverse engineering of advanced systems and unauthorized third party transfer or sale of information and technology guide U.S. technology protection activities.

TESTING AND LACK OF SUFFICIENT NUMBER OF TARGETS

Question. One of the key limiting factors of MDA's test program has been the lack of sufficient number of missile defense targets.

Do you currently have a sufficient amount of targets to execute your testing program?

Answer. Yes. Assuming our target development and production activities proceed according to schedule, we plan to deliver sufficient targets to execute the test program as it is laid out in the MDA Integrated Master Test Plan (IMTP). Specifically, in the MDA/TC Production and Delivery Manifest for BMDS flight tests through FY10 there are seven (7) targets for THAAD, five (5) targets for GMD, seven (7) for Aegis BMD, six (6) for cooperative tests with Japan's Aegis BMD capability, four (4) for the PAC–3, three (3) in support of the SSTS, three (3) for ABL, and three (3) in support of special experiments for BMDS sensor technologies.

Having additional target inventory or having a spare target available in the event of target failure does not mean a test could proceed immediately with the backup target. MDA must take the time necessary to conduct a root cause analysis to understand the target failure prior to resuming or re-attempting the test.

Question. If not, what can we do to improve the number of targets?

Answer. The FY09 President's Budget submission represents the best application of limited resources to meet the needs of the Missile Defense Agency in providing an integrated, layered ballistic missile defense capability to the warfighter. We, therefore, support the President's Budget request. The Targets and Countermeasures Program has limited flexibility to meet short-term, emergent, or contingency planning requirements. Activities that would support a more robust target program include the following priorities:

Priority: 1

$31.5M (FY09), $12.9M (FY10)

Implement a rolling spare and maintain minimal inventory as contingency for additional short notice test events for Ground-Based Midcourse Defense. Additional spare procurements optimize the manufacturing capability/thru-put. This procurement will include LV–4 ($25.7M), one reentry vehicle ($8.6M), multiple deployables and ejector mechanisms ($9.1M), and support equipment ($1.0M).

Priority: 2

$7.8M (FY09)

Implement an Aging Surveillance program to monitor the reliability and functionality of inventoried C–4s and Minute Man rocket motors. The Flexible Target Family rocket motors are in DoD inventory with minimal or no ongoing surveillance programs. The Director of MDA is developing long term budgets and plans for ongoing surveillance activities that will be prioritized within MDA's requirements as part of future budget development activities.

$3.5M would establish the C–4 Rocket Motor composition and characteristics baseline through the execution and analysis of static fire testing in support of the Aging Surveillance program.

$2.2M would be required to develop a C–4 nozzle return and repair capability. The C–4 has a defect in the first stage nozzle affecting roughly 60% of the inventory. Residual volatiles in the motor off-gas causing the material to shrink which sometimes results in nozzle throat cracks. The C–4 Motors are screened for this Forward Exit Ring Crack (FERC) defect prior to processing. However, this condition may worsen over time, affecting larger portions of the C–4 inventory and potentially occurring during rocket motor processing prior to target launch.

$2.1M would be required for the Air Force Aging Surveillance program for Minute Man (MM) motors which consists of propellant sampling and testing to characterize chemical stability, component testing (e.g., Ordnance Devices) to characterize performance, hot gas generator and motor instrumented static firings, and technical analysis of test results. Funding Aging Surveillance program would maintain viability for use of flight-proven assets for future FTF missions and in legacy target designs. MDA previously (FY06 and prior) funded the Air Force Aging Surveillance program for these M55, SR19, and M57 motors, but began phasing out funding in FY07 (M55 AS discontinued) and FY08 (SR19 unfunded) due to planned timeline for FTF implementation and funding constraints.

Priority: 3

$25.6 (FY09), $5.6 (FY10)

Implement a rolling spare and initiate inventory to optimize manufacture flow and support potential future short notice requirements in support of AEGIS and THAAD program requirements by procuring one (1) 52″ SR–19 (SR–19/57), one (1) MBRV–1, and one (1) Air Launch Carriage Extraction System for Air Launch requirements.

Question. Would additional funds in this area be helpful?

Answer. Yes, Funding and maintaining a backup inventory of Flexible Target Family hardware components would minimize target cycle time in the event of mission failures, mitigate risk of critical path schedules, and improve the ability to meet short-fuse new requirements. As stated previously, additional target funding and inventory will not necessarily mitigate all potential delays in testing because if a target fails, MDA may need to take the time necessary to conduct a root cause analysis prior to conducting a subsequent test.

AEGIS AND ATLANTIC FLEET SHIPS

Question. Gen. Campbell, I understand that all Aegis BMD-capable ships are currently assigned to the Pacific, and MDA only plans to upgrade two Atlantic Fleet ships to BMD configuration.

What's the rationale for this decision?

Answer. U.S. Pacific Fleet is the primary force provider of forward deployed and rotational forces for both the Western Pacific and Middle East regions, where the preponderance of the current threat resides.

Today the Navy has 12 Aegis BMD Engagement ships and five Aegis BMD Long-Range Surveillance & Track ships that have been upgraded with BMD capability. Eighteen Aegis BMD Engagement ships will be available by the end of CY 2008. Additionally, the Navy will begin outfitting the Arleigh Burke Class Destroyers with BMD capability as part of the DDG Modernization program in FY 2012, expanding the number of BMD capable surface ships to 62. The Navy is also examining opportunities to include BMD capability in th Cruiser Modernization program.

Question. Do you currently have any plans to upgrade additional Atlantic Fleet ships? If not, why?

Answer. The Missile Defense Agency's (MDA) resources provided in the President's budget will provide for 18 Aegis ships for Ballistic Missile Defense (BMD), including two destroyers in the Atlantic Fleet by the end of CY08.

In addition, Navy is adding BMD capability on all DDGs through the DDG Modernization program beginning in FY12.

MDA is working closely with Navy to ensure that future spirals of the Aegis BMD capability are compatible with an open architecture. In addition, the Navy is currently considering including this capability in additional Aegis Cruisers as well. These upgrades will apply to both Atlantic and Pacific fleet ships.

Question. Lt Gen Obering, if all BMD-capable ships are in the Pacific, what's the plan for using Aegis BMD to defend our troops and allies in the CENTCOM AOR?

Answer. I will defer to Commander, U.S. Central Command to discuss plans for using Aegis BMD ships to defend our troops and allies in his AOR. From my perspective, I work with the Navy to ensure the ships are as capable and operationally flexible as possible to perform BMD missions anywhere in the world. In this regard, the Navy is developing an open architecture (OA) for the AEGIS combat system that will provide BMD capability at relatively low cost to the rest of the fleet. We closely watch the threat, and if the promises of OA do not meet the current schedule MDA will work with the Navy to accelerate expanded BMD capability.

WARFIGHTER INVOLVEMENT PROCESS

Question. I understand that STRATCOM and MDA have developed a new program called the Warfighter Involvement Program (WIP) to ensure warfighter views are incorporated into the missile defense development process.

What are the key elements of the Warfighter Involvement Program?

Answer. The Warfighter Involvement Process (WIP) has been codified in the US Strategic Command (STRATCOM) Instruction SI 538.3, Missile Defense Warfighter Involvement Process. This document, closely coordinated between STRATCOM and MDA, defines the goals and objectives of the WIP; identifies roles and responsibilities of the key stakeholders; and prescribes the processes for assuring the integration of both near and far term Warfighter needs into Ballistic Missile Defense System (BMDS) development. The key products of the WIP are:

• STRATCOM Prioritized Capabilities List (PCL) defines Warfighter desired far-term future BMDS capabilities

• STRATCOM Modification & Fielding Request List (MFRL) describes Warfighter desired changes and additions to the currently fielded BMDS

• MDA Achievable Capabilities List (ACL) provides the response to the PCL; articulates budgetary, programmatic, schedule, and performance issues, as well as external-dependency shortfalls, for each PCL item

• STRATCOM Capabilities Assessment Report (CAR), provides the STRATCOM assessment of the MDA ACL

The STRATCOM PCL refines COCOM priorities for potential MDA POM adjustments and the Program Change Board (PCB) institutes the adjustments. The result is an integrated BMDS development effort that includes Warfighter-desired capabilities.

The STRATCOM MFRL communicates to the MDA desired modifications and fielding requests after a capability is fielded. Requests are adjudicated through the Missile Defense Management Structure (MDMS) and approved by the PCB. The Joint Functional Component Command for Integrated Missile Defense monitors the MFRL.

In a parallel effort, MDA is currently developing a WIP Directive and implementing Instruction that codify internal MDA responsibilities and procedures to support the STRATCOM WIP. The Directive and Instruction are in the staffing process and are due for publication this summer.

Question. To date, are you satisfied with the Warfighter Involvement Program?

Answer. Yes. In October 2006, MDA established the Warfighter Support Center (MDA/DFO), collocated with the USSTRATCOM Joint Functional Component Command for Integrated Missile Defense (JFCC–IMD) in the Missile Defense Integration and Operations Center (MDIOC) at Shriever AFB, CO. The mission of MDA/DFO is to provide a direct Warfighter link that ensures consistency and transparency in planning, coordinating, and integrating between the Combatant Commands (COCOM) and MDA. Over the past year this relationship has evolved, matured, and enabled a new and unique MDA-Warfighter synergy, based largely on the Warfighter Involvement Process (WIP).

Within the context of Continuous Process Improvement, the MDA 2007 Summer Study analyzed the existing WIP, focusing on the Prioritized Capabilities List (PCL), one of the principal WIP products. The PCL, developed by STRATCOM in conjunction with the other COCOMS, provides MDA with the Warfighter prioritized list of future desired BMDS capabilities, and constitutes a major input to future BMDS design and development. The Summer Study WIP focus group developed a list of recommended changes to the process that are being considered and implemented, as appropriate, through a new STRATCOM Instruction, *SI 538–3, Missile Defense Warfighter Involvement Process,* and a corresponding MDA Directive and Instruction.

Over time, implementation of the WIP changes will facilitate integration of Warfighter operational requirements and desired capabilities with the MDA system engineering process. The net yield will be a more operationally effective and suitable Warfighter oriented future missile defense capability.

Question. What happens if there's a disagreement between STRATCOM and MDA on an issue? How are differences resolved?

Answer. There are several venues to alleviate disputes existing between USSTRATCOM, representing the warfighter community, and the MDA. As described in section 2.3 of STRATCOM's Warfighter Involvement Process (WIP) directive, the CDRUSSTRATCOM has personal interaction with the Director of MDA in addition to using the Missile Defense Executive Board (MDEB) as a means to resolve disagreements. As directed by JROC memorandum 133–03, Commander, USSTRATCOM employs the Global Missile Defense Management Structure to integrate community input on operational concerns and issues. Through the management structure and through WIP interactions, many issues are surfaced and addressed from the 0–6-level up to and including the Executive Steering Committee at the 3-Star level.

Additionally, USSTRATCOM participates in MDA's Program Change Board (PCB) and its subordinate supporting group, the Integration Synchronization Group. The PCB is the MDA's single forum for managing the development, fielding, and integration of the BMDS. The PCB, under the authority of the Director, is the sole decision authority for establishing and changing BMDS and element program baselines. Given its function, it may also be used to resolve differences between the two communities.

For conflicts between test and operations of fielded systems, there is a rigorous asset management (AM) process. Using co-developed instructions, MDA Directive

3000.1, BMDS Asset Management Planning, Scheduling, and Execution; and USSTRATCOM Directive 538–1, BMDS System Description and Asset Management, the community of BMDS stakeholders, including all MDA program offices and all Combatant Commands and their Service components, collaboratively plan, schedule, and execute all BMDS test, training, exercise, and maintenance events/activity, while ensuring missile defense operations can be executed as directed.

Question. Are there areas where the process could be improved?

Answer. The 2007 MDA/USSTRATCOM Summer Study established a Warfighter Involvement Process (WIP) evolution focus group to study WIP improvements. This group, comprised of members from MDA and Combatant Commanders (COCOM), reviewed WIP processes and documents to synchronize Warfighter desired capabilities with MDA's engineering process. The recommendations from the Summer Study are being implemented by both MDA and USSTRATCOM, as appropriate.

The study team made the following recommendations:

- Restructure the MDA system engineering process (SEP) to incorporate warfighter input during appropriate points in system design which includes the road mapping and define and design phases. (process, participants, and overarching)
- Add a new WIP activity encompassing warfighter analysis of quantity, operating locations, and deployment timing of systems prior to fielding. (process and product)
- Restructure the change request process to permit resolution of single element item, fielding, and training requests in addition to system issues. (process and participants)
- Insert the Achievable Capabilities List (ACL) (MDA) and Prioritized Capabilities List (PCL) (USSTRATCOM) into the evolved SEP with the goal of achieving consensus. (product and overarching)
- Modify the PCL to convey both a long-term vision of the objective BMDS and more specifically defined capability needs. (product)
- Modify the USSTRATCOM WIP instruction to account for these identified changes in the process and content of WIP products. (documents recommendations)

STRATCOM Capabilities Mix Study

Question. LTG Campbell, STRATCOM recently completed a Capabilities Mix Study, which outlines the combatant commander's future missile defense force structure requirements.

Please discuss potential new requirements outlined in the study that are present in the FY2009 budget submission.

Answer. The Joint Integrated Air and Missile Defense Organization (JIAMDO) briefed the findings of the Joint Capability Mix (JCM) Study to the Joint Requirements Oversight Council (JROC) on February 21, 2008. On March 25, 2008, the JROC endorsed the study findings. The JCM study findings provide for minimum quantities for combat operations in certain contingencies in the 2015 timeframe. These findings recommend minimum quantities of upper-tier (THAAD and SM–3) interceptors, additional THAAD fire units, and modifications to the Forward Based Radar (AN/TPY–2) program. The Missile Defense Agency (MDA) has briefed the Missile Defense Executive Board and the JROC on their plan to meet the JCM study findings. It is anticipated that the study findings from this recent iteration of the JCM will be included in MDA's Fiscal Year 2010 and out budget submission.

Missile Defense and Soldier Training

Question. LTG Obering, with the continued development and fielding of the Ground-based Midcourse Defense system, DoD may now have a rudimentary capability to defend U.S. citizens against a limited ballistic missile attack.

What is your current assessment of training and personnel readiness to use the system in defeating a limited ballistic missile attack against the U.S.?

Answer. Assessment of training and readiness is a Combatant Commander responsibility and final say should be theirs. However, MDA does provide initial qualification training and we support proficiency training at the individual, crew, and joint levels. We also provide Ballistic Missile Defense System-Level Training and Education covering the capabilities, limitations, and employment of the entire system to the Combatant Command staffs—supporting their ability to develop tactics, techniques and procedures to defend America. Based on the training that we provide, I believe that the training and readiness of ballistic missile defense personnel is excellent.

MISSILE DEFENSE CAPABILITIES AND TRANSITION TO THE WARFIGHTER

Question. LTG Campbell, ballistic missiles and technology continue to proliferate in the world. Some nations are using their developing ballistic missile capabilities to threaten their neighbors. Our deployed forces have a missile defense capability with PATRIOT and fielding of Standard Missile 3 as the intercept or on the Aegis system. Additionally, the Terminal High Altitude Area Defense (THAAD) has successfully returned to flight testing and should soon be a deployed missile defense asset.

Looking to the future, how are you working to transition these missile defense capabilities to the warfighters and to determine the appropriate asset mix of PATRIOTS, Standard Missile–3s, and THAAD interceptors.

Answer. The Missile Defense Agency (MDA) is developing memorandum of agreements with individual element lead Services to document the transition process for procurement and sustainment. The U.S. Strategic Command (STRATCOM) is assisting the other Combatant Commanders (COCOMs) with understanding the capabilities and limitations of these systems in development and how they may impact operations until they transfer to a Service. We have several venues to assist the COCOM's in this, including the Operational Readiness & Acceptance Process, the BMDS Combined Element Review, and the BMDS Military Utility Assessment to name a few.

We are continuing to refine the force structure requirements through additional analysis and inform MDA of future COCOM capability needs through the STRATCOM-led Warfighter Involvement Process, the Joint Requirement Oversight Council process, and the Missile Defense Executive Board.

Active defense forces are but one piece of the solution. Combatant Commanders integrate attack operations, passive defense, and non-kinetic options to meet the threat.

GAO QUESTIONS FOR MDA

Question. To carry out its mission, MDA, until December 2007, executed an acquisition strategy in which the development of missile defense capabilities was organized in 2-year increments known as blocks. In 2007, MDA redefined its block construct to be based on fielding capabilities addressing particular threats as opposed to the biennial time periods that were the agency's past approach. MDA's new block construct makes many positive changes such as establishing unit cost for selected block assets, including in a block only those elements or components that will be fielded during the block, and abandoning the practice of deferring work block to block. However, there are remaining concerns with the new structure as several issues are left unaddressed. Specifically, the GAO was concerned that there would be no block cost estimates. Instead, MDA will include all prior costs for activities included in the block and an expected budget baseline for each block activity. This will address the six years included in DOD's Future Years Defense Plan.

Why can't cost estimates be made for nearer term blocks like 1.0 and 2.0—they have a large percent of work already completion?

Answer. MDA will build cost baseline estimates for the full costs of all blocks, not just Blocks 1.0 (Defense of the U.S. from Limited North Korean Long-Range Threats) and 2.0 (Defense of Allies and Deployed Forces from Short-to-Medium Range Threats in One Region/Theater). We also intend to request an independent review of these estimates by the Cost Analysis Improvement Group (CAIG).

FY2009 THAAD BUDGET REQUEST

Question. In the FY2009 budget submission for THAAD the request is relatively the same as last year, just about $1 billion.

Can you explain how the funding profile has changed for THAAD from FY2008 to FY2009 budget submission?

Answer.

CHANGES FROM PB08 TO PB09

	FY08	FY09	FY10	FY11	FY12	FY13	FY08–13
PB08	858.277	897.358	826.654	756.440	583.732	406,379	4,328.840
PB09	867.064	864.899	689.924	619.949	450.639	343.618	3,836.093
Delta	8.787	(32.459)	(136.730)	(136.491)	(133.093)	(62.761)	(492.747)

The funding profile has changed as a result of the following adjustments:

1. The FY08 changes were due to the Appropriation Conference addition for the Juniper Cobra 09 exercise and various Congressional undistributed reductions.

2. In the FY09–FY13 budget submission all AN/TPY–2 Radar efforts were consolidated into the Sensors PE (0603884C). Therefore, THAAD transferred all of their funding for the Fire Unit Radars and their associated radar program office support to the Sensors PE (0603884).

3. There were also various Department of Defense adjustments and miscellaneous internal MDA adjustments.

The table below provides a detailed listing of the FY08 to FY09 changes.

DETAILED CHANGES

	FY08	FY09	FY10	FY11	FY12	FY13	FY08–13
Add for Juniper Cobra	14.9	.....	.....	.....	.....	.....	14.9
Congressional Undistributed Reductions	(6.113)	.....	.....	.....	.....	.....	(6.113)
THAAD Fire Unit Radar Funding Transfer to Sensors PE	.....	(40.000)	(126.700)	(126.600)	(124.300)	(54.600)	(472.200)
Radar Program Office Support Transfer to Sensors PE	.....	(4.949)	(5.098)	(5.251)	(5.408)	(5.570)	(26.276)
Various OSD PBDs/MDA Adjustments	.....	12.490	(4.932)	(4.640)	(3.385)	(2.591)	(3.058)
Totals	8.787	(32.459)	(136.730)	(136.491)	(133.093)	(62.761)	(492.747)

Question. How can you spend that amount requested funding with the delay of the fire units three and four?

Answer. Following the February 2008 House and Senate Authorization Staffer Day briefing, the Agency made additional internal re-alignments which have restored the $65M in FY09 to enable award of the THAAD Fire Units 3&4 long lead contract as originally planned. The Agency has confidence that budget execution for FY09 funds for the Terminal PE will continue our track record of exceeding obligation and expenditure goals. Program execution in FY09 is paced by the need for completing critical activities on the THAAD Development contract, which was the rationale for initially delaying Fire Units 3&4.

Question. Why does the budget submission not show a reduction due to the fire units' delay? delay?

Answer. There were primarily only re-alignments between Fire Units and Development funding within the Terminal PE to complete critical activities on the THAAD Development contract, with no substantial reduction to the total budget submission for THAAD.

[CLERK'S NOTE.—End of questions submitted by Mr. Murtha.]

WEDNESDAY, FEBRUARY 27, 2008.

SHIPBUILDING

WITNESSES

VICE ADMIRAL BARRY J. McCULLOUGH, DEPUTY CHIEF OF NAVAL OPERATIONS FOR INTEGRATION OF CAPABILITIES AND RESOURCES

ALLISON STILLER, DEPUTY ASSISTANT SECRETARY OF THE NAVY (SHIP PROGRAMS)

INTRODUCTION

Mr. MURTHA. I want to welcome to the Committee Assistant Secretary of the Navy, Ms. Stiller, and Deputy Chief of Naval Operations for Integration of Capabilities and Resources, Admiral McCullough. We are delighted to have you before the Committee and look forward to getting some advice about how we can go forward.

I have been challenging the shipbuilding industry to come in with more realistic goals, and they are saying, well, give us a better design or more finished designed, and we will do that. I think it is partly the Navy's fault and partly industry's fault. But I have been challenging everybody. I said, the Committee is no longer willing to keep paying for the mistakes that are made by the Navy and industry. So I know that we are getting closer, I think, to that kind of an agreement.

But we also need some advice about any additional ships. If we took the ships that the administration sent over, we would never get to what the Navy is saying that you need; and so we are going to try—Bill and I are going to try to convince the Committee that we need three or four more ships. I think they finally sent over seven this year. We are going to find a way to get to a number that will take us to 313 ships in much less years. I think it would take 50 years the way they were going.

So we welcome you to the Committee and look forward to your testimony.

Mr. Young.

REMARKS OF MR. YOUNG

Mr. YOUNG. Mr. Chairman, thank you very much.

I want to join the chairman in welcoming you to the Committee.

We were one of the original—two of the original Ronald Reagan 600-ship Navy folks. So we are a little disappointed. We are trying to attain 313 ships. But we are going to do the very best we can to do that. So we are anxious to hear your testimony today.

We are very specifically interested in the direction of the Littoral Combat Ships, since I understand there have been some serious changes in what the ship is going to look like and what it will do.

Anyway, we are looking forward to what you are going to have to say to us, and we may have some questions for you. Thanks for being here.

ADDITIONAL REMARKS OF MR. MURTHA

Mr. MURTHA. The Littoral Combat Ships that Mr. Young mentioned I think is a perfect example of what I am talking about. We went in with inadequate design. I knew when they said they cost $188 million, and I even commented in Committee, that I doubted very much they will come in at that price. I realize the first ships are going to be expensive because of the changes and so forth. But I think a lot of this is solved if we have a better design earlier so that industry can make a legitimate design. I know you went out to shipyards that don't normally do Navy work. But they complained about the changes the Navy makes.

In the past, we have made mistakes by limiting the number of changes the services could make, and the perfect example of that is the B–1. We made a deal years ago that we would buy 100 B–1s for $20.5 billion with Secretary Weinberger. Well, we built the B–1s, but they didn't have any of the things they needed, and they sat on the runway during Gulf War 1991. So we all realize there has to be some changes, but when you come to 4 or 5,000, just seems to me that is excessive. So we need better design work.

So we look forward to hearing your testimony and any advice you have. We want to put at least 10 ships in the inventory for next year.

Secretary.

SUMMARY STATEMENT OF SECRETARY STILLER

Ms. STILLER. Mr. Chairman, Mr. Young, it is a privilege for Vice Admiral McCullough and me to appear before you today to discuss Navy shipbuilding. I request that our written statement be entered into the record.

The Department is committed to build an affordable fleet at or above 313 ships tailored to support the National Defense Strategy, the recently signed Maritime Strategy, and the 2006 QDR. For the first time in a long while, the Navy's budget does not include any lead ships. This year, a total of seven ships are included in the fiscal year 2009 President's budget: one Virginia Class submarine, one DDG 1000 class ship, two LCS, two T–AKEs, and one Navy Joint High Speed Vessel (JHSV). In addition, although not part of the Navy's 313-ship structure, the Navy will procure one JHSV for the Army in 2009.

I will now elaborate on the specifics of our request.

The Navy is requesting $2.1 billion of full funding for one Virginia Class submarine in 2009, an advanced procurement for the fiscal year 2010 boats, an advanced procurement for two boats in fiscal year 2011. The Virginia Class construction program is continuing to make progress toward realizing CNO's goal of buying two Virginia Class submarines for $4 billion as measured in 2005 dollars by fiscal year 2012.

Because of your support with the addition of advanced procurement funding last year, the Navy has accelerated the production of

two Virginia Class submarines per year from fiscal year 2012 to fiscal year 2011. The Navy also requests approval for the next multiyear contract, which encompasses eight boats planned in fiscal year 2009 through 2013.

Two weeks ago, the Navy awarded contracts for the construction of the dual DDG 1000 lead ships to General Dynamics, Bath Iron Works and to Northrop Grumman Shipbuilding. The fiscal year 2009 budget request of $2.55 billion provides full funding for the third DDG 1000 and advanced procurement for the fourth ship. With recent approval from the Defense Acquisition Executive for the follow ship acquisition strategy, the Navy intends to utilize fixed price incentive fee contracts through a competition for quantity for the remainder of the class.

The Navy remains committed to the Littoral Combat Ship (LCS) program, and LCS remains a critical warfighting requirement for our Navy. The fiscal year 2009 budget includes $920 million for two additional LCS sea frames. The Navy also intends to execute the fiscal year 2008 appropriation for one seaframe, utilizing the remaining funding and material from the terminated ships.

Under an acquisition strategy approved in January, the fiscal year 2008 and 2009 awards will be for fixed price incentive contracts based on a limited competition between the current LCS seaframe contractors.

The fiscal year 2009 budget also provides for procurement of two T–AKEs in the National Defense Sealift Fund. The fiscal year 2009 funding is for two ships, T–AKE 11 and 12.

The Joint High Speed Vessel program is currently in the technology development phase. Lead ship award is anticipated in late fiscal year 2008, with delivery of the first vessel in fiscal year 2011. The fiscal year 2009 budget includes $187 million for construction of the first Navy funded JHSV and $173 million for the second Army funded vessel.

We have worked diligently to stabilize our shipbuilding plan and move into serial production. The Navy remains committed to ensure fiscal responsibility in shipbuilding acquisition programs, as evidenced by the cancellation of LCS 3 and 4 last year.

Mr. Chairman, we would like to thank you for this opportunity to discuss the Navy shipbuilding budget request for 2009. Vice Admiral McCullough would like to remark briefly on a day in the Navy.

Thank you.

[The joint statement of Vice Admiral McCullough and Ms. Stiller follows.]

NOT FOR PUBLICATION UNTIL RELEASED BY
THE HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON DEFENSE

STATEMENT
OF

VICE ADMIRAL BARRY J MCCULLOUGH
DEPUTY CHIEF OF NAVAL OPERATIONS
FOR INTEGRATION OF CAPABILITIES AND RESOURCES

AND

MS. ALLISON STILLER
DEPUTY ASSISTANT SECRETARY OF THE NAVY
(SHIP PROGRAMS)

BEFORE THE

SUBCOMMITTEE ON DEFENSE

OF THE

HOUSE APPROPRIATIONS COMMITTEE

ON

SHIPBUILDING

FEBRUARY 27, 2008

NOT FOR PUBLICATION UNTIL RELEASED BY THE
HOUSE APPROPRIATIONS COMMITTEE
SUBCOMMITTEE ON DEFENSE

Mr. Chairman, distinguished members of the Subcommittee, thank you for the opportunity to appear before you today to address Navy shipbuilding. The Department is committed to the effort to build an affordable 313-ship fleet by 2020 tailored to support the National Defense Strategy, the Maritime Strategy and the 2006 Quadrennial Defense Review. This year a total of seven ships are included in the FY 2009 President's Budget, one VIRGINIA Class SSN, one DDG 1000, two LCS, two T-AKE and one Navy JHSV. In addition, although not part of the Navy's 313-ship force structure, the Navy will procure one JHSV for the Army in FY 2009.

The Department has updated the Long Range Strategic Shipbuilding Plan with an eye on further stabilizing workload and funding requirements. A stable plan will enable the shipbuilding industry to maintain critical skills and to make business decisions that increase efficiency and productivity in order to meet the Navy's projected shipbuilding requirements. In addition to a stable shipbuilding plan, the Department has been exploring alternatives with the shipbuilding industry to mitigate workload fluctuations among shipyards to maintain a stable and skilled workforce across the industry sectors. The Department requests consideration of a general cost cap exception to allow the Department to work with industry to better level load work across the industrial base.

We still face challenges. In response to cost increases in the lead ships of the Littoral Combat Ship Class, the Navy has slowed the initial rate of production to reduce risk; however, the Navy remains committed to the program to fill critical warfighting gaps that exist today. In an area of success, the innovative design and build practices being implemented by VIRGINIA Class are already showing promise and can serve as a model for other programs. Bringing the cost of the VIRGINIA Class fast attack submarine down to $2B (FY 2005 $) per hull by FY 2012 remains a challenge and is currently within $50 million of target.

As you know the Gulf Coast shipyards have struggled since Hurricane Katrina. Over the last year the Navy and Northrop Grumman Ship Systems (NGSS) have worked at a ship portfolio level to reset the schedule baselines and have adjusted the associated contracts accordingly. Additionally, six Gulf Coast shipbuilders were awarded contracts in 2007 under Section 2203 of Public Law 109-234, Emergency Supplemental Appropriations for Defense, The Global War on Terror and Hurricane Recovery 2006. The purpose of these contracts is to expedite recovery of shipbuilding capability in areas affected by Hurricane Katrina by repairing and/or replacing shipbuilding facilities, to make lasting improvement in shipyard facilities that would result in measurable cost reductions in current and future Navy shipbuilding contracts, and to improve the ability of shipbuilding facilities on the Gulf Coast to withstand damage from potential hurricanes or other natural disasters.

Lastly, we are actively working with our Allies to exchange best practices and lessons learned on shipbuilding efforts. A Shipbuilding Quadrilateral forum has been established which includes the U.S., United Kingdom, Canada and Australia to discuss systematic trends that are emerging in shipbuilding programs. The forum serves to discuss, compare and contrast acquisition matters such as contracting practice and industry trends. In addition, the Navy is

partnering with the United Kingdom to support the new missile compartment design for their VANGUARD Class replacement.

As noted earlier, the Department proposes procurement of seven new construction ships as part of the 2009 President's Budget request. Each of these ships as well as other significant Navy shipbuilding programs are discussed below.

VIRGINIA Class

Currently, four VIRGINIA Class submarines have been delivered to the Fleet and six more are under construction. In the past year, the Navy commissioned USS HAWAII (SSN 776), the third boat of the VIRGINIA Class, christened the fourth submarine of the class, NORTH CAROLINA (SSN 777), and laid the keel for the fifth submarine, NEW HAMPSHIRE (SSN 778). In 2008 we will deliver and commission two submarines. NORTH CAROLINA (SSN 777), the fourth submarine, just delivered last week and will commission in May. NEW HAMPSHIRE (SSN 778), the fifth submarine is scheduled to deliver in October, six months ahead of the April 2009 contract delivery date. In January 2008, the seventh, eighth and ninth hulls were named MISSOURI (SSN 780), CALIFORNIA (SSN 781) and MISSISSIPPI (SSN 782), respectively.

The VIRGINIA Class construction program is continuing to make progress toward realizing the Chief of Naval Operation's goal of buying two VIRGINIA SSNs for $4 billion as measured in FY 2005 dollars, starting in FY 2012. General Dynamics Electric Boat and Northrop Grumman Newport News (NGNN), will continue to jointly produce these submarines and are working to reduce the construction time and cost of these ships in concert with the program office. In this budget, the production of two VIRGINIA Class Submarines per year has accelerated to start in FY 2011 vice FY 2012. The FY 2008 congressional plus-up for advanced procurement was instrumental to this effort. Negotiations for an eight-ship multi-year procurement contract will begin soon, and we anticipate signing that contract in late 2008. The Navy requests approval for the next multi-year contract.

DDG 1000 Destroyer

This multi-mission surface combatant, tailored for land attack and littoral dominance, will provide independent forward presence and deterrence and operate as an integral part of joint and combined expeditionary forces. DDG 1000 will capitalize on reduced signatures and enhanced survivability to maintain persistent presence in the littoral in future scenarios. The program provides the baseline for spiral development to support future surface ships. DDG 1000 with the Advanced Gun System (AGS) and associated Long Range Land Attack Projectile (LRLAP) will provide volume and precision fires in support of Joint forces ashore. The dual band radar represents a significant increase in air defense capability in the cluttered littoral environment. Investment in open architecture and reduced manning will provide the Navy life cycle cost

savings and technology options that can be retrofit to legacy ships thus allowing adaptability for an uncertain future. The program continues to execute on cost and schedule.

This month, the Navy awarded contracts for construction of the dual lead ships to General Dynamics Bath Iron Works and to Northrop Grumman Shipbuilding. Ship detail design and the design of the mission system equipment are on track to support the start of production. The FY 2009 President's Budget request of $2.55B provides full funding for the third ship of the class, and advanced procurement for the fourth ship. With recent approval from the Defense Acquisition Executive for the follow ship acquisition strategy, the Navy intends to utilize fixed-price incentive fee contracts for the follow ships awarded through a competition for quantity.

Littoral Combat Ship (LCS)

LCS will be a fast, agile and networked surface combatant with capabilities optimized to assure naval and Joint force access into contested littoral regions. LCS will operate with focused-mission packages that deploy manned and unmanned vehicles to execute a variety of missions, including anti-submarine warfare (ASW), anti-surface warfare (SUW) and mine countermeasures (MCM). LCS will also possess inherent capabilities to support homeland defense, Maritime Interception Operations (MIO) and Special Operation Forces.

The Navy remains committed to the LCS program, and LCS remains a critical warfighting requirement for our Navy to maintain dominance in the littorals and strategic choke points around the world. However, the Navy identified significant cost increases on the order of 100% for the lead ships in the LCS Class, due to unrealistic contractor proposals, development difficulties and changes from a commercial baseline. The Navy believes that active oversight and strict cost controls are needed to deliver these ships to the fleet over the long term. The Navy demonstrated strong oversight when it terminated the contracts for LCS 3 and LCS 4 in 2007.

It is vital that the Navy continue through first-of-class construction challenges to complete LCS 1 and LCS 2. When these ships are delivered, the Department will be able to better evaluate their costs and capabilities. LCS 1 and LCS 2 are currently scheduled to deliver to the Navy in 2008. The Navy will seek congressional support to complete the reprogramming of FY 2007 LCS shipbuilding funds to complete LCS 1 and 2.

The FY 2009 President's Budget request includes $920 million for two additional LCS seaframes. The Navy also intends to execute the FY 2008 appropriation for one seaframe, utilizing the remaining funding and material from the terminated ships. The Navy will also seek congressional support for the reprogramming of these funds for the FY 2008 procurement. Under an acquisition strategy approved in January 2008 by the Defense Acquisition Executive, the FY 2008 and 2009 awards will be for fixed-price incentive fee contracts, based on a limited competition between the current LCS seaframe prime contractors. These ships will be designated as Flight 0+ and will include all existing approved engineering changes developed from lessons learned, along with any current improvements to construction or fabrication procedures. The Navy will incorporate further lessons learned from LCS 1 and 2 sea trials into

these ships prior to production. Any such changes will be minimized to those essential for safety and/or operability. Acquisition strategies for FY 2010 and follow ships are under Navy review.

Lewis and Clark Class Dry Cargo / Ammunition Ship (T-AKE)

T-AKE was designed to replace the Navy's aging combat stores (T-AFS) and ammunition (T-AE) shuttle ships. Working in concert with an oiler (T-AO), the team can perform a "substitute" station ship mission which will provide necessary depth in combat logistics. The FY 2009 President's Budget request provides for procurement of two T-AKEs in the National Defense Sealift Fund. Fourteen T-AKE hulls are covered under a fixed-price incentive contract with General Dynamics National Steel and Shipbuilding Company (NASSCO). Three of the T-AKEs are to support MPF(F) program requirements. Major accomplishments for the year include the christening of T-AKE 4 (RICHARD E. BYRD) in May 2007 and the delivery of T-AKE 3 (USNS ALAN SHEPARD) in June 2007 and T-AKE 4 in November 2007. T-AKE 5 (ROBERT E. PEARY) launched in October 2007. Progress continues on the follow on ships including the keel laying for T-AKE 6 (AMELIA EARHART) in June 2007 and T-AKE 7 in November 2007. T-AKE 8 commenced construction in October 2007. The construction contract option for the T-AKE 10 and long lead time material for the T-AKE 11 were exercised in January 2008. The FY 2009 funding is to complete funding for two ships (T-AKE 11 and 12).

Joint High Speed Vessel (JHSV)

High speed connectors will facilitate the conduct of sustained sea-based operations by expediting force closure and allowing the persistence necessary for success in the littorals. Connectors are grouped into three categories: inter-theater, the Joint High Speed Sealift, which provides strategic force closure for CONUS-based forces; intra-theater, the Joint High Speed Vessel (JHSV) that enables rapid closure and sustainment of Marine forces; and the Joint Maritime Assault Connector, to move troops and resources from the sea base to shore. These platforms will link bases and stations around the world to the sea base and other advanced bases, as well as provide linkages between the sea base and forces operating ashore. JHSV is currently in the Technology Development Phase. The Capabilities Development Document was JROC-approved in January 2007. Milestone B is anticipated in FY 2008 with delivery of the first vessel in 2011. The FY 2009 President's Budget request includes $186.8 million for the construction of the first Navy funded JHSV and $173.0 million for the second Army funded vessel.

The Navy also continues with important new construction and modernization programs. These programs are outlined below.

CVN 21

CVN 78, the lead ship of the CVN 21 program will replace USS ENTERPRISE (CVN 65). CVN 21 warfighting capability improvements include: 25% increase in sortie generation rate, ship's force reduction approaching 800 billets with an additional 400 billets reduction

including airwing and embarked staff, nearly three-fold increase in electrical generating capacity, restoration of Service Life Allowances, and enhanced Integrated Warfare System to pace future threats. These capability improvements will ensure that the CVN, the centerpiece of the Navy's Carrier Strike Group, continue to pace projected threats. The major critical technologies and capabilities planned for integration into the lead ship include: Electromagnetic Aircraft Launch System, Advanced Arresting Gear, Joint Precision Aircraft Landing System, Improved Survivability, Enhanced Flight Deck and Improved Weapon and Material Handling.

The FY 2007 National Defense Authorization Act authorized the Navy to enter into Construction Contracts for the first three ships of the CVN 78 Class and provided for four-year funding of the first three ships beginning with construction of the GERALD R. FORD (CVN 78) in FY 2008. Non-recurring investment in the class design is $5.7B and the cost of the lead ship (excluding all non-recurring costs) is $8.1B ($TY), nearly $300M less than the projected cost to buy a NIMITZ Class aircraft carrier in the same time-frame. The President's Budget request for FY 2009 included $2.7B as the second of the four funding increments planned for CVN 78. The Navy released the Request for Proposal for Detail Design and Construction of the lead ship in July 2007 and NGNN responded with their contract proposal on October 31, 2007. Contract negotiations are on-going.

CVN 68 Class

GEORGE H.W. BUSH (CVN 77), is the 10th and final NIMITZ Class nuclear powered aircraft carrier. The construction of CVN 77 has proceeded rapidly following the launch in October 2006. The aircraft catapults began testing in January of this year by 'launching' dead-loads. Sea trials will commence this fall. The GEORGE H.W. BUSH is expected to deliver near the end of this calendar year. The commissioning date has been set for January 10, 2009. The President's Budget for Fiscal Year 2009 requests $20.5 million for the completion of government responsible mission critical and safety system installations reflecting operational needs to deploy the GEORGE H.W. BUSH at a readiness condition appropriate for the defense of America's freedom. The program remains within the congressionally enacted $6,057M cost limitation.

CVN 68 Class Refueling Complex Overhaul (RCOH)

The CVN 68 Class RCOH program spans 40+ years across the NIMITZ Class. During each RCOH, 35% of a carrier's total Service Life Maintenance plan is performed, as well as depot level mid-life recapitalization that extends the service life of NIMITZ-Class carriers out to approximately 50 years. Refueling of the ships' nuclear reactors, warfighting modernization, and repair of ship systems and infrastructure are also completed to meet future missions. These combined upgrades support a reduction in operating costs, achieve expected service life, and allow the NIMITZ Class to deter projected threats well into the 21st century. This program is critical for the class to achieve its service life and retain combat relevance. The President's Budget for Fiscal Year 2009 requests $124.5M in FY09 to facilitate the acceleration of the execution start date for USS THEODORE ROOSEVEL (CVN71) to September 2009, and

$21.4M advanced procurement for USS ABRAHAM LINCOLN (CVN 72) RCOH. This acceleration provides additional two months of operational availability to the carrier fleet during the critical 2012-2015 period before the commissioning of the GERALD R. FORD (CVN 78) and adds approximately one million man hours to NGNN's FY 2009 workload keeping 300 NGNN skilled workers employed.

WASP (LHD 1) Class Amphibious Assault Ship

The WASP (LHD 1) Class comprises multi-purpose amphibious assault ships whose primary mission is to provide embarked commanders with command and control capabilities for sea-based maneuver/assault operations as well as employing elements of a landing force through a combination of helicopters and amphibious vehicles. Seven LHDs have been delivered to the fleet. The last of the LHD 1 Class, USS MAKIN ISLAND (LHD 8), is scheduled to be delivered in November 2008. Although a modified repeat of the previous seven ships, this ship introduced gas turbine propulsion system with all electric auxiliary systems and eliminated the steam plant and steam systems.

LHA (R) General Purpose Amphibious Assault Ship (Replacement)

The LHA (R) Assault Echelon ships will provide the Nation with forcible entry capability and forward deployed contingency response forces. These ships will provide enhanced hangar and maintenance spaces to support aviation maintenance and increased jet fuel storage and aviation ordnance magazines. The LHA (R) Assault Echelon ship is the functional replacement for the aging LHA 1 Class ships that reach the end of their extended service life in 2011-2015. The Detail Design and Construction contract for the lead ship, LHA 6, was awarded on June 1, 2007 with a contract delivery date of August 31, 2012.

LPD 17 Class Amphibious Warfare Ship

The LPD 17 SAN ANTONIO Class of amphibious warfare ships represents the Department of the Navy's commitment to a modern expeditionary power projection fleet that will enable our naval force to operate across the spectrum of warfare. The Navy took delivery of the first LPD 17 in the summer of 2005, and operational evaluation began in the spring of 2007. LPD 18 (USS NEW ORLEANS) and LPD 19 (USS MESA VERDE) were commissioned in March 2007 and December 2007, respectively. LPD 19 will undergo shock trials this summer. There are five ships currently under construction. LPD 20 (GREEN BAY) is expected to deliver this year, and LPD 21 (NEW YORK) has been launched and will be christened in March 2008. LPDs 22-24 are in various stages of the construction phase, and the option for construction of LPD 25 was exercised on December 21, 2007. The FY 2009 President's Budget request includes funding for outfitting/post delivery efforts on LPDs 20-24 and program closeout efforts required following delivery of the final LPD 17 Class ship. The SAN ANTONIO Class ship replaces four classes of older ships — the LKA, LST, LSD 36, and the LPD 4 — and will have a forty-year

expected service life. SAN ANTONIO Class ships will play a key role in supporting the ongoing Global War on Terrorism by forward deploying Marines and their equipment to respond to crises abroad.

Maritime Prepositioning Force (Future) (MPF(F))

MPF(F) provides a scalable, joint, sea-based capability for the closure, arrival, assembly and employment of up to a MEB-sized force. It will also support the sustainment and reconstitution of forces when required. MPF(F) is envisioned for frequent utility in Humanitarian Assistance / Disaster Relief, Non-combatant Evacuation Operations, Theater Security Cooperation, and other Littoral Combat Operations as well as major combat operations. When coupled with an Expeditionary Strike Group or Carrier Strike Group, MPF(F) will provide the Nation with a highly flexible operational and logistics support capability that enables rapid reinforcement of the Assault Echelon of an Amphibious Force in anti-access or denial environments. In March 2006, the Defense Acquisition Board approved program entry into the Technology Development Phase. An R&D plan is currently being executed and the program is progressing on track. The FY 2009 President's Budget request includes $41.8M R&D for ongoing risk reduction and technology development, and advance procurement for the FY 2010 MPF Aviation Ship.

DDG Modernization

The DDG 51 modernization program is a comprehensive 62 ship program designed to modernize the Hull, Mechanical, and Electrical (HM&E) and Combat Systems. These combined upgrades support a reduction in manpower and operating costs, achieve expected service life, and allow the class to pace the projected threat well into the 21st century. This program is critical for the class to achieve its service life and retain combat relevance.

The first DDG to be modernized will be DDG 51 with an HM&E availability in FY 2010. Congress provided additional funds to this program with $50M SCN in FY 2005, $50M in SCN in FY 2006, and $30M in OPN in FY 2007. The HM&E alterations are being developed in SCN new construction in order to minimize development costs and mitigate technical and schedule risk. The President's Budget for FY 2008 included the addition of robust war fighting upgrades. The President's Budget request for FY 2009 includes $316M which supports the Flight I and II ship modernizations starting in FY 2010.

Cruiser Modernization

Twenty-two Cruisers remain in service and are planned for modernization. A comprehensive Mission Life Extension is critical to achieving the ship's expected service life and includes the All Electric Modification, SMARTSHIP, Hull Mechanical & Electrical system upgrades and a series of alterations designed to restore displacement and stability margins,

correct hull and deck house cracking and improve quality of life and service onboard. Cruiser Modernization bridges the gap to future surface combatants and will facilitate a more rapid and affordable capability insertion process. The first full modernization is CG 52 commencing in February 2008. The President's Budget request for FY 2009 includes $413M which will modernization two cruisers.

CG(X)

CG(X) is envisioned to be a highly capable surface combatant tailored for Joint Air and Missile Defense and Joint Air Control Operations. CG(X) will provide airspace dominance and Sea Shield protection to Joint forces. The Maritime Air and Missile Defense of Joint Forces (MAMDJF) Initial Capabilities Document (ICD) was validated by the Joint Requirements Oversight Council (JROC) in May 2006. Under the Navy's current program of record, the program procures its first ship in FY 2011 with follow-on construction in FY 2013.

The results of the Navy's Analysis of Alternatives (AoA) for the Maritime Air and Missile Defense of Joint Forces capability are currently within the Navy staffing process. Resulting requirements definition and acquisition plans, including schedule options and associated risks, are being evaluated in preparation for CG(X) Milestone A, planned to occur in FY 2008. This process includes recognition of the requirement of the FY 2008 National Defense Authorization Act, that all major combatant vessels of the United States Navy strike forces be constructed with an integrated nuclear power plant, unless the Secretary of Defense determines this not to be in the best interest of the United States.

Regardless of the Navy's selection of a particular preferred alternative, vital research and development efforts must continue in FY 2009. These engineering development and integration efforts include systems engineering, analysis, computer program development, interface design, Engineering Development Models (EDMs), technical documentation and system testing to ensure a fully functional CG(X) system design. The FY 2009 President's Budget request will continue maturation of the CG(X) design based on the preferred alternative selected.

OHIO Class SSGN Conversion

The OHIO Class SSGN Conversion Program continues to be a successful transformational program. All four ships, USS OHIO (SSGN 726), USS FLORIDA (SSGN 728), USS MICHIGAN (SSGN 727), and USS GEORGIA (SSGN 729), have been delivered to the Fleet. The SSGNs completed their Operational Evaluation and had its Initial Operational Capability declared on November 1, 2007. Additionally, USS MICHIGAN will complete testing with the Advanced SEAL Delivery System (ASDS) in March 2008. USS OHIO, the first SSGN to complete conversion, is now deployed in the Pacific Ocean and has already conducted its first crew exchange in Guam.

SSBN Engineered Refueling Overhauls (EROs)

The OHIO Class SSBN Engineered Refueling Overhaul Program (ERO) will continue with the FY 2009 authorization for the start of the industrial period for the fifth submarine, USS TENNESSEE (SSBN 734). In addition, FY 2009 includes advance procurement funding for USS PENNSYLVANIA (SSBN 735) and USS WEST VIRGINIA (SSBN 736) which will start in FY 2010 and FY 2011, respectively. These EROs are the one time depot maintenance period near the mid-point of the SSBN service life, where the nuclear reactor is refueled, major equipment is refurbished, class alterations are installed, and SUBSAFE unrestricted operations maintenance is accomplished.

Ship Inactivations

The Navy remains committed to reducing and eliminating any environmental risks posed by its inactive ships by reducing the size of the inactive ship inventory. This inventory has been reduced from a high of 195 ships in 1997 to 62 ships today. The Navy plans to decommission 29 ships between FY 2009 and FY 2013, of which 23 will be designated for disposal upon decommissioning and six will be retained for future mobilization purposes.

The Navy utilizes six disposal methods to reduce the inventory of non-nuclear inactive ships, including Foreign Military Sales transfers; interagency transfers to the Maritime Administration, US Coast Guard or other agencies; donations for memorial/museum use; domestic dismantling; experimental use/Fleet training sink exercises; and ship reefing. While fleet training sink exercises are not a disposal method, since the primary purpose is weapons effectiveness testing or Fleet training, it does contribute to inventory reduction.

Summary

In summary, the Navy is committed to ensure fiscal responsibility in shipbuilding acquisition and modernization programs.

SUMMARY STATEMENT OF ADMIRAL MCCULLOUGH

Admiral MCCULLOUGH. Chairman Murtha, Ranking Member Young, I am honored to appear before you with Ms. Stiller to discuss Navy shipbuilding.

Before we begin, I would like to share with you what your Navy accomplished one day last week on the 20th of February.

The fleet is 279 ships strong, with 127 ships underway, or about 40 percent of our fleet. There are over 332,000 Active component, 70,000 Reserve component, and 177,000 civilians serving in your Navy.

Beginning in the eastern Atlantic, GEORGE WASHINGTON is preparing for future forward deployment to Japan, while the NASSAU Expeditionary Strike Group is underway to start its deployment.

CROMMELIN, SIMPSON, STEVEN W. GROVES, and Navy P–3s are in the Southern Command's area of responsibility conducting counternarcotics operations in the Caribbean and eastern Pacific.

In the European theater, COLE is operating in the Mediterranean with the British, and SAN JACINTO is in the Black Sea with NATO and Partnership for Peace Navies.

Supporting the African Partnership Station off western Africa, FORT MCHENRY arrives in Cameroon; and HSV2 SWIFT is in the Gulf of Guinea.

BAINBRIDGE and JOHN HALL are on station to support the President's visit to the continent.

In the Central Command area of operations supporting Iraqi and Enduring Freedom, HARRY S TRUMAN Carrier Strike Group departs Jebel Ali and the TARAWA Expeditionary Strike Group reenters the Arabian Gulf.

Riverine forces are conducting a variety of missions in country, while, in the air, Navy airborne ISR assets are providing critical intelligence to the Navy and special operations forces.

On the ground, 14,000 Sailors are employed as individual augmentees. Six Navy led Provisional Reconstruction Teams in Afghanistan delivered aid and reconstruction, while more than 3,000 medical personnel support operations.

Off the east coast of Africa, CARNEY, WHIDBEY ISLAND, and OSCAR AUSTIN are supporting counter-piracy operations with a coalition force.

In the Pacific theater, the NIMITZ Carrier Strike Group is underway in the western Pacific, providing presence while USS KITTY HAWK undergoes maintenance.

ESSEX Expeditionary Strike Group continues exercises with the Republic of the Philippines forces.

The USS OHIO conducts the first-ever SSGN port visit to Busan, Republic of Korea.

Finally, in the Pacific, the USS LAKE ERIE launches a modified SM3 missile and successfully intercepts and destroys an inoperable satellite containing a toxic hazard.

These are everyday examples of the balanced capability set the 2009 fiscal year shipbuilding program will provide to meet the challenges the nation faces with a reasonable degree of risk. The

Navy's 313-ship force structure represents the minimum number of ships the Navy requires, the minimum capability and capacity, if you will, to provide global reach, persistent presence, and warfighting effects expected of our Navy forces as outlined in the National Defense Strategy, the QDR 2006, and our recently signed Maritime Strategy.

I thank you for this opportunity to discuss the Navy shipbuilding program, your support of our Navy, and I look forward to answering your questions. Thank you very much.

FLEET SIZE

Mr. MURTHA. Thank you very much.

The one thing that I keep worrying about is the threat down the road in looking past Iraq. I have been arguing policy-wise with the White House for a long time. But now I am trying to concentrate on how we can stabilize the Armed Forces not only to fight a war, to prevent a war.

I look back at Korea when they drew the line underneath Korea, and the North Koreans attacked South Korea because they didn't think we had an interest in the area. When they see we are weak, or perceive us as being weak, then I perceive a danger out there.

Intelligence people only spent a very short time on Russia or China, and yet it takes us much longer to build ships today than it did in the old days because of the sophistication of these ships. So I think we have to start now.

Every time you say you are going to build 313 ships, you come to us and you say, the out years are going to make up the difference. Well, we have said, no, no, we are going to start last year; and we didn't get as far as we wanted. But we hope that we can come to an agreement with the Navy and the Senate this year to build at least 10 ships.

A couple suggestions staff has made is to take one of the 1000s out and put in two more T–AKEs, because they are stabilized platforms. I don't know if that is the right answer. But we need some suggestion from you folks about which direction to go. Our industrial base is so small and there is so little competition that we need, obviously, competition. But, on the other hand, we need to build as many ships as we can. So we need to look at all the options.

I have been talking to Gene Taylor and Mr. Young about the possibility of jumping over the 1000 and going to the nuclear-powered cruiser. I would hope, and in talking to you privately beforehand, I know the Navy is looking at that.

Finally, I want to compliment the Navy on the shot that you just mentioned as if it were a routine thing, shooting down the satellite. That was by far not routine. In everything that I have heard, it was a complicated thing, and there had to be some substantial changes made. And it shows you planning ahead, how important it is when something like that comes about. If it hadn't been for the money that was spent in research and providing what was needed in that regard—and that started in this Committee, what we called defense of individual ships. A guy named Dave Killian came up with the idea. We kept putting it in, and the Navy kept resisting what we were trying to do, and finally you developed a much more

sophisticated system than we ever envisioned. But the point is we come up with some pretty damn good ideas which have been very helpful in the long run.

Mr. Young and I worked assiduously over the years trying to make sure that you have what you need. I know that you have cut back on I think 28,000 personnel in order to build ships. This is when England was the Secretary of the Navy. That is what he told me he was going to do. I liked that. I said, well, I worry you're cutting back too many personnel because you lose your flexibility. But, on the other hand, we want to start building ships.

Well, they stole the money. In other words, the money went someplace else.

Well, we are here to change that direction, to stabilize it. We hope that the supplementals will become part of the overall picture, rather than being separate from the base bill that has been sent over here to us. Both Mr. Young and I have said over and over again, put everything together so that we can understand and plan ahead and work with you folks, coming up with a viable defense or the strength we need to make sure we prevent a war rather than get into a war.

So I appreciate the Navy's role. There is no other force that can project yourself better than you can.

I worry you are talking about going down to 10 carriers. That is the kind of thing that we get into with the military in Iraq and Afghanistan, not having enough people, not being able to deploy with the worldwide commitments that we have.

So I think you have got to rethink these things. I know how expensive they are. But I know lethality is a lot more than it was in World War II, and we don't need quite as many. But, on the other hand, you could only force your ships out there so often. You are going to have breakdowns, whether it is the air wing or the shipbuilding itself.

So we want to work with you doing everything we can to help you get going in the right direction.

Mr. Young.

LITTORAL COMBAT SHIP

Mr. YOUNG. Mr. Chairman, thank you very much.

We are both committed to doing everything we can to make the Navy as strong as it needs to be. So Chairman Murtha is a very strong leader in making this happen; and the subcommittee is very, very supportive.

He made one point that I think is important, and that is we have got to look beyond the conflict that we are dealing with today in Iraq and Afghanistan. We have got to look to what might be the next event of hostility that we might face. Navy shipbuilding and the Navy fleet, of course, is extremely important to that question.

Let me go to the LCS, because in working with CNOs, the present CNO and previous CNOs, LCS was very, very high up on their priority list. We started to build two LCSs. One contractor fell a little behind, had some problems. The other contractor was quite proud of the fact that they were on track, when all of a sudden the other contractor wasn't on track either. So the Navy has decided

to change the design, as I understand; and the LCS of tomorrow will not be the LCS that we anticipated yesterday.

Tell us about that. My understanding is that you are going to a design that is very similar to a Coast Guard cutter. I am not sure if that is accurate or not. I would like to have the answer to that.

Admiral MCCULLOUGH. Yes, sir, I will take part of the question; and Allison will jump in where she thinks appropriate.

First, we have not changed the warfighting requirement for the LCS program since its inception. As you know, we started to build this ship with very little of a firm design, and it was an underestimation on both the part of the government and the contractor on what the implementation of the vessel rules—what the effect of that would be, if you will.

Mr. MURTHA. Say that again.

Admiral MCCULLOUGH. The implementation of the Naval Vessel Rules. When we initially started this contract, the design was immature and the Naval Vessel Rules had not been finalized.

Mr. MURTHA. How far along was the design?

Ms. STILLER. When we signed the contract, about 2 weeks later the Naval Vessel Rules were firmed up. What we did as part of the contract was say we know they are not firmed up so come back in and tell us what the implications are. And we did adjust both contracts.

What Admiral McCullough has pointed out is both sides underestimated the true impact of the Naval Vessal Rules. But the Naval Vessel Rules are approved now, approved before we signed the contract for DDG 1000, so we don't feel we will have that situation on DDG 1000.

I will defer back to you.

Admiral MCCULLOUGH. So we haven't changed the warfighting requirements for the LCSs. The LCSs in what we propose in the 2009 program will be what we call flight zero plus LCSs. They will only incorporate the minimum number of safety changes that we feel appropriate for that ship. So there is no intent to wholesale redesign any one of the LCSs.

We will perform sea trials and builders' trials and take lessons learned from both hull forms and decide what changes, if any, need to be implemented in the fiscal year 2010 ships. The LCS meets a current critical warfighting gap in the areas of mine warfare, response to high-speed maneuvering surface vessels and littoral antisubmarine warfare. The LCS and its mission modules have been designed to meet that warfighting gap.

Sir, I have heard a lot of discussion about national security cutters, but there is currently no warfighting requirement in the United States Navy that sees a national security cutter as a solution.

Mr. YOUNG. Does your funding profile meet the needs of your LCS requirements?

Admiral MCCULLOUGH. Sir, when we revised the program due to the cost growth that we saw on LCS 1 and 2 that subsequently resulted in the cancellation of LCS 3 and 4, the profile we have put in the budget is to build the number of ships that we can with the amount of money that is profiled in the budget. Our commitment

is still to build 55 LCSs, and that will require additional funding outside the FYDP.

Ms. STILLER. I would just like to add we also were given a cost cap for LCS, and so the budget reflects that cost cap. The provision does not allow us to adjust for escalation over time. The cost cap is something we are going to come back to Congress and ask to be addressed. Because a ship today isn't going to cost the same as one way out there. Obviously, you will have learning on the first ships that will counterbalance the escalation impacts. But as you come down a learning curve the cost cap may be a challenge.

Mr. YOUNG. What is the status of LCS 1 and 2 now? What is their construction stage?

Ms. STILLER. Concerning LCS 1, the program office projects it is about 79 percent complete. That is as of December 2007. We are going to go to builders' trials when the ice melts and we are able to get underway, hopefully this spring. The good news is both diesel engines were lit off, one yesterday, the second one this morning. So the ship is in testing right now, primarily, and things are going well.

On LCS 2 we are about 65 percent complete. This is the Navy's estimate. That is also as of December 2007. They hope to launch that ship once she is about 80 percent complete, and that is predicted to be sometime this spring. She will also go into test and trials as well. Both should deliver this year.

ANTI-SUBMARINE WARFARE

Mr. YOUNG. Let me shift to another issue, Mr. Chairman, if I might.

Submarines. The Chinese have aggressive underwater programs, the surprise that they gave the U.S. Navy by surfacing a submarine very, very near one of our large ships. Is this something that the Navy is dealing with? Do you have a plan to find out more about what the Chinese are doing or how they are doing it?

Admiral MCCULLOUGH. Yes, sir, we do.

The Chinese have approximately 65 submarines. Some of them are extremely modern, and some of them are not. We have a variety of programs using distributive arrays that are in research, development and evaluation to help us get at that problem. The program of record for our advanced sonar system for our surface combatants, the SQQ–89, AV–15. We have accelerated in last year's budget to put additional assets on our ships.

We are working on surface ship torpedo defense. We have successfully demonstrated the guidance package on an anti-torpedo torpedo that could be launched from a surface ship. We recently completed a demonstration of detection, classification and localization of a five torpedo salvo up in the Pacific northwest.

We recognize that the Chinese have accelerated development of their submarine program, and we have got several programs and several research and development projects under way to counter that threat, sir.

ENVIRONMENTAL IMPACTS OF SONAR

Mr. YOUNG. You mentioned the advanced sonar program. We are beginning to hear a lot about sonar and the effect of sonar on sea mammals. Are you gearing up for a discussion of that issue?

Admiral MCCULLOUGH. Sir, I am on the periphery of that discussion with my counterparts on the OPNAV staff. But that is not really in my lane. If you will, I would like to take that question for the record.

Mr. YOUNG. I understand that. Since you mentioned sonar, I just thought I might take a shot at it.

Admiral MCCULLOUGH. I understand.

[The information follows:]

The AN/SQQ–89A advanced surface ship sonar program utilizes the existing hull-mounted mid-frequency active (MFA) sonar source, the AN/SQS–53. Improvements to the system include upgrades to signal processing and displays in commercial-off-the-shelf computers, a new passive multi-function towed array for improved anti-submarine warfare (ASW) performance, and software upgrades include improvements to the acoustic waveforms.

Because the advanced system will use the same source as the existing active sonar system, the AN/SQS–53, the source level will be the same as that currently in use. MFA sonar has been linked with only a very small fraction of marine mammal standings in a limited number of geographic areas (specifically the Bahamas, the Canary Islands, and Greece). Despite the limited number of strandings associated with sonar, Navy is concerned about the potential for sonar to negatively affect marine mammals. Navy is a world leader in funding research on potential acoustic effects on marine mammals and is spending approximately $18 million per year on research with ocean agencies, academic institutions, and independant researchers around the world to better understand what combinations of ocean conditions, geography, and sonar use may lead to marine mammal disturbances.

For the U.S. Navy, the safety of Sailors and Marines is top priority when carrying out our national security mission. A critical part of this mission is defending Navy ships from the current and future submarine threat. The only effective way to counter this threat is training with active sonar at sea under simulated combat conditions to detect these submarines before they strike. At the same time, the Navy goes to great lengths to protect marine mammals and the environment during training exercises.

The Navy has implemented an At-Sea Policy to guide compliance with environmental laws, regulations and executive orders in the conduct of naval exercises or training at sea. The most important element of this Policy involves environmental analysis of all reasonably foreseeable training activities on each of 12 range complexes in the United States. The training activities being analyzed includes the use of MFA sonar and its potential effects on marine mammals. These analyses have also resulted in extensive coordination with other federal agencies including the National Marine Fisheries Service.

Currently, all major ASW training exercises using MFA sonar incorporate protective measures to ensure there is minimal effect on the marine environment. Protective measures include: posting highly trained lookouts; listening for marine mammals with passive hydrophones; creating buffer zones within which sonar levels are reduced if marine mammals are present; and ceasing sonar operations if marine mammals are detected within a certain distance of an active sonar dome.

Mr. YOUNG. I had a chance 2 weeks ago to visit the Marine Mammal Training Center in San Diego, and we had a long discussion about the effect of sonar on those sea animals. It is an issue that we are going to be faced with I think pretty seriously as the days go on.

Mr. Chairman, thank you very much.

DDG 1000

Mr. MURTHA. Would you go through the DDG, what we are looking at here with the 1000? In other words, was it three of them

now in line? If we were to take one out, what does that do to the shipbuilding distribution here? If we take one out and we go to two T–AKEs, what does that do to our distribution of ships and capability to build ships?

Ms. STILLER. Yes, sir. I will answer that from the industrial base perspective.

You are right, the 2009 ship is the third of the DDG 1000s. Like I said, we just awarded the two lead ships. The yards that build those ships are General Dynamics, Bath Iron Works and Northrop Grumman Shipbuilding down on the gulf coast. T–AKEs are built by NASSCO in San Diego. We have two T–AKEs in the 2009 budget already, and we feel when we balanced the seven ships that are in the plan, we looked at it from an industrial perspective and felt that was a good balance both in the warfighting requirement, what with the warfighter needed as well as the industrial base. To put two more ships at NASSCO, they likely could not execute four in one year. They would have to spread them out over time, the deliveries.

Mr. MURTHA. How long would it take them to build the four? That would end the program, right?

Ms. STILLER. Yes, sir, that would end the program. I would have to look at the exact date. I don't know that off the top of my head. But they likely couldn't execute four in one year. They are only building one a year currently, and we felt that could go to two a year. That is why we put the two in 2009. But to go to four would be quite a leap for them.

Mr. MURTHA. What we are looking at is if you take one of the others out, that funds the LPD 17 and the two T–AKEs. We are looking for how we can shift this and not affect shipbuilding. So what happens to the shipbuilding industry? How does this affect it? What is the problem we will have?

Ms. STILLER. The issue will be with the surface combatant builders. Granted, you said an LPD, and Northrop Grumman Shipbuilding builds LPDs as well. So, in their case, it is probably not as big of an impact as it would be to Bath Iron Works, who is one of our two surface combatant providers. So that would be where the industrial base would feel it the most.

Mr. MURTHA. What does it look like, the profile for the 1000?

Ms. STILLER. DDG 1000, two ships in 2007. They were split-funded between 2007 and 2008; and then one a year through the rest of the FYDP, for a total of seven. So one in 2009, one in 2010.

Mr. MURTHA. What kind of cost are we talking about and what do you see as a cost growth?

Ms. STILLER. Right now, we don't estimate we have any cost growth. We have about $2.5 billion in 2009 for DDG 1000, with another $51 million for advance procurement for the next—around $2.6, and then it goes down to $2.3, in that range through the outyears where we will start to see the learning in the ships.

COST REDUCTION EFFORTS

Mr. MURTHA. So what is the difference in the platform between a submarine and a 1000? They are going to get the submarine down to $2 billion. That is what they are committed to, and I think the Navy worked on getting them down to $2 billion. What is the

difference between a surface ship, this particular ship, and a Virginia Class submarine?

Ms. STILLER. As you know, sir, the Virginia Class submarine—we have already delivered four Virginia Class submarines and are continuing on that path. DDG 1000 is several years behind where Virginia Class was. Concerning the Virginia Class submarine cost reduction initiatives, we made an investment in R&D to get at some of these cost reductions to get to the $2 billion submarine in 2012.

The luxury here is you have more ships delivered and more quantity in the class to get to that $2 billion a year, where you only have seven ships in DDG 1000. Certainly, after you get lead ships delivered, you can certainly look at cost reduction efforts for the later DDG 1000s. But there are not going to be too many to catch with only a seven ship class.

Mr. MURTHA. We are trying to help you with this. We are trying to get to the point where people know in the industry, the Navy knows what we can afford over here in the Congress. I know COTS has been a big part of them getting the price of the submarine down and Navy pressure from the submarine. We are doing the same thing, I assume, with the surface ships.

Ms. STILLER. Yes, sir.

Mr. MURTHA. We are how far along on the design of the 1000? Eighty-five percent did you tell me?

Ms. STILLER. When we start production later this year, they will be at 85 percent complete in design. That is very similar to where the Virginia Class was when they started production. In fact, they were right at 85 percent.

We also project the carrier CVN 78 will also be in that range. That is because we have taken the steps to make sure that we get the design mature, where we didn't have that luxury on the LCS.

SHIPBOARD MANNING

Mr. MURTHA. One of the other things this Committee has been worried about is the number of people on the ships and the fact that you are depending on technology to solve some of these problems. Yet, if we have a major disaster, I worry there is not going to be enough. I brought this to Admiral Mullen's attention when he was CNO. He understands that, and I know I have harped on that for years and years.

Are we getting down too low in the number of people? I realize personnel costs are going to have to come down. If we are going to procure and get our military back to the capability it should be, and this is the first war in history where we lost capability rather than increased capability with all the services. In order to recapture that, we are going to have to cut personnel costs. The Army is going to be the one that suffers. The Navy has already lost some. The Air Force cut back substantially and is still not buying the airplanes we need.

But where are we in that regard? Where are we with the numbers of people on these ships in case something happens?

Admiral MCCULLOUGH. Mr. Chairman, we look carefully at how we design the ships to get to the minimum crew that we can to ef-

fectively operate the ship and maintain the damage control standards. I think that is what you are concerned about.

In the LCS, we have a core crew of 40 folks, with 15 folks for the mission package and an aviation det of about 20, for a total of 75 people on the LCS.

In the DDG 1000, the core crew on that ship is about 114, with an aviation det of 28. The technology advances that let us get to the 114 folks had to do with human systems integration in the ship's mission center that allowed us to reduce the number of watch standers we had in the combat information center; and advances in technology in the fire suppression systems and the flight deck fire suppression systems, which let us reduce the number of people we had on standby when we did helicopter operations.

If you visit a surface combatant today, let's say a CG 47 or DDG 51 class, and you land in a helicopter, you will see about 25 Sailors as part of the rescue and salvage crew in the event that the helicopter crashed. The modifications that we did in the DDG 1000 allow the firefighting to be done remotely from the helo control station and the need for only two additional folks to rescue the flight crew.

This has been demonstrated in an engineering demonstration module, and we have tested it repeatedly. We put up fans to replicate the wind that you would have across a flight deck during a helo crash, which is essentially 30 degrees off the center line at a speed of 30 knots.

Additionally, we took an EX 963 class ship to sea and configured the general workshop with fire main, because there isn't any fire main in the workshop on the 963. We put in the fire suppression system that we will use in the DDG 1000. It involves a series of smart valves that have flow and pressure sensors in the control system. We put a 1,000 pound warhead in the general workshop and detonated the warhead. The fire main reconfigured itself and put the fire out in less than 10 minutes. Demonstrated it worked.

So we feel confident that the damage control safety of both the DDG 1000 and the LCS are supported by the crew. Any further reductions in crew size we would have to seriously look at what technology was available.

As for personnel costs, as you state, the Navy has been coming down in size. I said in my oral statement that we were about 332,000 people a week ago. The goal is for 322,000 people. N1 has a very detailed program on that, Vice Admiral Harvey.

I would tell you, even as we ramp the number of people down, our personnel costs went up at about a percent and a half a year. So personnel costs are huge to not only the Navy but all the Services. We have to continue to get our arms around personnel costs so we don't severely impact the procurement accounts, as you referenced.

Mr. MURTHA. I understand what you are saying, and I appreciate—I assume there is redundancy built into this. For instance, the exercise you are working, has a redundancy, and you have tried to consider all the alternatives.

We went into Iraq. We had that problem. Many of us thought we needed more people initially. The Secretary of Defense disagreed with that. He said no, no, technology will take care of this.

So you are telling me you are convinced that the technology has enough redundancy, that no matter what happens, how many people are killed or wounded on these ships, you will still have enough to get that ship back.

I think it was the Cole or the Roberts, I think it was, was hit out in the Gulf, and I went out to visit that ship at one of the ports, I think it was Dubai, and it was right down at the water level at the time. They told me the horrendous stories about how heroic the crew had been in getting that ship saved. Because it hit the mine. There was a hole as big as a bus on the side of it. It kept coming down. But they got it back; and, of course, we brought it back to the United States and repaired it. The point was they had enough people to take care of it.

Then the Navy cut out the firefighting, the damage control school that they had at Guantanamo at the same time. The captain of the ship had written the regulations for this. So you can see our experience is that once you get into a combat situation it is very hard to make the changes.

So I just hope that you are looking at whatever redundancy is necessary. I know what you are talking about personnel costs. You are going to struggle here for a while. But I just worry we are not going to have enough people that, if something dramatic happens on those ships, we are not going to have people to take care of them.

Admiral MCCULLOUGH. Mr. Chairman, I will tell you on the DDG 1000 and what we have done with technical mitigation in the area of damage control, I am confident in the area of redundancy and capability that we have built in that ship that allows us to get to the 114 core crew.

SHIPBUILDING FUNDING

Mr. MURTHA. Is there any advanced funding we need to keep this shipbuilding going? For instance, any advanced funding we need in the supplemental or in the base bill for next year that we need to put in to keep any of these programs going?

Admiral MCCULLOUGH. I don't think there is anything that is required in the supplemental or the base program that is required.

Mr. MURTHA. Advanced funding for the submarine. There is no other program that needs any advanced funding.

Admiral MCCULLOUGH. The budget lines that we have put in the 2009 submittal, the President's budget 2009 contained all the requirements we have for our programs as submitted in 2009, sir.

Mr. MURTHA. The problems we had at the shipyard down there in the south from Katrina, are those all worked out now?

Ms. STILLER. Yes, sir. We have re-baselined all the contracts affected by Katrina, finished that the end of last year, so they are executing to those new contracts.

Admiral McCullough and I were talking on the way over, LHD 8, who is under construction, also lit off diesels yesterday. We are making forward progress down there as well.

We christened LPD 21 on Saturday in Avondale.

Mr. MURTHA. Mr. Young.

LPD 17

Mr. YOUNG. Let me go back to shipbuilding now. LPD 17. The Marine Corps this year and also last year made this, an additional LPD 17, their number one unfunded requirement. They are really feeling strongly about this, considering what their missions might be in the future years.

My big question is I think we are going to have to do this for the Marines somewhere along the line. But if we don't do it in 2009, is the possibility that you will begin to prepare to close down that capability of building that particular ship?

Admiral MCCULLOUGH. I will take the operational aspect of that, Congressman.

The Commandant of the Marine Corps has stated a requirement for 33 ships in the amphibious assault echelon to deliver two Marine Expeditionary Brigades. He specifically requested 11 aviation-capable ships, 11 LSD 41/49 class, and 11 LPD 17s. The CNO has concurred. CNO Roughead has concurred with that determination. So we understand and agree with the Commandant's requirement.

That said, in the 2009 program, given the needs of the entire Navy, we could not put an LPD 17 in the 2009 program. Some things we have worked at to get at the Commandant's requirement is looking at extending the service lives on some LHA 1 class ships and some LPD 4 class ships. While it doesn't get to the entire requirement, depending on the year and the mix, we get to anywhere from 1.86 to 1.92 MEBs based on a 2015 agreed-to MEB baseline between the Navy and Marine Corps. We will continue in future programs to look at when and if we can put that ship in the program.

Ms. STILLER. I will just comment from the "could you execute it and where are you in the program". We have delivered the first three LPDs, and through LPD 25 are under contract. We awarded that contract in December, exercised the option on the contract in December. That ship doesn't deliver until February of 2012.

There is a backlog of LPD work. As we went through the 2009 budget, we felt from an industrial base perspective we did not have to put the ship in the FY 2009 Budget, that they could wait and we could revisit as part of the discussions in POM 10.

Mr. YOUNG. The answer to my question is, if we do not fund the additional LPD 17, we will not close down the line.

Ms. STILLER. That is correct, sir. Yes, sir.

Mr. YOUNG. Mr. Chairman, thank you very much.

VIRGINIA CLASS WELDS

Mr. MURTHA. Tell us about the bad welds on the Virginia class submarine. I know staff mentioned this to me. What was the problem there? Where was it and what happened and what did you do to correct it?

Ms. STILLER. Yes, sir. This was an issue at Northrop Grumman Newport News, not an issue at General Dynamics Electric Boat. It was a procedural issue and a quality assurance issue and who was overseeing what welds. Newport News took immediate action to change processes and procedures. We have looked at all of the weld issues on the Virginia Class submarine and have come through all

that; and, in fact, we just delivered USS NORTH CAROLINA, which was a Newport News boat, on the 21st of February.

I think we have come through the issue. We have put the right processes and procedures in place at Newport News. We don't feel that there are any issues that are going to hold up production on the future submarines.

Mr. MURTHA. Tell me how it was discovered, and it must have gone a while before you discovered it. I remember years ago going out for the first Trident submarine, and it had 5,000 bad welds, and General Dynamics said they wanted us to pay for it, and we didn't. They did it themselves. What happened here is that all at once we had a lot of bad welds.

Ms. STILLER. That was a different issue in the Sea Wolf days. That was a material issue that caused the problem.

In this particular case, it was oversight or supervision of journeymen level folks doing welding and what procedures they had to follow to report when they had to rework a weld, and they weren't doing that necessarily. It got caught in a spot check. That is why we wanted to make sure we knew how pervasive it was.

Mr. MURTHA. Were they in the hull or the piping?

Ms. STILLER. I believe just the hull. But I will get that for you for sure, sir. I don't remember.

[The information follows:]

During routine testing of VIRGINIA Class submarines, the Navy learned of weaknesses in non-nuclear pipe welding processes at Northrop Grumman Shipbuilding-Newport News. The Navy has thoroughly investigated the problem, taken corrective actions, and certified the ships safe for operations. All of the affected welds have been pipe welds. An assessment of the potential long-term impact of this issue is due from General Dynamics-Electric Boat and Northrop Grumman Shipbuilding-Newport News by April 15, 2008.

Mr. MURTHA. So now there is no possibility of being in a submarine in the Antarctic underneath the ice. I worry about those bad welds. That is not a good thing.

Ms. STILLER. Yes, sir. In any place we felt the weld needed to be reworked, it has been reworked. The engineering discipline NAVSEA has looked at, the technical authority has looked at it in great detail.

SEALIFT OF MRAP VEHICLES

Mr. MURTHA. Ms. Kaptur.

Let me ask one more question before I go to Ms. Kaptur.

This MRAP thing has always worried me. It took so long for people to recognize the MRAPs overseas. One of the things that I worried about them when I found out we are going to send them by air was they cost $150,000 apiece. Now I understand we send them by sea. Are those all U.S.-flagged ships that we are sending them in?

Ms. STILLER. Yes, sir. Yes, sir. Any ship that TRANSCOM or Military Sealift Command uses has to be U.S.-flagged and U.S.-crewed.

Mr. MURTHA. If you don't have the figures, I would like to know what it costs per MRAP by ship versus by air. It just kind of worried me that we were sending them by Russian air. Or I guess it was Russian airplane. I don't remember where the crew was from,

Kiev or someplace, but, at any rate, Russian air. I think you get four in there, and none of our airplanes could carry that many, so it was cheaper. It just shows you how our capability has been degraded, and we don't have the things we need out there now in order to get things like the MRAP overseas.

[The information follows:]

USTRANSCOM uses these planning factors:

$18,000 via surface ship per MRAP

$135,000 via air shipment per MRAP (regardless of whether an AN–124 or C–5/C–17 is used)

Ms. Kaptur.

LEASING OF FOREIGN-BUILT SHIPS

Ms. KAPTUR. Thank you, Mr. Chairman, for giving me a few moments to catch up. I apologize for being late. We have three concurrent hearings on my subcommittees.

Let me turn to the issue of the leasing of foreign-built ships. We have talked about this in past hearings. Secretary Stiller, what are the Navy's long-term plans regarding the practice of leasing foreign-built ships to augment your sealift capacity?

Admiral McCullough, my question to you along the same lines, what would be the impact to the Navy's mission if Congress were to prohibit the Navy's ability to enter into these leases on foreign-built ships?

Let's start with Secretary Stiller.

Ms. STILLER. Yes, ma'am.

Today, we have 17 long-term leases for foreign-built ships. All of these ships are now U.S.-flagged. To get them to U.S. Coast Guard standards, work was done in the U.S. shipyard to bring those ships to U.S. Coast Guard standards. There are 17 of these long-term leases that were foreign built out of 32 leases right now. When I talk lease, I am talking greater than 6 months. Nine of these 17 won't be rehired at or before when their lease is expired. The Navy has in our budget money to buy out five of the MSC leases, two in 2008 and three in 2009.

Two of the vessels that are under long-term charter are High Speed Vessels. The Navy and the Army intend to procure Joint High Speed Vessels. When those vessels deliver, these leases won't be continued.

There is also one Air Force container ship that the requirement from the Air Force won't exist when the lease expires, so we won't renew that lease.

Then there is one undersea surveillance support ship that is going to be filled by reactivating a Navy asset.

Out of the 17, six of the 17 are from long-term leases that were authorized for the MPS force back in 1986. But, again, all of them have been reflagged to U.S. standards.

Ms. KAPTUR. You said 32 or 35?

Ms. STILLER. Thirty-two total.

Ms. KAPTUR. Thirty-two leases?

Ms. STILLER. Yes, ma'am. Thirty-two long-term leases, and 17 of those were foreign-built and then converted to U.S. The remainder were built in the U.S.

Ms. KAPTUR. Can you provide for the record what types of ships are being leased?

Ms. STILLER. Yes, ma'am.

Ms. KAPTUR. The actual type and purpose and which countries.

Ms. STILLER. Yes, ma'am.

Ms. KAPTUR. And how much we are paying for those leases.

Ms. STILLER. Yes, ma'am.

[The information follows:]

The attached spread sheet provides a complete list of the 32 ships currently under long-term charter to the Military Sealift Command (MSC), including the type of ship, ship mission, country of origin, and chartering costs.

Ships Under Charter (Six Months or Greater) To Military Sealift Command as of 10 March 2008^

VESSEL NAME/TYPE	Vessel Type	YEAR SHIP BUILT	BUILDER	COUNTRY OF ORIGIN	DOD CUSTOMER / MISSION	COMMENCEMENT OF INITIAL CONTRACT	OPTION PERIODS	CURRENT PERIOD	END DATE	MONTHLY COST OF LEASE	MODIFIED TO USCG STANDARDS	NOTE
SPECIAL MISSION SHIPS												
CORY CHOUEST	Offshore Supply Vessel	1974	Ulstein Hatlo	Norway	NAVY / UNDERSEA SURVEILLANCE	1989/ Current contract Oct-03	3 1-yr options & one 11-month option	Final option ends 31-Aug-08	31-Aug-08	$511,998	Yes	1
HSV 2 SWIFT	HSV	2002	INCAT	Australia	NAVY / HIGH SPEED VESSEL	Jul-03	3 1-yr options & one 11-month option	Final option ends 14-Jul 08	14-Jul-08	$558,217	Yes	
HOS GREYSTONE	Offshore Supply Vessel	2003	Leevac Industries LLC, of Jennings, LA	US	NAVY / STRATEGIC SYSTEMS PROGRAMS (SSP)	15-Feb-06	7 1/2 month firm period and 2, 6-month options; one 12-month option and one 100-day option added	First Added option ends 30-Sep-08	8-Jan-10	$754,950	Yes	
HOS BLUEWATER	Offshore Supply Vessel	2003	Leevac Industries LLC, of Jennings, LA	US	NAVY / STRATEGIC SYSTEMS PROGRAMS (SSP)	15-Feb-06	7 1/2 month firm period and 2, 6-month options; one 12-month option and one 100-day option added	First Added option ends 30-Sep-08	8-Jan-10	$754,950	Yes	
HOS GEMSTONE	Offshore Supply Vessel	2003	Leevac Industries LLC, of Jennings, LA	US	NAVY / STRATEGIC SYSTEMS PROGRAMS (SSP)	15-Feb-06	7 1/2 month firm period and 2, 6-month options; one 12-month option and one 100-day option added	First Added option ends 30-Sep-08	8-Jan-10	$770,350	Yes	
HOS SILVERSTAR	Offshore Supply Vessel	2004	Leevac Industries LLC, of Jennings, LA	US	NAVY / STRATEGIC SYSTEMS PROGRAMS (SSP)	15-Feb-06	7 1/2 month firm period and 2, 6-month options; one 12-month option and one 100-day option added	First Added option ends 30-Sep-08	8-Jan-10	$770,350	Yes	
M/V ALICE A. SOLOMON	Workboat	1973	Curtis Bay, MD	US	NAVY/USCG's AVIATION TRAINING CENTER (ATC) - MOBILE, AL	2002/ Current Contract Oct-07	One Year Base Period with 3 1-year options and 1 11-month option	Firm Period ends 30-Sep-2008	31-Aug-12	$26,567	Yes	5
C-COMMANDO	Offshore Supply Vessel	1997	Edison Chouest Offshore	US	NAVAL SPECIAL WARFARE/SPECIAL OPERATIONS FORCES COMMAND ADVANCED SEAL DELIVERY SYSTEM	1-Oct-93	3 1-yr options & one 11-month option	First option period ends 30 June 08	30-Jun-09	$262,950	Yes	2
CAROLYN CHOUEST	Offshore Supply Vessel	1994	Edison Chouest Offshore	US	NAVSEA/DEEP SURFACE SUPPORT VESSEL	Oct-92	3 1-yr options & one 11-month option	Final option ends 31-Aug 08	30-Aug-08	$415,190	Yes	2
DOLORES CHOUEST	Offshore Supply Vessel	1990	Edison Chouest Offshore	US	SUBLANT/DEEP SUBMERGENCE ELEVATOR SUPPORT SYSTEM (EAST COAST)	1-Jun-94	3 1-yr options & one 11-month option	Third Option ends 30-Sep-2008	30-Aug-09	$226,269	Yes	2
KELLIE CHOUEST	Offshore Supply Vessel	1996	Edison Chouest Offshore	US	NAVSEA/DEEP SUBMERGENCE ELEVATOR SUPPORT SYSTEM (WEST COAST)	1-Jun-94	3 1-yr options & one 11-month option	Third Option ends 30-Sep-2008	30-Aug-09	$470,592	Yes	2
C-CHAMPION	Offshore Supply Vessel	1999	Edison Chouest Offshore	US	WARCOM/SOCOM/MARITIME SUPPORT VESSEL	4-May-07	3 1-yr options & one 11-month option	Base Period ends 3 May-2008	3-Apr-12	$554,900	Yes	
SEALIFT SHIPS												
BAFFIN STRAIT	Multi-Purpose Container	1997	Wuhu Shipyard	China	NAVY / DIEGO GARCIA DRY CARGO SHUTTLE	10-Jan-05	9 month firm period & 4 1 yr options	Option ends 30-Sep-2008	30-Sep-09	$320,000	Yes	
AMERICAN TERN	Multi-Purpose Container	1990	VEB Schiffswerft Neptun	Germany	NAT SCIENCE FOUNDATION & USAF / DRY CARGO FOR ANTARCTICA/ GREENLAND	1-Dec-05	10 month firm period & 4 1-yr options	Option Period ends 30-Sep-2008	30-Sep-10	$820,000	Yes	
VIRGINIAN	Heavy Lift Container	1984	Bremer Vulcan Shipyard	Germany	JOINT MUNITIONS CMD. / DRY CARGO OPERATIONS	11/4/2005 / 04/01/2007/Current contract Oct 2007	1 year firm period & (3) 1-yr options	Base year Ends 15 Oct 2008	15-Oct-11	$985,000	Yes	2
TRANSPACIFIC	Tanker	2001	Celiktekne Shipyard	Turkey	DESC / FAR EAST PETROLEUM SHUTTLE	22-Nov-06	3 1-yr options & one 11-month option	Option period Ends 30 Sep 2008	22-Oct-11	$414,000	Yes	
PREPOSITIONING SHIPS												
CAPTAIN S.L. BENNETT	Container	1984	Samsung	S. Korea	USAF / CARGO PREPO DIEGO GARCIA	Nov 1997/Current contract Jan 2008	9 month firm period & four 1-yr options, one 2-month option	Firm period ends 30 Sep 08	20-Nov-12	$829,080	Yes	2
LTC JOHN U.D. PAGE	Container	1984	Daewoo	S. Korea	US ARMY / PREPO CARGO DIEGO GARCIA	Mar 2001 / Current contract Apr 2006	8 month firm period & four 1-yr options, one 3-month option	Option period ends 30 Sep 08	31-Dec-10	$1,082,267	Yes	2
SSG EDWARD A. CARTER JR.	Container	1985	Samsung	S. Korea	US ARMY / PREPO CARGO DIEGO GARCIA	Jun 2001 / Current contract Aug 2006	2 month firm period & 4 1-yr options, one 9-month option	Option Period ends 30 Sep 08	30-Jun-11	$1,088,210	Yes	2
A1C WM H. PITSENBARGER	Container	1983	Atlantique	France	USAF / CARGO PREPO DIEGO GARCIA	Dec 2001/Current contract Jan 2007	One six month firm period & four 1-yr options, one 5-month option	Option Period ends 30 Sep 08	10-Mar-12	$1,065,900	Yes	2
MAJ BERNARD F FISHER	Container	1985	Odense Steel Shipyard Ltd	Denmark	USAF/ PREPO CARGO SAIPAN	Aug 1999 / Current contract Oct 2004	1 year firm period & three 1-yr options & one 11-month option	Option period ends 14 Oct 08	15-Sep-09	$784,500	Yes	2
WESTPAC EXPRESS	HSV	2000	Austal Ships	Australia	USMC / DRY CARGO AND PAX FOR JAPAN AND S. KOREA	Feb 2001 / Current contract Feb 15, 2007***	7 month firm period & 4 1-yr options	Option Year ends 30-Sep-08	30-Sep-11	$1.1 M	Yes	2
VADM K. R. WHEELER	OPDS	2007	Edison Chouest Offshore	US	OLA / OFFSHORE PETROLEUM DISCHARGE SYSTEM	20-Sep-07	1 year firm period & 3 1-yr options & one 11-month option	9/19/2008	20-Aug-12	$2.1M	Yes	

Ships Under Charter (Six Months or Greater) To Military Sealift Command as of 10 March 2008^

VESSEL NAME/TYPE	Vessel Type	YEAR SHIP BUILT	BUILDER	COUNTRY OF ORIGIN	DOD CUSTOMER / MISSION	COMMENCEMENT OF INITIAL CONTRACT	OPTION PERIODS	CURRENT PERIOD	END DATE	MONTHLY COST OF LEASE	MODIFIED TO USCG STANDARDS	NOTE
SGT WILLIAM R. BUTTON	Multipurpose Container/RoRo	1986	Quincy	US	USMC / PREPO CARGO DIEGO GARCIA	22-May-86	5-year Base w/ 4 5-yr options	4th Option ends 21 May 2011	21-May-11	$2.1M *	Yes	1
SGT MATEJ KOCAK	Multipurpose Container/RoRo	1984	Sun	US	USMC / PREPO CARGO DIEGO GARCIA	3-Oct-84	5-year Base w/ 4 5-yr options	4th Option ends 3 Oct 2009	3-Oct-09	$2.1M *	Yes	1
PFC EUGENE A. OBREGON	Multipurpose Container/RoRo	1985	Sun	US	USMC / PREPO CARGO MEDITERRANEAN	15-Jan-85	5-year Base w/ 4 5-yr options	4th Option ends 14 Jan 2010	14-Jan-10	$2.1M *	Yes	1
MAJ STEPHEN W. PLESS	Multipurpose Container/RoRo	1985	Quincy	US	USMC / PREPO CARGO GUAM AND SAIPAN	1-May-85	5-year Base w/ 4 5-yr options	4th Option ends 30 April 2010	30-Apr-10	$2.1M *	Yes	1
CPL LOUIS J. HAUGE JR	Multipurpose Container/RoRo	1979	Odense Steel Shipyard Ltd	Denmark	USMC / PREPO CARGO GUAM AND SAIPAN	7-Sep-84	5-year Base w/ 4 5-yr options	4th Option ends 6-Sep-2009	6-Sep-09	$2.1M *	Yes	1
PFC WILLIAM B. BAUGH	Multipurpose Container/RoRo	1979	Odense Steel Shipyard Ltd	Denmark	USMC / PREPO CARGO DIEGO GARCIA	28-Oct-84	5-year Base w/ 4 5-yr options	4th Option ends 27-Oct-2009	27-Oct-09	$2.1M *	Yes	1
PFC JAMES ANDERSON JR	Multipurpose Container/RoRo	1979	Odense Steel Shipyard Ltd	Denmark	USMC / PREPO CARGO GUAM AND SAIPAN	26-Mar-84	5-year Base w/ 4 5-yr options	4th Option ends 25-Mar-2010	25-Mar-10	$2.1M *	Yes	1
1ST LT. ALEX BONNYMAN	Multipurpose Container/RoRo	1980	Odense Steel Shipyard Ltd	Denmark	USMC / PREPO CARGO GUAM AND SAIPAN	26-Sep-85	5-year Base w/ 4 5-yr options	4th Option ends 25-Sep-2010	25-Sep-10	$2.1M *	Yes	1
PVT FRANKLIN J. PHILLIPS	Multipurpose Container/RoRo	1980	Odense Steel Shipyard Ltd	Denmark	USMC / PREPO CARGO DIEGO GARCIA	12-Sep-85	5-year Base w/ 4 5-yr options	4th Option ends 11- Sep-2010	11-Sep-10	$2.1M *	Yes	1

Notes:

1 - LONG TERM CHARTERS SPECIFICALLY AUTHORIZED BY LEGISLATION
2 - THE CURRENT/FOLLOW-ON CHARTERS WERE AWARDED UNDER FULL AND OPEN COMPETITION
3 - A MODIFICATION TO SUBSTITUTE THE SEAMARK III WITH THE MEGAN BEYEL IS BEING EXECUTED UNDER THE SAME CONTRACT; ALSO US BUILT IN LA IN 1979
5- 8(a) SET ASIDE CONTRACT

* INCLUDES OPERATING AND CAPITAL HIRE
** *DOES NOT INCLUDE $10 MILLION DELIVERY BONUS*
*** WESTPAC EXPRESS WAS CHARTERED BY USMC FROM 15-Feb-01 THROUGH 13-Feb-02;1ST MSC CHARTER BEGAN ON 14-Feb-02.
^ Table covers only charters of ocean-going ships, and does not include small watercraft

Ms. KAPTUR. Admiral.

Admiral MCCULLOUGH. Ms. Stiller talked about which leases we were buying out and how we were going to replace a lot of those ships with LMSR takes from the Army, which are U.S.-built ships. The ones that remain as foreign-built, if we were prohibited or required to terminate the lease, are in our maritime pre-positioning force. We would have to procure ships to replace those. Those ships are not currently planned to be recapped until the mid-2020s. So it would be an additional bill that we would have to figure out how to fund to replace that capability.

Ms. STILLER. I would also add, if the lease period was reduced from the 5-year, it would also be costly to the Navy. Because when an operator or a ship owner decides to lease the vessel, he is trying to amortize it over the greatest period possible. Five years would give him a better chance of paying off what he spent to build the vessel than a 2-year period. The cost would get passed along to the Navy as well.

SMALL BOAT DEFENSE

Ms. KAPTUR. I am interested in smaller vessels. And you may know, obviously, I am from a Great Lakes community; and we have tried very hard to retain some ship repair capacity on the Great Lakes. That is easier said than done.

I am wondering about your needs for smaller ships within the Navy. A few years ago, a Toledoan was Sailor of the Year. We are having all kinds of difficulty in our region of the country repairing vessels, getting vessels constructed, getting the Navy's attention to our region.

The Iranians seem to have a capacity to cause a little trouble over there in the Strait of Hormuz and in the Persian Gulf. What are your small ship needs; and, for a region like ours, what role do you see that companies there or interests there can play in helping to supply the Navy?

Admiral MCCULLOUGH. Ma'am, as you know, we recently stood up the Navy Expeditionary Combat Command. We have developed three riverine squadrons. The first one is in the process of or has recently completed a deployment in the Haditha Dam protection in Iraq. There are some small vessels associated with the riverine squadrons but only three squadrons' worth.

As we look at the requirement for that capability, I have to say we were not sure of exactly what we needed. I looked at a myriad of small craft options to work in theater security cooperation both in the Horn of Africa region, the Arabian Gulf, and in the Gulf of Guinea region.

What we looked at initially is, since we could not define the requirement because we don't yet fully understand the mission, is to, for lack of a better word, service life extend the patrol coastals, the Cyclone class ships that we currently have. We have embarked on that at the tune of about $12 million dollars a hull. I will tell you we continue to look at that requirement; and, as we design it, we will better know what our requirements for small ships are.

Ms. KAPTUR. Mr. Chairman, I have to go cast my vote. Are you going to continue the session?

Mr. MURTHA. I think we will adjourn.

Ms. KAPTUR. All right.

Mr. MURTHA. Thank you, very much, Secretary and Admiral. We appreciate what you have said.

The Committee will now adjourn until Thursday at 10:00.

[CLERK'S NOTE.—Questions submitted by Mr. Obey and the answers thereto follow.]

SHIPBOARD CONTROL SYSTEMS

Question. What steps is the Navy taking in the development of the 313 ship fleet to increase commonality of equipment across the fleet?

Answer. The Department continues to strive to achieve commonality at ship, system, and material levels. The Department is analyzing and implementing where possible greater modularity, open architecture, commercial technology, and common equipment and specifications:

• The Naval Sea Systems Command is looking for ways to reduce hull types and potential Hull Mechanical and Electrical (HM&E) components with the potential to garner savings in testing, logistics, supply, and training.

• The Department is also assessing ship design commonality opportunities, looking at product data interoperability, design tools, Technical Warrant Holder tools for certification, and design community tools coordination.

• The Navy is even examining the possibility of strategic sourcing with the Navy setting up commodities contracts which the shipyards may then utilize to purchase from vendors. The objective of the effort would be to allow economic order quantity purchases, while maintaining multiple sources to ensure competition.

÷ In the area of combat systems, the Navy continues looking for efficiencies as well. Open architecture is helping the Navy evolve, especially over the long-term. The Navy has already made a move to increase the use of COTS-based systems. Aegis Combat System Baseline 7 Phase one on DDG 91 and follow is a major example. The Navy intends to continue implementing Open Architecture further, by working towards adopting Commercial Software Development practices, leveraging Open Source Code offerings, and partnering with Small Businesses in harvesting the "best of breed" in Software Algorithms.

Question. With the existing shipbuilding plan, how many unique surface ship machinery control systems is the Navy currently supporting?

Answer. There are 13 unique machinery control systems in the Surface Fleet today.

Question. What are the plans for converting proprietary legacy hydraulic control systems to more modern technology that uses standard equipment?

Answer. Today there is no formal program to convert legacy hydraulic systems on in-service ships. The Navy monitors the supportability of shipboard hydraulic system components and will consider alterations to more modern technology when necessary. The Navy is designing new classes of ships, such as DDG 1000 and CVN 78, with significant reductions in the use of hydraulic systems where feasible to reduce life-cycle maintenance costs.

[CLERK'S NOTE.—End of questions submitted by Mr. Obey. Questions submitted by Mr. Boyd and the answers thereto follow.]

LITTORAL COMBAT SHIP

Question. What is your best estimate for when the Navy will complete the competition and select a single contractor?

Answer. It is vital that the Navy continue through first of class construction challenges to complete LCS 1 and LCS 2. The Navy believes that additional design maturity, production progress on LCS 1 and 2, and a competitive contract award between incumbent suppliers will enable the use of fixed price incentive terms for the FY08 ship appropriated by Congress and the two FY09 ships that the Navy is requesting. When these ships are delivered, the Navy will be able to better evaluate their costs and capabilities, and to make decisions regarding the best manner to procure the remainder of the class.

Acquisition strategies for FY10 and outyear ships have not yet been formulated. OSD will conduct a Milestone B prior to FY10 procurement. The Navy and OSD will consider the questions of single seaframe assessment (or not) and the transition to full and open competition (or not) as part of the FY10 acquisition strategy deliberations.

Question. What is your best estimate for when the Navy will accept delivery of the first two Littoral Combat Ships from the contractors?

Answer. LCS 1 (FREEDOM) is under construction at Marinette Marine, Marinette, WI. LCS 1 launched in September 2006, and is projected to deliver in August 2008. LCS 2 (INDEPENDENCE) is under construction at Austal USA, Mobile, AL. The Navy projects LCS 2 to deliver in December 2008.

LCS MISSION MODULES

Question. As we understand it now, the first LCS is scheduled to arrive in Panama City in Oct. 2009 and the second LCS in Jan. 2010. From now until then, the Mission Packages are scheduled to remain in Panama City, which offers a lengthy opportunity to accomplish intermediate testing that could reduce the risk of integration problems when the LCS actually arrives.

What is the Navy doing during the next 1.5 years to ensure that the integration of the Mission Packages to the LCS is successful?

Answer. The Navy's Littoral Combat Ship (LCS) Program Offices, PMS 420, the LCS Mission Modules Program Office, and PMS 501, the LCS Seaframe Program Office, are performing several activities to ensure that the Mission Packages are effectively and successfully integrated into the LCS ships. Ongoing integration activities for the next 1.5 years include:

- Independent validation and verification (IV&V) of interfaces to ensure that both the Seaframe and Mission Modules conform to the approved Interface Control Document;
- Land-based combat system and shipyard Seaframe software testing of the Mission Package Computing Environment with the Ship's Core Mission Systems to ensure interoperability between ship and mission modules;
- Shipboard testing of mission module components to ensure that the launch, recovery, and shipboard handling (LR&H) systems can adequately support the mission systems and associated mission package equipment.

Question. What are the current testing plans for the Mission Packages?

Answer. Each Mission Package has extensive testing plans:

- Mine Countermeasures (MCM) Mission Package Unmanned Surface Vehicle (USV) integration testing is currently underway, and its sweep payload will be installed and tested this spring and summer. The MCM Detachment Sailors will support DDG–96's Remote Minehunting System (RMS) Technical Evaluation and Operational testing this summer and fall. MCM Mission Package #1 will be tested end-to-end in the waters of Panama City, Florida, beginning in the second quarter of FY 2009.
- Anti-Submarine Warfare (ASW) Mission Package in-water integration testing is currently underway. Unmanned Surface Vehicles (USV) and their sensor payload will be tested in shallow and deep water through the spring and summer. This fall (first quarter of FY 2009), ASW Mission Package #1 will undergo end-to-end testing.
- Surface Warfare (SUW) Mission Package will test fire the Gun mission on the range at Naval Surface Warfare Center, Dahlgren this fall. The software for the gun will also be integrated and tested at Dahlgren. This includes an end-to-end test firing against small boat targets planned for early FY 2009. The Non-Line of Sight (NLOS) Precision Attack Missile mission module will be tested with the Army. Tests include:
- Captive Flight Testing in the Gulf of Mexico during August 2008;
- Multiple Restrained Firing Tests at Dahlgren over the next 12 months;
- Guided Flight Testing of missiles in FY 2009.

Question. What funding is being provided for this and at what level?

Answer. The mission module level testing is funded through the RDTE,N appropriation PE0603581N, Project 3129, for LCS Mission Modules. The LCS Mission Modules Program plans to apply $9.5M in FY08 and $29.6M in FY09 toward testing.

Question. If the LCS schedule slips what are the Navy's contingency plans for using the Mission Modules?

Answer. Mission Packages are not procured for a specific LCS hull. They are procured at a rate to provide in-theater operational flexibility for deployed LCS Seaframes and support forward staging of sufficient Mission Packages to meet operational needs, while allowing for a Mission Package maintenance cycle.

LCS is the ideal platform for deploying the planned operational capability for Mine Warfare, Anti-submarine Warfare, and Surface Warfare. The mission modules are designed to integrate seamlessly into the LCS via a standard interface. This allows for these modules to be operated from other platforms if a contingency requirement emerged. Currently, there is no requirement for alternative platforms, and

there is no other ship in the U.S. Navy that can fully employ all three Mission Package (MP) types. However, some platforms may offer potentially satisfactory contingency capability for elements of individual Mission Packages.

USD (AT&L) has directed the Navy to conduct analysis on the use of the Mine Countermeasures (MCM) Mission Package on alternate platforms. Analysis is currently underway.

[CLERK'S NOTE.—End of questions submitted by Mr. Boyd. Questions submitted by Mr. Hobson and the answers thereto follow.]

SHIPBUILDING

Question. Admiral McCullough, why is the Navy's Fiscal Year 2009 budget for new ship construction, including T–AKES's only $12.1 billion? This is $1.2 billion below the Fiscal Year 2008 funding for new ships. Is your office not fighting for a larger percentage of the Navy budget? Is the Navy being trumped by the needs of the Army and Marine ground forces in Central Command and the expense of new procurements for Air Force?

Answer. The Navy's base program in the Fiscal Year 2009 President's Budget represents the best balance of warfighting capabilities within fiscal guidelines. The Defense Department also balances capabilities within its base budget to meet warfighting requirements.

Within the Navy budget, some factors pressurizing warfighting procurement include significantly rising manpower and health care costs in MILPERs; increasing fuel costs in O&MN; increased material, design and manufacturing costs in ship construction; and accelerated depletion of expected service life due to current operations in the Global War on Terror. There are more requirements than Navy has resources which equates to taking risk. The Navy's Unfunded Priority List outlines areas where Navy took risks to its base budget in order to balance the overall program.

Question. How are you going to rebuild a 313-ship Navy if more money isn't budgeted for shipbuilding?

Answer. While the Navy's FY 2009 shipbuilding budget is less in FY 2009 than it was in FY 2008 ($12.4 billion versus $12.5 billion), it represents the best balance of meeting requirements with the resources available to the Navy at the time. In fact, when accounting for the $588 million in Advance SSN procurement in the FY 2008 budget and the $300 million in the FY 2008 budget allocated for additional T–AKE funding, the total funding available to begin procurement of ships in FY 2009 is actually approximately $13.2 billion.

It will always be a challenge for the Navy to procure the quality and quantity of ships it needs for the future within the resources made available to us—in this environment, it is critical that we balance both the shipbuilding requirements and those demands of the myriad other programs the Navy must support. As we have said from the start, the Navy must provide well defined requirements that do not vary over the life of the shipbuilding programs we currently have and the requirements must be based on a solid foundation of analytic rigor that does not allow for "what we can do" and only supports what we must be able to do. The current Requirements, Resources and Review Board (R3B) process and gate reviews introduced by the Secretary are all aimed at meeting this need. The second step is getting in assist industry energized to assist in cost control by facilitating capital investments aimed at improving their efficiency and effectiveness in building what we say we need at a reasonable and affordable cost. Once we can achieve this step, it will permit us to introduce the stability that we all know will achieve additional cost savings.

Question. Ms. Stiller, the high cost of Navy ships concerns me. I understand that 35%–55% of the cost of a warship is in the weapon systems, bought directly by the Navy and outside the control of the shipyard.

How much cost control is the Navy placing on this 35%–55% cost?

Answer. Contracts with values over $50M are written requiring Earned Value Management System (EVMS) reporting. Large cost/incentive contracts are required to submit EVMS data directly to the Earned Value (EV) Central Repository. This EV Central Repository improves data analysis to facilitate timely and effective management action. Cost Control Incentives are being added to contracts, and are focused on objective and measurable results.

Question. Has there been any reduction in the cost of the weapon systems over the past few years?

Answer. We are establishing a combat system product line approach based on a common objective architecture that utilizes Government controlled architecture and

authenticated interfaces. This approach facilitates incremental capability introduction, certification, and testing, resulting in shorter timeframes and reduced costs for computer program certification, Test and Evaluation.

Our future Surface Combat Systems will be created from a mix of existing and new components, fully leveraging as much capability as possible from previously developed efforts. This approach was chosen to reduce the costs in procurement of weapon systems for new classes of ships.

Question. How do these costs compare with shipyard costs?

Answer. Shipyard costs represent 72% of the PB09 shipbuilding (SCN) budget, warfare systems costs are 18% and other government furnished equipments costs are 10%. Most of the complex warfare systems are not procured by shipyards. These percentages can vary based on the mix of combatants in any given shipbuilding plan.

LIFE RAFTS

Question. I understand the Navy is procuring life rafts to replace older models removed from service due to age, fleet modernization, or inspection failure. Currently, there are 1,200 of these older, MK6 life rafts left in the fleet. It would cost $12,000,000 to purchase new rafts to replace the older ones and additional funds for periodic servicing and replacements.

Apparently, the Navy does not budget for these life rafts, but rather makes procurement decisions for this particular item after Congress has approved the Navy budget. This unpredictability results in down-time on the production line, erratic swings in production, layoffs and re-hiring of trained personnel, and higher per unit costs.

Why doesn't the Navy include life raft funding in its budget at a stable level?

Answer. The President's Budget submission represents the best balance between Navy requirements and resources. Although there is no dedicated Budget Line Item (BLI) for the purchase of life rafts, the Navy does purchase Mk–7 & Mk–8 life rafts for new construction and in-service ships. Life rafts for shipbuilding programs are purchased in support of the end item construction of a ship using Shipbuilding and Conversion, Navy (SCN) funds and are provided as Contractor Furnished Equipment (CFE) by the shipbuilder. Life rafts for in-service ships in need of replacement are available from either existing assets removed from decommissioned ships or are newly procured via the Navy Supply System using Operation and Maintenance, Navy (O&MN) funds.

Question. Is the Navy considering budgeting for life rafts—both production and ongoing maintenance—in its Fiscal Year 2010 budget?

Answer. Life rafts for shipbuilding programs are purchased in support of the end item construction of a ship using Shipbuilding and Conversion, Navy (SCN) funds, and are provided as Contractor Furnished Equipment (CFE) by the shipbuilder. Life rafts for in-service ships in need of replacement are available from either existing assets removed from decommissioned ships, or are newly procured via the Navy Supply System using Operation and Maintenance, Navy (O&MN) funds. The Fiscal Year 2010 budget submission is predecisional, and it would be inappropriate for the Navy to comment at this time on any changes in our procurement approach.

Question. If you do NOT include funds in next year's budget request, how would you procure life rafts? Are you relying on Congress?

Answer. No, the Navy is not relying on Congress for the procurement and replacement of life rafts. Life rafts for shipbuilding programs are purchased in support of the end item construction of a ship using Shipbuilding and Conversion, Navy (SCN) funds and provided as Contractor Furnished Equipment (CFE) by the shipbuilder. In-service ships utilize Fleet Operation and Maintenance, Navy (O&MN) funds to procure replacement life rafts through the Navy Supply System on an as-needed basis.

Question. Finally, if you do NOT budget funds, how would you work with the manufacturer to help smooth out the solicitations in life raft procurement?

Answer. Mk–7 and Mk–8 life rafts are Navy standard stock items. For new construction, life rafts are purchased by the shipbuilder either through the Navy supply system or through the shipbuilder's own contracts and provided as Contractor Funded Equipment (CFE). For in-service ships, replacement life rafts are procured on an as needed basis via the Navy Supply System. The Navy Supply System utilizes past procurement information to forecast demand and is dependent upon qualified sources to fulfill the demand. The Navy Supply System has a Performance Based Logistics contract (N00104–05–A–ZE01) in place with RFD Beauford to provide life rafts.

[CLERK'S NOTE.—End of questions submitted by Mr. Hobson. Questions submitted by Mr. Murtha and the answers thereto follow.]

DDG 51 DESTROYER PROGRAM

Question. The Navy is completing construction of the 62 ships in the DDG 51 program. The last year that the Committee appropriated funding for the construction of new ships was in fiscal year 2005. With the new DDG 1000 program just getting off the ground, there is a possibility to procure additional DDG 51 ships to maintain the industrial base until the DDG 1000 program ramps up.

Secretary Stiller, could the industrial base accommodate the construction of additional DDG 51 class ships even though it has been several years since that program has had new funding appropriated?

Answer. The FY05 President's Budget procured the final three ships of 62-ship DDG 51 Class. Additional DDG 51 Class ships would be in excess of that war fighting requirement and are not part of the Navy's projected force structure. Based on current projected workload, either Northrop Grumman Shipbuilding (NGSB) or General Dynamics Bath Iron Works (BIW) could absorb the workload of additional DDG 51 destroyers, but numerous Government Furnished Equipment (GFE) and Contractor Furnished Equipment (CFE) vendor base issues (including production restart of major components, system obsolescence and configuration issues) would need to be resolved in order to award and construct additional ships at either shipyard. All material for the ships currently under construction has been procured.

Question. Secretary Stiller, would the idea of constructing additional DDG 51 ships be a good risk mitigation effort for the industrial base given the maturity of the DDG 1000 program?

Answer. Although there are always uncertainties in shipbuilding, and particularly for lead ship combatants, DDG 1000 has been in design, development, and demonstration for almost six years. The Navy has successfully, on cost and on schedule, built and tested the ten critical technologies that provide the capabilities future ships need. The ship's detail design effort is also on cost and on schedule, and will be more complete at the start of construction next year than any other previous surface warship. The Navy considers the risk in DDG 1000 sufficiently mitigated to begin construction. Although proven in production and operation, the Navy does not require additional DDG 51 class ships. In addition, there are numerous ship and Government furnished equipment (GFE) vendor base issues (including obsolete equipment, new main reduction gear supplier, multiple ship configuration issues, and production line re-starts) that would need to be resolved in order to award and construct additional DDG 51 class ships at either shipyard.

Question. Secretary Stiller, what is your estimate for how much a DDG 51 ship would cost, considering the fact that there has been such a long break in production?

Answer. The estimated end cost to competitively procure a single DDG 51 class ship in FY 09 is $2.1 B. This estimate assumes current ship construction profiles in accordance with the President's Budget request for FY 2009 and the Navy's Report to Congress on Annual Long-Range Plan for Construction of Naval Vessels for FY 2009.

This estimate utilizes the latest audited Forward Pricing Rate Agreements (FPRAs) rates. Impacts for production line restart and contractor furnished equipment/government furnished equipment obsolescence are included. Several ship and vendor base issues (including equipment obsolescence, main reduction gears, configuration change issues, and production line re-starts) would need to be resolved in order to award and construct an additional DDG 51 class ship.

Question. Admiral McCullough, has the Navy considered extending the production run on the DDG 51 program?

Answer. The Navy long-range shipbuilding plan seeks to ensure the Navy's force structure meets its operational requirement in terms of capability and capacity. This plan, consisting of 313 ships, includes a requirement for 62 DDG 51 Class destroyers. The FY 2005 President's Budget procured the final three ships of the 62 ship DDG 51 Class.

While changes in our overall shipbuilding strategy are always possible, we believe the current mix of ships proposed in the FY 2009 budget represent the best mix of capability given available resources.

DDG 1000 COMBAT SYSTEM

Question. The combat system on the Virginia Class submarine has been extremely successful in that it is built on open architecture concepts that can be quickly upgraded to take advantage of technology advancement as the ship ages. The Navy calls this concept "Acoustic Rapid COTS (commercial-off-the-shelf) Insertion (ARCI)". The Navy claims the DDG 1000 program is being patterned after the Virginia program in its construction phase. It would be extremely forward-thinking to also model the combat system after the Virginia Class to ensure the combat system stays current throughout the life of the ship.

Secretary Stiller, the combat system of the Virginia Class submarine program has been successful largely due to the concept of Acoustic Rapid COTS Insertion. Is the DDG 1000 combat system being designed along the same lines such that the combat system can be upgraded without major ship modifications?

Answer. Yes, the DDG 1000 is an open architecture compliant combat system designed to decouple hardware and software developments so improvements can be economically incorporated as they develop without major ship modifications. The DDG 1000 also isolates the combat system sensors and weapon systems from the Total Ship Computing Environment (TSCE) so that introduction of future sensors/weapon systems do not significantly impact the core combat system hardware or software.

Question. Secretary Stiller, one of the big advantages that the Virginia Class program has is that the combat system can be upgraded fairly easily (relative to legacy submarine and surface ship programs). In fact as submarines are delivered to the fleet, they come with the most current version of the combat system rather than the combat system that was available when construction began. Can the same be said for the DDG 1000 ships? How easy will it be to modernize and update the combat system of the DDG 1000 given that electronics become obsolete every two to four years? How frequently will modernization occur for this class of ship?

Answer. DDG 1000 has made substantial investments in Open Architecture which provides the ability to isolate the hardware from the software programs and install technology updates as needed. DDG 1000 plans to follow similar COTS refresh cycles (hardware upgrades approximately every 4 years) in order to introduce the latest COTS processors and middleware. The DDG 1000 program is working to identify the most cost effective timeframe for a COTS technology upgrade that will not impact the shipbuilders' ability to complete construction and testing. Since the DDG 1000 employs a Total Ship Computing Environment (TSCE) that is comprised of a homogenous set of COTS processors that meet Open System standards, this will enable efforts to modernize the combat system electronics.

Question. Secretary Stiller, will the government own the rights to the combat system design or will the software and/or hardware component design be proprietary and belong to the contractor?

Answer. Yes, with few exceptions. The Navy has at least Government Purpose Rights (GPR) to the hardware and software components of the combat system design.

Question. Secretary Stiller, do you envision the DDG 1000 will use commercial off-the-shelf equipment to help drive down the cost of the combat system? If so, will this commercial off-the-shelf equipment be proprietary?

Answer. Yes, DDG 1000 will use commercial off-the-shelf equipment to help drive down the cost of the combat system. The DDG 1000 Total Ship Computing Environment (TSCE) uses a homogenous set of COTS processors and commercial marketplace networking equipment that were competitively selected. The use of mainstream COTS equipment in DDG 1000 will allow the Navy to gain the latest technology benefits and continue driving down cost. DDG 1000 also has moved away from custom built middleware to mainstream COTS middleware without sacrificing system performance. The commercial off-the-shelf equipment will be delivered with any Intellectual Property (IP) rights that the commercial vendors maintain in order to protect their company private investments. This is common across most commercial equipment vendors. The DDG 1000 will only use well defined and published Open Architecture interfaces which eliminate the potential for vendor lock into a specific set of COTS equipment. This approach is inline with the Navy concept of Acoustic Rapid COTS Insertion (ARCI).

[CLERK'S NOTE.—End of questions submitted by Mr. Murtha.]

WITNESSES

	Page
Amos, Lieutenant General J. F	83
Campbell, Lieutenant General Kevin	189
Castellaw, Lieutenant General J. G	83
England, Gordon	1
Francis, Paul	189
Jonas, T. W	1
McCullough, Vice Admiral B. J	291
Mullen, Admiral M. G	1
Obering, Lieutenant General Henry	189
Rochelle, Lieutenant General M. D	139
Speakes, Lieutenant General S. M	139
Stiller, Allison	291
Thurman, Lieutenant General J. D	139