AUTHENTICATED
U.S. GOVERNMENT
INFORMATION
GPO

[H.A.S.C. No. 111–69]

HEARING

ON

NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2010

AND

OVERSIGHT OF PREVIOUSLY AUTHORIZED PROGRAMS

BEFORE THE

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

AIR AND LAND FORCES SUBCOMMITTEE HEARING

ON

BUDGET REQUEST FOR ARMY ACQUISITION, RESET AND MODERNIZATION PROGRAMS

HEARING HELD
MAY 21, 2009

U.S. GOVERNMENT PRINTING OFFICE

52–848 WASHINGTON : 2010

For sale by the Superintendent of Documents, U.S. Government Printing Office
Internet: bookstore.gpo.gov Phone: toll free (866) 512–1800; DC area (202) 512–1800
Fax: (202) 512–2104 Mail: Stop IDCC, Washington, DC 20402–0001

AIR AND LAND FORCES SUBCOMMITTEE

NEIL ABERCROMBIE, Hawaii, *Chairman*

JOHN SPRATT, South Carolina
SILVESTRE REYES, Texas
ADAM SMITH, Washington
MIKE McINTYRE, North Carolina
ELLEN O. TAUSCHER, California
ROBERT A. BRADY, Pennsylvania
JIM COOPER, Tennessee
JIM MARSHALL, Georgia
JOE SESTAK, Pennsylvania
GABRIELLE GIFFORDS, Arizona
NIKI TSONGAS, Massachusetts
LARRY KISSELL, North Carolina
FRANK M. KRATOVIL, Jr., Maryland
ERIC J.J. MASSA, New York
BOBBY BRIGHT, Alabama
DAN BOREN, Oklahoma

ROSCOE G. BARTLETT, Maryland
CATHY McMORRIS RODGERS, Washington
MARY FALLIN, Oklahoma
DUNCAN HUNTER, California
JOHN C. FLEMING, Louisiana
MIKE COFFMAN, Colorado
HOWARD P. "BUCK" McKEON, California
W. TODD AKIN, Missouri
JEFF MILLER, Florida
JOE WILSON, South Carolina
FRANK A. LoBIONDO, New Jersey
ROB BISHOP, Utah
MICHAEL TURNER, Ohio

JESSE TOLLESON, *Professional Staff Member*
DOUG BUSH, *Professional Staff Member*
JOHN WASON, *Professional Staff Member*
BEN GLERUM, *Staff Assistant*

CONTENTS

CHRONOLOGICAL LIST OF HEARINGS

2009

Page

HEARING:

Thursday, May 21, 2009, Fiscal Year 2010 National Defense Authorization Act—Budget Request for Army Acquisition, Reset and Modernization Programs 1

APPENDIX:

Thursday, May 21, 2009 39

THURSDAY, MAY 21, 2009

FISCAL YEAR 2010 NATIONAL DEFENSE AUTHORIZATION ACT—BUDGET REQUEST FOR ARMY ACQUISITION, RESET AND MODERNIZATION PROGRAMS

STATEMENTS PRESENTED BY MEMBERS OF CONGRESS

Abercrombie, Hon. Neil, a Representative from Hawaii, Chairman, Air and Land Forces Subcommittee 1

Bartlett, Hon. Roscoe G., a Representative from Maryland, Ranking Member, Air and Land Forces Subcommittee 6

WITNESSES

Ahern, David G., Director, Portfolio Systems Acquisition, Office of the Under Secretary of Defense, Acquisition, Technology and Logistics 8

Speakes, Lt. Gen. Stephen M., USA, Deputy Chief of Staff, G–8, U.S. Army 12

Thompson, Lt. Gen. N. Ross III, USA, Military Deputy to the Assistant Secretary of the Army (Acquisition, Logistics and Technology), and Director, Acquisition Career Management, U.S. Army 10

APPENDIX

PREPARED STATEMENTS:

Ahern, David G. 43

Thompson, Lt. Gen. N. Ross III 60

DOCUMENTS SUBMITTED FOR THE RECORD:

[There were no Documents submitted.]

WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING:

Mr. Hunter 85

Mr. Kissell 85

Mr. Marshall 85

Mr. Wilson 85

QUESTIONS SUBMITTED BY MEMBERS POST HEARING:

[There were no Questions submitted post hearing.]

FISCAL YEAR 2010 NATIONAL DEFENSE AUTHORIZATION ACT—BUDGET REQUEST FOR ARMY ACQUISITION, RESET AND MODERNIZATION PROGRAMS

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
AIR AND LAND FORCES SUBCOMMITTEE,
Washington, DC, Thursday, May 21, 2009.

The subcommittee met, pursuant to call, at 10:05 a.m., in room 2118, Rayburn House Office Building, Hon. Neil Abercrombie (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. NEIL ABERCROMBIE, A REPRESENTATIVE FROM HAWAII, CHAIRMAN, AIR AND LAND FORCES SUBCOMMITTEE

Mr. ABERCROMBIE. Aloha. Good morning, everybody. Thank you for being with us.

We have some old friends here, and new friends, and Mr. Ahern, General Thompson, and of course General Speakes. General Speakes has been my mentor and chief lecturer for some time now, and I am pleased to see him, although I am not sure that he thinks I have been a good pupil, that is the only thing.

The subcommittee meets today to receive testimony on the Army's acquisition and modernization budget for the fiscal year 2010, and I want to particularly welcome then, again, Dr. David Ahern.

I said "mister" yesterday and I should have said "doctor." You earned it; you deserve the title. Or it is not so?

Mr. AHERN. No, sir. I am a graduate of the Naval Academy——

Mr. ABERCROMBIE [continuing]. Thought maybe I had missed it in your biography.

Mr. AHERN. No, sir.

Mr. ABERCROMBIE. Okay.

Nonetheless, you are in charge of the portfolio systems acquisition of the Office of the Under Secretary of Defense for Acquisition, Technology and Logistics (USD/AT&L). I am saying some of these things not because you don't know it, but because this is for the public record. People are seeing it and they may not be aware at all. This may be their first exposure.

So again, I thank the members and I thank those of us that—those of you who are here for indulging me a little bit if I seem to go into a lot of detail that many other people here already know. It is for the public record and for those who may be observing and learning for the first time about a lot of these things.

General Thompson is the military deputy to the Assistant Secretary of the Army for Acquisition, Logistics, and Technology.

I hope, by the way, General Thompson—to show you we actually do read testimony, the word "friction," I understand is a Clausewitzian term, and I hope it is not going to replace "logistics" as a phrase of art. Friction, to me, means something working against each other, and particularly when it comes to the transportation side and supplying, I think the Army actually has it down pretty well. It may be difficult—the logistics may be difficult, but I don't see it as friction in the Clausewitzian sense, okay? We will get the theory out of the way.

And General Speakes was the Deputy Chief of Staff.

And again, General, thank you for your endless patience with me over the years. It is appreciated.

Although the President's budget request was finally delivered to Congress on May 11th, the full details on several major programs remain unclear, pending further analysis by the Army. Nonetheless, the Air and Land Forces Subcommittee markup for the fiscal year 2010 is just 21 days from today—3 weeks from today.

I am emphasizing that to you, gentlemen, this morning, because this extremely tight timeline means that the witnesses need to provide answers to members today, and certainly within the next three weeks, not some point in the distant future. I know you are working every day on this; I am not giving you some kind of a task that has not already been assigned to you by the Chief of Staff, let alone the Secretary of Defense. I am sure there is a lot of double shifts being worked right now, so this is not meant to further burden you so much as it is to indicate that we are ready to receive whatever decision and recommendations that you have for us as soon as possible.

To facilitate these answers, then, the subcommittee specifically requested that the Army witnesses bring with them subject matter experts on all the major programs facing changes in the budget so members could not hesitate to ask detailed questions. And so for new members that are here, I can assure you that General Thompson and General Speakes can state with authority the answers and the observations that they will give to you in response to your questions and/or observations.

While the Army 2010 budget does not include significant—does include significant changes to many programs, it is overall—I wish to say this at the beginning; I am saying these words with consideration—a solid request that will provide the Army with what it needs. And I want to emphasize that, because obviously we may have some questions and differences to be resolved with regard to individual items or categories within the budget, but I wanted to emphasize to you, Mr. Ahern, and to both generals here that I believe it is a solid request and I believe it will provide the Army with what it needs.

The total of $41.1 billion for procurement and research and development demonstrates a commitment, I believe, to adequately fund the Army needs while also being prudent about where the money is allocated. Put in context, this total of $41-plus billion exceeds the entire budget request of the Department of State, Agriculture, Energy, Homeland Security, and just below the funding request for the Department of Veterans Affairs and the Department of Education.

So the emphasis here, I think, is where it needs to be, so that we don't have friction with regard to maintenance and operations and deployment. That is what we have to try and avoid, and I think you are making a good faith attempt to do that with this budget as we have it so far.

However, despite this large amount of funding, the Army remains under significant pressure to support overseas operations. To do so, the readiness of the most nondeploy—of most nondeployed units has been severely compromised. While equipment stocks are not the only reason many units are not ready for combat, it is a major reason in many cases, I think you will agree.

There is also a large unknown requirement for repair of equipment coming out of Iraq, and I expect the same will—or, this will be compounded by operations in Afghanistan without even getting into the question of other contingencies that might arise. So there is an unknown requirement, then, for repair of equipment and logistics with regard to equipment and deployment of personnel, even though, in Iraq, the size of the U.S. force may, in fact, and probably is, in fact, going to decline.

The extent of this unknown cost hangs over all of the Army modernization plans, in my estimation, and may be significantly changed as the full cost of the war in Iraq becomes clear, particularly if it goes in the direction I think it might. So we are putting this mark together in three weeks, trying to be fully cognizant of what I believe to be the fact that the Army may have cost implications that it has to deal with that are not anticipated, or are anticipated to the best it can, given the budget document and the defense bill that we have before us. But I am well aware that we have to try to take into account—how can we modernize and still take into account what you are going to need to handle the deployments and handle the equipment needs?

With regard to specific programs, the proposed changes to the Future Combat System will have the most impact on the Army's near-term budget needs and long-term modernization plans. The House Armed Services Committee, under both Republican and Democratic leadership—and I want to pay particular tribute today, on the record, to former Chairman Curt Weldon, under whose leadership I had the honor to serve as ranking member. Under his leadership, there was the first expressed doubts about the technical feasibility, the affordability, and the wisdom of some of the aspects of this very complex and expensive program.

Unfortunately, I believe that leadership all the way around, in Congress and in the Pentagon, simply waited too long to address the fundamental contradictions for some of its own plans, some of the Army's plans for the Future Combat System, and how these plans related to the modernization for the rest of the Army. That said, the Army now faces dramatic changes imposed on the Future Combat System by the Secretary of Defense that will require months of additional analysis, contract negotiations, and leadership reviews to straighten out, all the while trying to explain why the program still needs almost $3 billion in fiscal year 2010.

However, the decision by Secretary Gates to terminate the manned ground vehicle portions of the Future Combat Systems

program, I believe, was overdue, and it is the right decision. I am not sure, though, that he has gone far enough.

While many questions remain, some aspects proposed for the reorganization of the Future Combat System appear to be good ones, and I want to say what they are: the rapid phase-out of the lead systems integrator to manage the program. Again, this is not a partisan observation; this goes back to leadership when Republicans were in charge of Congress and in charge of the committee, in terms of responsibility.

New contracts with reasonable fee structures to replace the current fee arrangement that featured hundreds-of-millions-of-dollars a year in fees with very few tools for Army program managers to hold contractors to account. In other words, I believe that it is a step forward for the Army to be more in charge.

Breaking up the programs into separate elements for vehicles, communication network, and spinouts to the current force so that the Army can properly manage each of these major efforts. I think logistically speaking, that is going to reduce the friction for the Army. I think that is a good managerial step forward.

However, many questions—I know I have a lot of "howevers" in here—many questions about the way forward with the Future Combat System remain, some of which I hope will be answered today and in the three weeks to come before the markup. For example, in what remains of the Future Combat System in the budget, there is a $415 million cost increase for software development costs that I am having great difficulty in figuring out the logic, or what it is there for, that kind of thing.

And there is other examples that we needn't go into right now. So it appears that even without the manned vehicle, the Future Combat Systems program could face continued cost overruns in the future, and this has been predicted by the Government Accountability Office (GAO) and other analysts again and again.

There is one critical issue regarding the Future Combat Systems (FCS) that I want to emphasize today: Trying to go too fast with immature technologies and optimistic cost estimates is how the Future Combat System got in trouble in the first place, so it is imperative, in my view, that the Army not repeat all these same mistakes and that Congress not repeat these same mistakes.

I want to make it clear that this is a critique of the Army program, with regard to Future Combat System, not criticism, as such, because there is criticism to go around that can start with the Congress. The Congress has the ultimate responsibility and decision-making here, and the Congress did not do its job, in my estimation, in terms of oversight and helping the Army to resolve these issues in a legislative sense in the defense bill.

So there is enough sins to atone for to go around. My job, I feel, today and in the markup to come, and the job of this subcommittee and the committee as a whole is to see to it that we exercise our oversight functions in a responsible way and work with you to see that the strategic interests of the Nation are met.

Taking time to get the—in other words, then, taking time to get the requirements, the cost estimates, and the technology right is absolutely essential to make sure that the Army can proceed with a new vehicle program that has the support of Congress and actu-

ally succeeds. That has to be our goal—I say our goal; not yours or mine, but ours.

Beyond the FCS, the 2010 budget request also includes some major changes, and I just want to mention them very briefly: the Joint Cargo Aircraft program. The subcommittee needs to better understand the rationale and the impact of the proposed changes to this important program.

The budget request is also the first Army budget request since 2003 that does not include funds for Stryker vehicles. Members need information regarding the future of the Stryker program, including whether or not the Army is ready to commit to a fleet-wide Stryker upgrade program or programs.

The Army's Tactical Wheeled Vehicle Fleet also faces many challenges, including the future of the Mine Resistant Ambush Protected (MRAP) vehicle in the Army fleet, modernization for the Army's huge inventory of Humvees, adequate resourcing for the Joint Light Tactical Vehicle (JLTV) program—that really needs some close attention—addressing critical shortfalls in the Guard and Reserve medium and heavy truck fleets as well as policy with regard to the Guard and Reserve.

There are also significant issues that need to be addressed regarding the Army's fleet of helicopters and Unmanned Aerial Vehicles (UAVs). Recent reprogramming in the fiscal year 2009 supplemental request by the Army to fund the upgrade of the Apache and the Kiowa Warrior helicopters satisfy, I believe, near-term requirements and address the cancellation of the Armed Reconnaissance Helicopter (ARH). Longer-term, however, there needs to be considerable analysis completed to determine the proper mix of helicopters and UAVs and required capabilities to meet warfighter needs.

We don't have, at least in the presentation that has been made to us so far, an idea of where you want to be over the next 5 years or 10 years, other than in the most general terms, and we are going to need more analysis in that regard.

Finally, members need to also fully understand the Army's path forward on body armor. I feel like Bill Murray in "Groundhog Day" when it comes to body armor, and I feel like I am reading the same reports over and over again and the same accusations over and over again.

Media reports continue to indicate that in Afghanistan, soldiers may carry loads as high as 130-to-150 pounds for a 3-day mission. Much of this is anecdotal, I understand, but we have previously received testimony that personnel can wear only so much armor beyond which their operational effectiveness is inhibited, and that, in turn, increases the risk of being injured. And I suspect that that should be apparent. We expect to receive updates on immediate efforts to lighten the load on the soldier without sacrificing their safety.

Again, in this area, in my Bill Murray mode, the Army recently implemented a new policy decision requiring all body armor tests to be conducted in-house at a government laboratory, the Army Test Center. Historically, the Army has contracted the Independent National Institute of Justice certified laboratories. Those who are certified under the National Institute of Justice and are inde-

pendent for first article test and lot acceptance test, so this is a change in direction and we need a little bit more information in that regard and what the Army's intent for the long term is.

We also need to know whether this decision could create delays in fielding body armor to the warfighter. And at the request of the subcommittee, before the testing policy decision was made by the Army, the Government Accountability Office was already observing and reviewing the most recent body armor tests being conducted at the Army Test Center.

The GAO is in the process of completing their review. We are waiting to review their findings. I am hoping this can be done in short order, but if it can't be done by the time of the defense bill markup, I think we may have to deal with this as a separate issue down the line.

In the meantime, then, I encourage the Army and the Department of Defense to standardize test procedures and protocols. That would eliminate, I think, a lot of this friction and contention that is taking place.

Again, this has been a lengthy statement. I am generally loath to do that, but given the importance of the defense bill coming up, and with the change in administrations, I felt it was imperative that we have a crystal clear understanding of where we are and what we need to address ourselves to.

So before we move, then, to our witnesses' opening remarks, which don't necessarily have to be in response to this at all at this time, I want to turn to the ranking member of the subcommittee and our most valued and trusted friend, Mr. Roscoe Bartlett, for his opening remarks.

STATEMENT OF HON. ROSCOE G. BARTLETT, A REPRESENTATIVE FROM MARYLAND, RANKING MEMBER, AIR AND LAND FORCES SUBCOMMITTEE

Mr. BARTLETT. Thank you very much, Mr. Chairman.

To our witnesses, thank you for being here, and thank you very much for your service to our country.

In the recent series of full committee posture hearings a consistent theme has carried through, and I want to echo it here today. I feel that there has been an absence of thoughtful debate, discussion, and in some cases analysis, to support this budget request.

The fiscal year 2010 Army top-line request is advertised as being a robust 2.1 percent increase over 2009. That assertion is misleading, given that when funding previously included in the supplemental is added, the Army in 2010 will be funded at $4 billion less than in 2009.

Army procurement accounts, not including the Joint Improvised Explosive Device Defeat Organization (JIEDDO), were funded at $37 billion in 2009, yet the request in 2010 totals just $30 billion. Army Research and Development (R&D) accounts were funded at $12 billion in 2009, yet the 2010 request has been decreased to just $10 billion.

So basically, the Army's procurement is down; R&D is down. Even though the Army's overall funding is $4 billion less than in 2009, the Army's unfunded requirements list is only $900 million,

which is $3 billion less than last year. I hope our witnesses can shed additional light on these concerns.

I have just a couple of issues I would like to highlight. The first issue is in regard to the Joint Cargo Aircraft.

All of you have heard my thoughts on this over the course of the previous hearings. I have asked witnesses from the Army, the Air Force, the Guard, and the Office of the Secretary of Defense (OSD), what has changed? Why is this mission being moved out of the Army and slowly over to the Air Force when not four months ago we received the Quadrennial Roles and Missions Review Report that stated, "The option that provided most value to joint force was to assign the C–27J to the Air Force and the Army"?

None of them have been able to answer the question, but all of them stated that there has been no new study or analysis conducted that countered the existing plan or reduced the Joint Requirements Oversight Council (JROC)-approved requirement for 78 joint cargo aircraft. I might note that that was just Army aircraft; the Air Force needed to add to that the aircraft that they would need.

The second issue I would like to highlight is in reference to the Future Combat Systems program. As you know, Mr. Chairman, no other committee has provided as much oversight on this program as this subcommittee. You can go back to when Mr. Weldon was the chairman and find that many of the concerns that Secretary Gates recently announced were very similar to the points that this subcommittee made back in 2005.

However, it matters not who was right or who was wrong. What matters is, what do we do now? How do we ensure that we are looking out for the future of our soldiers? We must get this right. The Army must be allowed to modernize.

To our witnesses, please take this message back to the Pentagon. We want to support your efforts as you restructure the Future Combat Systems program, but you must figure out a way to make us part of the process.

Along those lines, if I could make an additional point specifically in regard to the manned ground vehicles—I realize that you have your work cut out for you as you go back and look at requirements and move toward a new or modified program. I would ask that as you take a closer look at requirements that you include taking another look at your electrical magnetic pulse requirement, EMP.

I visited Aberdeen Proving Ground a couple of months ago and received a classified briefing on Future Combat Systems in regard to electromagnetic pulse. This is not the appropriate venue to get into a classified discussion, but I can tell you that you need to change your requirements. The threat is several times what you have designed it to and are testing it to. Please take a look at this and follow up with me.

Finally, I would like to mention a few things about body armor. Again, Mr. Chairman, under your leadership this subcommittee has provided extensive oversight on this area that is matched by no other committee. Body armor is the ultimate last line of defense when it comes to protecting our warfighters, and while we have made much progress, we must do more.

The senior Army leadership has testified that they want to provide a high level of protection and reduce waste, but the way we currently procure body armor does not support that objective. We must not continue to classify body armor under the same category as clothing and boots. Not only does it send the wrong message to our soldier, but it doesn't help our industrial base plan for the future.

As you know, Mr. Chairman, our subcommittee tried to make some changes last year, but we were unsuccessful during conference. I know we plan on making some changes this year, and I fully support such efforts.

My last point concerns body armor as well. There have been some recent press reports regarding the Army's recent decision to conduct all first article testing and lot acceptance testing at a government test lab.

As you know, Mr. Chairman, we sent a letter to the Secretary of the Army, and the response did not provide the detail we were hoping for. We also requested that the General Accountability Office report back to us in regard to the Army's efforts to conduct this testing.

I will withhold judgment on this issue pending the final GAO report. However, I will say this: The first article test is very comprehensive, and critical test in terms of qualifying a product. I can understand why the Department believes that they need to maintain this capability as a core competency and that it may cost more compared to a private test lab.

But to do so, they must properly staff their test facility and have an established and fully vetted set of test procedures and protocols that is understood by industry concerning light acceptance testing, which is a less rigorous sample test. I continue to have concern regarding the Army's change in policy and hope to gain more detail at today's hearing. Again, I will await until the final GAO report comes out, but I suspect we will be reengaging with the Department of the Army on this decision.

Thank you for being here. I look forward to your testimony.

And Mr. Chairman, I would ask leave to be absent for a few minutes to go to testify before a Judiciary subcommittee. Thank you, and I yield back.

Mr. ABERCROMBIE. Thank you, Mr. Bartlett.

Before we go to our guests, starting with Mr. Ahern, we will engage in dialogue with our witnesses in reverse order today. Those who are the newest members will go first, and in order of those who were here at the time the gavel came down, and then who subsequently arrived.

Mr. Ahern, thank you for your service. Please proceed. And if you have a longer statement it will be submitted to the record, without objection. Same for both generals. And any remarks at this time would be welcome.

STATEMENT OF DAVID G. AHERN, DIRECTOR, PORTFOLIO SYSTEMS ACQUISITION, OFFICE OF THE UNDER SECRETARY OF DEFENSE, ACQUISITION, TECHNOLOGY AND LOGISTICS

Mr. AHERN. Thank you, Chairman Abercrombie.

Distinguished members of the subcommittee, thank you for the opportunity to appear before you to discuss Army modernization from the perspective of the Office of the Secretary of Defense. I will be brief in order to move quickly to the panel's questions.

When Secretary Gates introduced the Department's fiscal year 2010 budget, he clearly articulated that one of his principal objectives was to rebalance the Department's programs to institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead while at the same time providing a hedge against other risks and contingencies.

The Secretary's decisions regarding the Future Combat System focused the effort to deliver military useful capability developed in FCS to all of the Army's combat brigades while reevaluating the requirements, technologies, and approaches, then re-launching the Army Vehicle Modernization program.

You asked that I address the Department's support for both the Army's Aerial Common Sensor and the Navy's EP-X Aircraft programs. Both the EP-X and the Aerial Common Sensor (ACS) capabilities are important to maintain current warfighting capability and to improve multi-intelligence based Intelligence, Surveillance, and Reconnaissance (ISR) solutions for survivability and mission effectiveness.

At this time, the Department is reviewing service plans for material development decisions and their associated analyses of alternatives. Our goal in the pursuit of both capabilities is to identify affordable program solutions that field multi end capabilities as soon as possible.

You also asked about lessons learned from the Comanche and the Armed Reconnaissance Helicopter acquisition programs. While both programs share the common objective to replace aging armed reconnaissance aircraft inventories, the technical goals of the two programs were nearly opposite.

Comanche incorporated cutting edge technology for improved performance. ARH objective was to field new aircraft that matched existing capabilities without significant new technology.

The primary lesson from Comanche relates to assuring technology is mature prior to engineering development. For ARH, schedule is a critical goal that the program was unable to achieve. We have already incorporated those lessons in the new Department of Defense (DOD) instruction.

The department continues to modernize the Tactical Wheeled Vehicle Fleet of some 300,000 vehicles. The sheer magnitude of the fleet dictates that modernization must be approached incrementally with attention on affordable and achievable solutions.

In the Joint Light Tactical Vehicle, or JLTV, acquisition, the Army and Marine Corps selected multiple contractors for competitive prototyping to reduce risk, ensure designs are produceable and properly costed. The JLTV will give us increases in reliability, maintain ability performance and commonality at a competitive price.

As you know, we have fielded thousands of Mine Resistant Ambush Protected vehicles to operational forces. The MRAPs are out-

standing vehicles for specific missions, and we will ensure that this capability remains part of the force structure.

In the area of body armor, USD AT&L recognizes Defense Advanced Research Projects Agency (DARPA), Army, Navy, and Marine Corps' science and technology efforts aimed at reducing body armor weight while maintaining or enhancing the protection they provide. These efforts include work on ballistic fiber technology, ceramics and composites, advanced materials, modular designs, and biomechanics as well as longer-term technologies.

In the small arms area, a Joint Assessment Team (JAT) was established to assess the Department's approach to satisfying requirements. The JAT's preliminary findings include insights into the importance of training, the challenges in defining measurable, effects-based requirements, and the availability of commercial products that could meet the Department's needs. We will share the final results with the committee after the JAT completes its work and USD AT&L approves the report.

The final topic you asked me to address is the Persistent Threat Detection System (PTDS). The PTDS Tethered Aerostat Program is a capability procured and supported specifically for the theater of operations.

There are eight PTDS quick-reaction capability systems currently deployed of a requirement for 18 systems. We are awaiting the approval of supplemental funding for up to seven additional systems.

We are grateful for the continued support of Congress, which has been critical to ensuring our soldiers are the best trained and equipped Army in the world. Thank you for this opportunity to testify on the Department's plans to continue to equip them for today's wars and tomorrow's challenges.

[The prepared statement of Mr. Ahern can be found in the Appendix on page 43.]

Mr. ABERCROMBIE. Thank you, Mr. Ahern. I appreciate your comments on the values of competition. I think I will extract those remarks and send them over to the Secretary of Defense about the—I think you were inches from a clean getaway.

General Thompson.

STATEMENT OF LT. GEN. N. ROSS THOMPSON III, USA, MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY (ACQUISITION, LOGISTICS AND TECHNOLOGY), U.S. ARMY

General THOMPSON. Chairman Abercrombie, distinguished members of the subcommittee, thank you for this opportunity to discuss the fiscal year 2010 President's budget request and the Army's acquisition, reset, and modernization programs. With this budget request the Army——

Mr. ABERCROMBIE. I think your mike may not be on or you need to pull it a bit closer, General.

General THOMPSON. With this budget request, the Army's highest priority remains the protection of our warfighters in an operational environment that is increasingly unpredictable and dangerous. Force protection has taken on an even greater importance as we shift major operations in Iraq to Afghanistan.

We are grateful to members of this committee for your guidance and your steadfast support. We continue to meet the equipping demands of our soldiers in ongoing overseas contingency operations and in other operations worldwide because of the resources and the guidance provided by this committee and the Congress. We constantly strive to be good stewards of those resources.

The Army's comprehensive modernization program is the key to ensuring that our soldiers maintain a decisive advantage over a diverse array of potential adversaries while improving their survivability. In every aspect of Army modernization, we leverage lessons learned from soldiers in the current fight to speed fielding of enhanced capabilities to the force while we concurrently develop capabilities soldiers will need both today and tomorrow.

Our plans include transition to a modernization strategy focused on building a versatile mix of networked brigade combat teams and enablers that can leverage mobility, protection, information, and precision intelligence and fires to conduct effective full spectrum operations. We also plan to incorporate the valuable technology and network advances we have drawn from the Future Combat Systems program as well as the key technologies already in use in Iraq and Afghanistan.

On a couple of individual programs, the Army and the Department of Defense remain committed to the requirement for a manned scout helicopter capability and the need to deliver this capability to our soldiers in a responsible and timely manner. We are also committed to working with the Secretary of Defense and the Office of the Secretary of Defense and Congress to field the new ground combat vehicle as soon as possible.

In other areas of future commitments, we are evaluating proposals for the next evolution of the MRAP, the MRAP All Terrain Vehicle (ATV). We are planning for production of the Joint Light Tactical Vehicle, competition for a new carbine, and continued development of the Joint Tactical Radio System, the Warfigher Information Network Tactical, Aerial Common Sensor, and other systems, to ensure that our soldiers maintain a decisive advantage over potential adversaries.

Mr. Chairman and members of the subcommittee, your deep and abiding commitment to our men and women in uniform is widely recognized throughout our ranks. We thank you for your continued support of the men and women in uniform, for the United States Army, and their families. And this concludes my opening remarks.

[The joint prepared statement of General Thompson and General Speakes can be found in the Appendix on page 60.]

Mr. ABERCROMBIE. Thank you, General Thompson.

General Speakes, I realize that the statement of General Thompson is meant to be a joint statement. However, out of respect for your valued input to this subcommittee over the years and to the committee as a whole, taking into account fully my shortcomings as a pupil with regard to your instruction over the years, if you would like to make a statement, even informally, we would be pleased to hear it.

STATEMENT OF LT. GEN. STEPHEN M. SPEAKES, USA, DEPUTY CHIEF OF STAFF, G–8, U.S. ARMY

General SPEAKES. Chairman Abercrombie, sir, it is an honor to speak to you, and I speak to you as somebody who is humbly grateful for all that you have done for us for the years that I have been associated with this committee, which is now four years.

And Ranking Member Bartlett and members of the committee, it is an honor to be here today to be afforded the chance to talk about our Army, an Army that right now is at its peak in terms of soldiers deployed—as we straddle commitments in both Iraq and Afghanistan, as we execute a responsible drawdown, and as we shift and now adopt the main effort of this great Nation as we focus on Afghanistan. So it is an Army that is under a heavier load than ever, and one that merits and receives your support as never before.

We would like to address some specific areas where the Army shifted focus and reflection on the lessons learned of this last period of conflict. It is going to be reflected in both the fiscal year 2010 budget and our plans to the future.

First of all, it is an Army that recognizes that we must provide and continue to provide the best equipment to soldiers in conflict. Much of what General Thompson has already spoken about addresses our recognition that soldiers in conflict today in Afghanistan will be equipped differently than those in Iraq in very important but very subtle ways.

Such examples as you have already cited is lightening the soldiers' load. A soldier who operating in Iraq essentially operated in close proximity to a up-armored Humvee or an MRAP, or some other mounted platform.

Today's soldier that is operating in Afghanistan is operating at very high altitudes in a long-range dismounted mode of operation that puts much greater priority on us to put the equipping strategy in a very important new way, and a new light.

We also recognize that as we begin to execute the withdraw of equipment out of Iraq, that we must have a strategy that brings that equipment back here and resets it appropriately so that we put strategic depth back into this Nation's Army.

We would like to draw your attention to the point that getting that equipment back is essential to our future readiness. While it is not the panacea that will fix our readiness issues, it is important that we recognize that there are vital capabilities that right now are a part of equipment that is in Iraq, is a part of our theater-provided equipment—over 30,000 weapons—over 30,000 trucks.

Those are examples of capabilities that must be brought back so that we can do something that is very important to ensure the readiness of the Army in the future. There are moves afoot to put equipment on a transfer basis into other forces, military, specifically the Iraqi army and police.

We would simply ask that if that happens that the Army be compensated for that because we certainly must have the equipment back in order to ensure the future readiness of the Army. So what may make important sense from a national strategy also must reflect the readiness of the Army as a core value for all of us.

And then finally, what I would also like to do is ensure that we have a shared vision of the road ahead. The guidance that we received from the Secretary of Defense as we announced the fiscal year 2010 budget is a very, very important signal to us about learning lessons from this conflict and thinking very carefully about our modernization.

And we think your comments about how we ensure that we are getting value for the future dollars spent and that we have a strategy that is nested with yours is absolutely vital to all of us. So we are doing that.

We have also made important adjustments to our equipping strategy, one that reflects the reality now of an Army that is in motion, that won't be equipped on a static basis with equipment sitting in a unit for the lifetime of that particular piece of equipment, but instead, now, an Army that equips units on a mission-specific focus recognizing the relative place in the cyclic readiness profile, much like the United States Navy has employed for many years.

So we have adopted that, and we think that what we are going to be able to do is show much higher utilization for our equipment, improved readiness, and a better ability to focus the best equipment where it needs to be to support soldiers who are headed into harm's way.

So these are but a few of the important initiatives that we welcome today as an opportunity to engage in dialogue and to explain what we are trying to do in pursuit of the Secretary of Defense's strategy. We thank you for the opportunity to testify today.

[The joint prepared statement of General Speakes and General Thompson can be found in the Appendix on page 60.]

Mr. ABERCROMBIE. Thank you very much, General Speakes. Thank you for your kind remarks, not least of which regarded me, and to the subcommittee. Appreciate it.

We will start with Mr. Kissell, to be followed by Mr. Wilson.

Mr. KISSELL. Thank you, Mr. Chairman.

Thank you, Generals. My district in North Carolina is immediately adjacent to Fort Bragg, and I had the privilege Monday of spending all day with Special Forces and General Mulholland, and learning more about the tremendous work that these men and women do to help us.

Mr. Ahern, I think the difficulty in asking the question right now is, if we have a lot of specifics about what is taking place as we transition towards Afghanistan, potentially away from Iraq, and to try to balance the specifics of what is taking place now versus the general aspect of modernization. And as we talked about yesterday in our subcommittee hearing and the chairman's aspect of what wishes can be, and we know the limitations of what wishes can offer to us.

I would like to ask you about the ground vehicles. As I was reading through the information available to us, it seems like we are looking at multipurpose vehicles—light, heavy, medium—but yet the ground vehicle for the Future Combat Systems is out.

So where are we going, in terms of ground vehicles? And more importantly to me is, how are we going to know what successes we are having in this transition, because it seems like on a lot of

issues, that we are at a transition point that if the new doesn't happen on time, we are in trouble.

So if you could give me some ideas on that, I would appreciate it.

Mr. AHERN. Yes, sir, and I would like to collaborate with my Army compatriots on answering your question. I think what I would say is that as we are moving forward on the Manned Ground Vehicle (MGV), on the ground vehicles, that aspect of the Future Combat System. The first step is going to be to look at whether or not we have that right mix currently of heavy Stryker, of vehicles in support of the heavy, the Stryker, and the infantry brigades. And depending upon that, how we accomplish those missions in a variety of environments. And we need to assess what we need going forward in that combination of forces—the task forces that we fight in.

That, anyway, is the way I look at it. And that is what the Army is going to be looking at this summer and this fall, is an assessment of the requirements for the right mix of vehicles in the brigades and identify what gaps there are and what capabilities are needed toward that reinstitution of the manned ground vehicle development, if that answers your question, while at the same time we are well underway on the Joint Light Tactical Vehicle, which will, as it is fielded to the brigades, provide the capability in that space.

Does that begin to answer your question, sir?

Mr. KISSELL. Yes, sir. And I think one of the important things there is you said that we are going to be assessing this and have answers in the fall, and I think one of the important things is, we have got to know what those answers are so that we can help you determine, you know, what is the future of this modernization?

And another question, and you can get back to me on this, that we have had ongoing discussions on the ISR and this procurement request in here for C–12s, but yet there were some C–12 Angel Fires in Iraq that were being dismantled.

And so just wondering where we might stand in that process of looking at those to see what application they may have in Afghanistan to help our troops over there, because we do know, from previous hearings, that there are a lot of concerns about ISR capacity being equal to the surge and our troops being protected.

Mr. AHERN. Yes, sir. Well, one of the leading edge of the Aerial Combat System is, in fact, six, if I recall correctly, of the Liberty C–12s to be procured, and I will get back to you on where they are going, sir, but that is a leading edge of the program and I believe it is in the fiscal year 2010 request.

Mr. KISSELL. And be sure and look at—we do have some from Iraq that were being dismantled, and you are requesting new ones when there were others available. That was a great concern to a lot of people on this committee.

Mr. AHERN. Yes, sir.

Mr. KISSELL. Thank you.

Mr. AHERN. I will take that question.

[The information referred to can be found in the Appendix on page 85.]

Mr. ABERCROMBIE. Thank you, Mr. Kissell.

I should have reminded everybody, we are on the 5-minute clock, and that worked out just right. No, no, you are right on the—as they say in Hawaii, right on the Kupopo. Don't worry about it.

And I know Mr. Wilson will do it, too.

Mr. WILSON. Yes. Thank you, Mr. Chairman——

Mr. ABERCROMBIE. He is going to truncate his introduction and get right to his question.

Mr. WILSON. I sure am.

I want to thank all of you for your protecting our warfighters. I particularly appreciate it as a member of the Armed Services Committee, a 31-year veteran of the Army National Guard, son of a veteran, but particularly, I have three sons serving in the military, so I have a keen interest in what you are doing.

And specifically, General Thompson, competing for the next contract for the M4, what is the status of the competition? When do you anticipate issuing a solicitation? Do you plan to make an award to one company or will the contract be divided in multiple awards to different companies? And how much has been budgeted for the M4?

General THOMPSON. Sir, I will take your question into three parts. We now, after many years, have the government purchase rights to the technical data package for the existing M4 Carbine, and we are in the process of putting the solicitation package out to compete that M4 Carbine tech data package, and I expect that request for proposal to be out within the next four to six weeks.

In addition to that, we have also looked at the broader requirement for small arms, in particular the carbine, and the Army is about ready to update that requirement and pass that requirement, which has been jointly developed, to the Joint Requirement Oversight Council to go into that broader requirements process.

So we will complete the existing carbine design at the same time we are updating the requirement for a potential future carbine or small arms capability that will go into the Joint Requirements Oversight Council process.

I will look up the answer to the question on how much is in the budget. I don't have that at the tip of my fingers, but I have got it somewhere in my material here.

[The information referred to can be found in the Appendix on page 85.]

And to the question of, will we go with one or more——

Mr. WILSON. Companies——

General THOMPSON [continuing]. Companies as we do the award, I don't know the exact acquisition strategy, but my recollection is that it is just with one winner as a result of a competition. If that is incorrect I will come back and correct that for the record.

Mr. WILSON. Thank you very much. And additionally, I understand that the Army issues a solicitation for an MRAP that is the responsibility of the original equipment manufacturer to select the door for the vehicle. This results in the MRAP vehicles with different doors. Would it be wise for the Army to specify the safety and survivability of the door?

General THOMPSON. For all of the equipment manufacturers that have produced MRAPs to date, they have designed the doors par-

ticular to that vehicle variant. We have continued to improve the doors from a couple of standpoints.

We identify in the testing that the doors don't stay shut properly when they are subject to blasts; we have made those adjustments on all the vehicle variants. We have also made adjustments to the individual designs to make sure that the soldiers inside once that vehicle is hit are able to get that door open and get out of the vehicle.

We have not standardized the design on doors. We did not think that was something that we needed to do because we have optimized the design with each individual manufacturer. But we have continued to take the lessons learned from theater and adjust the door designs for the two key categories I talked about—making sure they stay shut when they need to stay shut and making sure they are easily able to be opened when the soldiers inside need to get out of the vehicles, especially after they have been hit.

Mr. WILSON. And I was honored to be with Congresswoman Tsongas to see some of the new MRAPs, and the doors—and you have really identified some of the concerns I have. But as we consider specifications for the doors, would it be possible that the power door system have a sensing device to prevent injuries to the operator while closing the door?

When a blast disables the vehicle, the power door system must assist quick egress, relying on a self-contained separate power system. The power door system should also assist in egress on an uphill side when a blast or accident rolls the vehicle to its side. Are these specifications that—and you really hit on some of them a few minutes ago—a few seconds ago.

General THOMPSON. Sir, those are all things that, as we look at the MRAP All Terrain Vehicle with five companies that are in the process of source selection and testing right now, and then, as I said before, is looking at the existing fielded MRAPs—primarily the ones that have been fielded to Iraq—making adjustments to those door designs.

I will take your question back in detail and get back with the Joint Program Office, which is, you know, led by the Department of the Navy, but certainly large participant of the Department of the Army, and make sure that we are addressing those particular issues that you addressed.

[The information referred to can be found in the Appendix on page 85.]

Mr. WILSON. Thank you very much, and I appreciate your answers.

Mr. ABERCROMBIE. Thank you, Mr. Wilson.

Mr. Marshall, to be followed by Mr. Miller.

You are next after Mr. Marshall, Jeff.

Mr. MARSHALL. Thank you, Mr. Chairman.

The ATV MRAPs—when do you think we are going to see them in theater?

General THOMPSON. Sir, right now we just are in the second phase of the——

Mr. MARSHALL. When are your——

General THOMPSON [continuing]. Source selection evaluation process. We will make a source selection decision at the end of

June, as we continue the evaluation. And the expectation is the first of those will——

Mr. ABERCROMBIE. Can you pull the mike a touch closer, please, General?

General THOMPSON. The first of those vehicles will be fielded in the fall.

Mr. MARSHALL. During the fall of this year?

General THOMPSON. Yes, sir.

Mr. MARSHALL. Been to Afghanistan a bunch of times, and you are out on some of the special forces installations, and what you will see is MRAPs parked and gathering dust. They just won't use them. You give them to them, they won't use them, and for good reason. They roll over.

Your unfunded requirements makes reference to—well, pardon me. In response to an inquiry by the ranking member, General Casey gave us a list of unfunded requirements, and included in that list is Army test sets, diagnostic equipment, and test infrastructure. What does that refer to? Do you know offhand?

General SPEAKES. Sir, I would like to just give you a quick explanation of what we tried to do with the unfunded requirements list. I would like to take the specifics of that——

Mr. MARSHALL [continuing]. I would rather not take too much time on this. I would like a specific response to that inquiry, so maybe you could do that for the record. And the force provider—could you get some detail there, you know, what that is, why you want that?

[The information referred to can be found in the Appendix on page 85.]

Joint Cargo Aircraft—Mr. Bartlett has already noted that in the Quadrennial Roles and Mission Report of January 2009 the department indicated that it is appropriate to have JCA, C–27 in both the Army and the Air Force. The Institute for Defense Analyses came out with a report done at our request on March 13th, and in that report it seems to be—the Institute for Defense Analyses (IDA) seems to be saying that for low-intensity conflicts like those that we are engaged in in Afghanistan, for example, that the best airlift mix includes as much, if I recall correctly, as 98. That is most effective for the least cost—98 C–27s.

How do we get—let us say it is Army that really needs the C–27s and Army is convinced that this is a very useful platform to meet operational needs in, say, Afghanistan. And yet, the program is assigned to the Air Force. How do we get more C–27s?

Does Army pay for it? It is an Army need. The Air Force actually is going to own it, buy it, operate it, service the Army. Is it in the Army budget or is it in the Air Force budget as we move forward?

General SPEAKES. Sir, the intent of the guidance that we received as we announced the fiscal year 2010 budget decisions is that this program moves to the Air Force, and——

Mr. MARSHALL. We have got that part of it.

General SPEAKES [continuing]. We are in the process now of an orderly transition of funding, program administration, and future support all to transfer to the Air Force to include the training of the aviators, everything else associated with it. The concept, then,

would be that from our perspective as a user on the battlefield, we will look to the Air Force to provide that support.

And the specific work that is going on right now with the vice chairman with the two service vices is to ensure that we have a plan to enable the Army to achieve the kind of quick support for the last tactical mile that has been the shortcoming that was addressed in the requirement——

Mr. MARSHALL. Do you offhand know whether or not it will be in the Army budget or the Air Force budget?

General SPEAKES. It will be in the Air Force budget, sir.

Mr. MARSHALL. So the Air Force will have to ask, in its budget, for resources needed by the Army?

General SPEAKES. Sir, in the same context that all fixed-wing assets, essentially, that provide that kind of support are an Air Force asset, so this is a concept now of who is providing support to the tactical commander on the battlefield. We would be the customer; the Air Force would be the sole source provider.

Mr. MARSHALL. I think this is a terrific opportunity for the Air Force. I have no problem with the idea of the Air Force managing the acquisition, modernization, maintenance. Got a very different concept than the Army does with regard to those things, and I think in the long run a better one as far as saving taxpayer dollars is concerned.

I am just kind of worried that—we, none of us, want to see a repeat of the Caribou history. We want this to work.

I think it is a terrific opportunity for jointness, et cetera, but where Caribou was concerned, what got in the way was money as much as anything else. It is, "Oh, gosh, is this coming—you know, is this trip coming out of my budget? Is this plane coming out of my budget? I don't really need it that much. You know, I am more worried about some other things." So I am hoping that that coordination works out well.

I yield back. Thank you, Mr. Chairman.

Mr. ABERCROMBIE. Thank you.

Mr. Miller, to be followed by Mr. Johnson.

Mr. MILLER. Thank you, Mr. Chairman.

Gentlemen, thanks for being here today and your testimony. I would like to talk a little bit about body armor, if we can.

Chairman, I think you were right on the mark. We keep hearing it over, and over, and over again.

I was reading, I think, Mr. Ahern, in your remarks, and correct me if I am interpreting this incorrectly, but it says that the Joint Clothing and Textile Governance board, which was mandated by DOD, dated August 20 of 2008, and then I look down and I see that—and the director is supposed to chair—of Defense Logistics Agency (DLA)—is supposed to chair that board.

And then I look down, in the next paragraph it says DLA is in the process of formalizing this board to include drafting a charter, identifying membership, and creating a governance structure. Are we talking about a year-long process to set this board up? Is that what happens?

Mr. AHERN. Yes, sir. I think that the DLA involvement—the board that I am describing is a sustainment board. I will defer, again, to General Thompson for the specifics. I think it is a looking

forward effort; it is not affecting the fielding, the development, the fielding, the procurement of the body armor currently for the Army, but it is looking forward toward the sustainment of the body armor capability in the years to come.

General THOMPSON. Sir, if I could just add to that, just a minute, the services develop requirements for equipment and develop requirements for body armor. There is a lot of work going on right now to develop more joint requirements on body armor.

The services also do the development and the procurement of the new equipment; DLA does the sustainment. So this board that is being set up, as I understand it, is to get better collaboration on how do we do the sustainment of the fielded items—clothing and equipment—body armor being one of those items.

Mr. MILLER. All right. Since we are talking about fielding the equipment, can you tell me where we are now with fielding body armor and the testing? What changes have taken place in the testing process of the body armor?

My understanding is that maybe some of the requirements have changed. Tests have been done. Body armor that passed and was acquired in the past now doesn't meet specs. Can you elaborate on that?

General THOMPSON. There has been a lot of questions raised about body armor testing, so let me try to answer most of them and then take some specifics. As a result of a series of audits and Inspector General (I.G.) reports, we pulled the body armor testing back in with a policy statement that said we were primarily going to do the testing in-house at government facilities, because we do have the government facilities that we need to fully leverage.

So that doesn't mean we are going to do all of the testing inside the government facilities, but the intent right now—and we are balancing this between what we do in house and what we do with the commercial industry—is to do the first article testing, which, as has been pointed out in the opening statements, the more comprehensive testing in order to qualify a design to go in production. We have an industry day set up with the commercial testing laboratories in June to be able to get their input to see what is the right balance between government testing and commercial testing for the long haul.

We are in the process right now of increasing the capacity of the Army Test and Evaluation Command, in particular to the facilities at Aberdeen, in order to do that testing. The director of operational tests and evaluation has got oversight responsibility for the testing of body armor, and they are in the process of standardizing the test protocols for the Department of Defense, which have been different between the services and with United States Special Operations Command (USSOCOM), and the expectation there is they will publish a Department of Defense instruction, which codifies the standard test protocols, by the end of this summer, probably in September.

Mr. MILLER. Has this move—and I think there was a National Institute of Justice or something that was mentioned earlier; I wasn't able to write down. Was that one of the testing groups in the past, or did I misinterpret their comment?

General THOMPSON. Sir, the National Institute of Justice standard is a certification standard, like an International Organization for Standardization (ISO). The commercial labs have chosen to have the National Institute of Justice come in and certify their processes and procedures, which is an indication of their focus on quality. And so it is good for us to use those commercial labs that have the National Institute of Justice standard.

Mr. MILLER. Has pulling—I apologize, my time is expired. Just a very quick question. Has pulling the testing in house caused any of the suppliers to no longer meet the requirements?

General THOMPSON. This is a very complicated area, but it is possible to qualify a design with first article testing, and then the individual lots that are produced to not pass testing, because we test not just the qualification of the design, we also do testing every lot that an individual body armor manufacturer produces to make sure that they are still adhering to the standards.

So it is possible to have a first article test pass, pass a number of lot acceptance tests, and then fail one, and then pass a subsequent one. So it really depends on the manufacturing process, the materials, et cetera, but that is part of a quality control check.

Mr. MILLER. Thank you.

And I have some follow-up questions, Mr. Chairman, I would like——

Mr. ABERCROMBIE. Sure.

Mr. MILLER [continuing]. To submit for the record.

Thank you very much.

Mr. ABERCROMBIE. Mr. Miller will send you those, and if you can reply to him and to us we would be grateful.

Mr. Marshall has a very brief follow up on Mr. Miller's inquiry.

Mr. MARSHALL. When you are doing your follow-up testing, your lot testing, and you discover that there is a fault with a particular lot, do you have a regime where, if it happens once or twice or three times, that manufacturer is out, so that the manufacturers are encouraged not to try and——

General THOMPSON. Yes, sir. In the contract specifications for body armor now, if you fail two lots in a row you have to go back and requalify that design, or if you fail three lots out of 100 you have to go back and requalify the design. So you have to go back and do the comprehensive first article testing again, and that is what is in the contract specifications for body armor today.

So you can't fail more than two lots in a row and then pass one and have us accept that body armor and field it. And whenever a lot is failed, we do not accept that lot of equipment. It is rejected, as you would expect it to be.

Mr. ABERCROMBIE. Thank you.

Mr. Johnson, to be followed by Mr. Coffman.

Mr. JOHNSON. Thank you, Mr. Chairman, for hosting this hearing, or holding this hearing.

And thank you, gentlemen, for coming. It is, indeed, our honor to be in your presence, and I personally want to thank you for your service to the Nation.

As I understand it, the average soldier deployed over a 3-day mission is carrying up to 150 pounds of gear, and of course, you are seeking to lighten that load. However, two to three pounds

lighter for the body armor is what we have now. And is there any reason why we should not be able to get that down substantially more, and—while at the same time preserving the coverage and even expanding the coverage of the body armor?

General THOMPSON. Sir, I will take that question. We are always looking to improve the capability and lighten the load on the soldier. An example today is that we have fielded to a battalion at Fort Carson that is getting ready to deploy to Afghanistan a series of lighter equipment, and we will evaluate that battalion and its performance when it goes to Afghanistan to see how the soldiers perform with that lighter load.

The program executive officer soldier has done a number of significant things over the last five and six years to lighten the load not just in body armor, but in the optics that are on the weapons and the clothing that the soldiers wear. That is a constant focus for us to be able to lighten the load on the soldier in every category of equipment that the individual soldier carries.

We just finished, this week, an evaluation—back to body armor—on plate carriers. We evaluated six different categories of plate carriers that take weight off of the soldier, in particular looking towards the operational environment in Afghanistan where it is more of a dismounted operation, and so we have evaluated the capability of that plate carrier.

So it is the same plate—it is the same Enhanced Small Arms Protective Insert (ESAPI) plate that we field today in a plate carrier that doesn't cover as much, but that is part of the risk tradeoff. And what we have done is, we have characterized what that coverage is and we have given that commander the ability to use that plate carrier with the full-up ceramic plates that we field to all the soldiers to give them that option when they are going on a mission that requires them to reduce some of the weight that the soldiers carry.

Mr. JOHNSON. Right. Thank you.

And with respect to our men and women serving in the Reserves and the National Guard, and also their families, your budget request shrinks the amount of money for the National Guard, as I understand it, and for the Naval Reserve components. And, you know, you already talked about—well, you haven't talked about this during the hearing, and I would like you to talk about it—equipment shortfalls that are projected to occur despite the budget request.

And so I would like to know, why is it that we are decreasing that part of your budget as opposed to increasing it?

General SPEAKES. Sir, I would like to take the question. Since I have been in Army G–8 over four years now, properly equipping the Army National Guard and the Army Reserve—the two elements of our reserve component—has been a critical Army priority. To put it in perspective, in fiscal year 2001 the Army National Guard was given $1 billion to equip the force. Now, over the course of the period from 2002 through 2013, the average has been $3.9 billion per year. So what you see is almost by a factor of four that we have made a sustained, long-term commitment to ensure that both the Army National Guard and the Army Reserve are properly equipped.

That strategy has involved several key elements. First, we had to address the fact that we had to put them on the same basis for equipping, so they now have the same structure, the same Table of Organization and Equipment (TO&E), as their active component counterparts. So we have one standard to measure equipping levels at.

The second thing we had to do was recognize that as we filled the organizations, we wanted to give them modernized equipment and not castoff equipment. You will recollect that in decades past what we did is equip the active force and then we took the used equipment from the active force and moved it to the reserve component. Those days are past. Now the Army National Guard and the Army Reserve get equipment that is new, right off the production line, the same way as their active component brethren.

So what we have been able to do is do two things: fill holes, but secondly, raise the level of modernization. So we will continue this effort now through the current planning focus, which in our case is out through fiscal year 2015, and what we are going to be able to do is approach the same levels of equipment on hand and, probably as importantly, the same levels of modernization, which is really important to soldiers so they don't have something that is 10 or 20 years old, in terms of technology; they have the same thing as their active component brethren.

The intent being, then, so that when they are deployed they have the same compatible equipment that provides high survivability, and secondly, we also recognize the importance of homeland defense. We are managing, now, separately visibility on what we call the homeland defense items, which are essentially about 250 items of equipment that have particular utility when we are going homeland defense functions in support, particularly, of our state governors.

Those items are also continuing to improve over time. So this is a long-term commitment. We are going to sustain this commitment through the period of planning that we have been accountable for now, which is out through 2015, in draft terms. And at this point, I can offer you our sincere commitment that you have a sea change, in terms of the actual equipping levels of our reserve component now, and that that will continue for the foreseeable future.

Mr. JOHNSON. Thank you very much, sir.

Mr. ABERCROMBIE. Thank you.

Mr. Coffman.

Mr. COFFMAN. Oh, I am sorry. There has been some concern, and certainly I share the concern, that this Nation has been engaged in counterinsurgency and nation-building since post-9/11 and that we have gutted our conventional capability at the expense of counterinsurgency and nation-building. And I wonder if you can speak to that in this budget?

And also, I wondered if you could also speak to, in the budget, the status of armor and the status of field artillery? Please comment.

General SPEAKES. Sir, I think you correctly identify a very important issue for all of us in the Army, and it is an issue of balance. We certainly understand the Secretary of Defense's guidance, and his guidance, essentially, is this: that we have to have a formation

that is relevant to the lessons learned from the current conflict, but also let us prepare for what we regard as the likelihood and kind of potential conflict that we face in the future.

So what we use is the term "full spectrum capability." What it means, then, is both our formations in terms of their design, the soldiers and leaders who man them, and the equipment that we use for those formations has got to be able to function across the spectrum of conflict.

And as you well know, the artillery piece that we are using today with an Excalibur Precision Round can be used right now to take out a terrorist room that we would find in a building in Baghdad, or it can be used in the event that we need the mass precision fires against some kind of a major operation that would involve mass formation. So we are committed right now to ensuring that the rest of our formation, which specifically would be the heavy formation that has heavy brigades as its core, is modernized along with the other elements of our formation to give us a ability to move across the spectrum.

So specifically, in the case of artillery, we have the Proton Exchange Membrane (PEM) (fuel cell demonstration) program, which is the concept by which we continue to apply state-of-the-art capabilities to our Howitzers. We are also continuing the same kind of modernization to our Abrams and our Bradley formations, continuing a vigorous research and development program so that we could continue to apply capabilities to those vehicles as we see the lessons learned at war tell us we need to move to improvements.

Let me defer to General Thompson for additional——

General THOMPSON. Sir, the only thing I would really add to that is that the big change for us in this budget is the fact that we are going to look at the requirements and begin again, anew, on the ground combat vehicle program. So there is a need for us to modernize the ground combat vehicles. That is the replacements for the tanks, and the Bradleys, and the 113s that are out there in the force today.

Until we do that, you would expect us to look at those opportunities to upgrade and modernize the existing fleet that is out there, and we do that. And there is a balance. There is a balance in how much you invest in today's systems versus trying to go to modernize for the future, and it is no different than replacing your old car one day, or it is no different than the other services replacing Joint Strike Fighter aircraft with the existing aircraft that are in the inventory today.

And so you can't just stop. You have got to always be looking to the future. And there does become a point where it doesn't make operational sense, or fiscal sense, to continue to modernize an older set of equipment because it has outlived its useful life.

Mr. COFFMAN. Well, thank you.

For the record, I want to express my concern about maintaining our conventional warfighting capability, because I think it is very easy for the Department of Defense and the Congress to say, "You know, these—nation-building and counterinsurgency is really the future threat. We don't have to focus on conventional threats."

And it is much cheaper, quite frankly, from the standpoint of modernization or looking at weapons platforms, to focus on coun-

terinsurgency and nation-building than it is to focus on conventional warfighting capabilities.

Last question is, can you tell me about the status of the Humvee? I know that initially, earlier on in Iraq they were, you know, sticking extra metal on those things for up-armored Humvees, and the transmission, I know, wouldn't support—you know, they were wearing those vehicles out prematurely. Can you tell me what the status of the Humvees are right now?

General THOMPSON. Sir, we have sequentially upgraded the protection capability on the Humvees through a series of fragmentation kits, and right now we are on our sixth iteration of fragmentation kits to increase the protection levels. And so we have done that to the Humvee fleet.

You know, we see, from a requirements perspective, that we won't have any thin-skinned vehicles in the future, that we know we need to be able to put the right level of armor protection on the entire Humvee fleet that goes in harm's way, and that is part of the tactical wheeled vehicle strategy. As we look to modernize the light tactical vehicle fleet, which the Humvee is part of, that is what the Joint Light Tactical Vehicle Program is about.

And again, back to the question of balance, it is what is the right level of investment to continue to sustain the roughly 140,000 Humvees that we have got in the inventory, many of them up-armored today as we go to the future and begin to produce the Joint Light Tactical Vehicle, which, as Mr. Ahern pointed out earlier, is a competitively-awarded development program that is one day going to be the replacement for the Humvee.

Mr. COFFMAN. Mr. Chairman, if I could——

Is it the Army's objective that there be no more thin-skinned Humvees, that all Humvees are of the same up-armored capability?

General THOMPSON. There will continue to be, you know, thin-skinned Humvees in the inventory. The ones that are in the inventory will primarily be used in a training area, but they are not the ones that will be used in the operational environment that we see today in Iraq and Afghanistan.

Mr. COFFMAN. Thank you, Mr. Chairman. I yield back the balance of my time.

Mr. ABERCROMBIE. Thank you very much.

Ms. Tsongas, to be followed by Mr. Hunter.

Ms. TSONGAS. Thank you for your testimony and for your service in very difficult times. You have heard a lot of questions about body armor today, and I, too, share that concern, both with the information we have received on the numbers of orthopedic injuries, some attributable to the weight of the armor, the numbers of those who are not deployable. And in testimony here, we also heard a young soldier testify of the temptation to take it off when in the field because it is so heavy.

So given all that we have heard here, my question is, wouldn't it make sense to put together a—rather than dealing with this in a piece-by-piece fashion, put together a task force, much as we did around the MRAPs, to sort of deal with this in a holistic way, a concerted effort around research and development and then fielding whatever body armor makes the most sense? And I welcome your thoughts from all of you.

General THOMPSON. Ma'am, we have, today, in the Program Executive Office Soldier, which does all of the soldier systems, a task force on soldier protection that is looking at the holistic items for soldier protection. The joint work that is going on in both the requirements and the testing area around body armor is essentially doing that without calling it a task force.

And so I think we are doing that from a requirements and from a testing perspective when I addressed the testing standardization that the director of operational tests and evaluation is leading us through right now.

We have a number of other forums—the Army-Marine Corps Board at multiple rank levels, all the way up to the Vice Chief of Staff and the Assistant Commandant of the Marine Corps—look at those opportunities between the two primary ground forces to look at areas of standardization on all soldier protection equipment.

One of the things that I have talked about with a number of the staffers is, we do think that there is a need to have, in the base program, not in the supplemental, a dedicated research and development line for body armor and soldier protection. That money has been in the supplemental funding for the last couple of years, and we recognize that need, and that is something we need to work with the Congress on in both the 2010 and 2011 budget, and then putting the proper amount of money in there so that we have a steady state level of investment to continually improve the body armor for the soldiers.

Mr. AHERN. Yes, ma'am. I would agree with everything General Thompson said. And as we were preparing for this hearing, the issue of the sustaining R&D came up, and that is something that I would like to say we are considering going forward.

Ms. TSONGAS. I would say that is the great shortfall, and even as you sort of deal with this in a piecemeal fashion, it seems to me we need a more concerted effort around that, so thank you for your testimony, and I yield back.

Mr. ABERCROMBIE. Thank you.

Mr. Hunter, followed by Ms. Fallin.

Mr. HUNTER. Thank you, Mr. Chairman.

Thank you, gentlemen, for your service.

Mr. Ahern, good to see you again, sir.

And first question is about brownout technology. There is nothing in the budget at all for any brownout technology for Black Hawks or any other rotary wing aircraft. Just wanted to get a——

The Black Hawk pilots that I have talked to have a really hard time. Their gunners have a really hard time. You know, a lot of Black Hawks bouncing off the ground as they try to land, in Afghanistan especially. So why wouldn't there be money in here even for R&D for Black Hawk brownout technology?

General THOMPSON. Sir, I don't have a specific answer to that question. I do know, from a collaboration standpoint, that we do a lot of joint work with the Air Force on brownout technology. But I guess I would have to take that one for the record and get back with you on specifically what is in the budget. It may not be explicitly called out, but I know we do research and development in that area; I just don't know what line it is in.

[The information referred to can be found in the Appendix on page 85.]

Mr. HUNTER. Do they have anything right now on Black Hawks that—any kind of debris in the air?

General THOMPSON. Yes. The information that they just handed me that the UH–60 Mike upgrade testing that is underway right now has both cockpit and stabilization technology being evaluated.

Mr. HUNTER. And that is brownout stuff?

General THOMPSON. It deals with the brownout challenge.

Mr. HUNTER. Does it use radar to do it, or does it use——

General THOMPSON. Sir, I don't know.

Mr. HUNTER. Okay.

General THOMPSON. I don't know the technical details.

Mr. HUNTER. Okay.

That is all I had. Thank you, Mr. Chairman.

Mr. ABERCROMBIE. Thank you.

Ms. Fallin.

We have three votes—15 and two 5—so we have some time, and we will come back. If you can stay, I am sorry. It will probably be roughly half an hour. Probably less than that—20 minutes or so. But we have time now.

Ms. FALLIN. Thank you, Mr. Chairman.

And thank you, gentlemen, for your service to our Nation. I have a question about the National Guard, and it is indicated that 31 percent of the Guard units have their family medium tactical vehicles requirement on hand. And in my state in Oklahoma, our National Guard tells me they have 40 percent of their required vehicles and 20 percent of their trailers on hand.

And I am just a little concerned about the readiness implications of not supplying the Guard units with the equipment that they need for both deployment and even the ability to effectively respond to emergencies in our home state. So my question is, what is the plan to help with the inventory—equipment inventory—that our Guard units need and in our individual states, and are there any changes coming down that will help them have a better operation role?

General SPEAKES. Ma'am, let me start of by explaining that we are measuring, right now, two items that are a concern to everybody. First is overall Guard equipping levels. The second is where we are on the homeland defense items that you are, for example, focusing.

And as a part of that, what we are focused on specifically is addressing critical shortfalls in modernized tactical wheeled vehicles with a focus on light and medium trucks, because those are the ones that are a critical shortfall right now. Over the course of the next several years, what we will be able to do is raise our items of homeland defense and aggregate to over 80 percent, to about 82 percent on hand as we look at our strategy between now and fiscal year 2015.

This is vital because what we are going to be able to do is ensure that we have the right amount of equipment on hand in a state to address their particular capabilities associated with the units they have. And then through the formation of regional compact, which is a part of the director of the Army National Guard's strategy, to

be able to max capabilities in the event that we have a particular need in the state.

Let me get back to you with the specifics of what the plan is for Oklahoma and the Guard equipping within that state.

Ms. FALLIN. I would like to know, also, the timeframe we are looking at. Are we looking at two, three years, five years—I mean, I hope it is as quick as possible.

General SPEAKES. Yes, sir. Yes, ma'am. In this case the issue, or the focus is, now to 2015 is where we have a specific plan with an investment strategy that is designed, for example, to take the ancient 2½ ton truck, which has been with the Army and the Army National Guard in disproportionate levels for the last 30 years, and we will have it out of the inventory completely by fiscal year 2011.

So this is the strategy that puts enormous amounts of capability in the hands of soldiers and units in the Army National Guard here in the next several years. Essentially, the investments that were funded by the Congress two years ago in supplemental funding are now coming as a tidal wave of capability that is beginning to make a wholesale change in terms of Guard equipping.

Ms. FALLIN. Okay.

And I have one other question, Mr. Chairman, if I can.

This question is related——

Mr. ABERCROMBIE. Two minutes.

Ms. FALLIN. Okay. Thank you.

We had a hearing yesterday—a readiness hearing—and I had the chance to ask General Chiarelli about the Army artillery's capacity considering the cancellation of the FCS manned ground vehicle system, and specifically the Non-Line of Sight (NLOS) cannon. And the general testified that the Army is committed to using the gains that have been made through the technology though the manned ground vehicle program into the new combat system.

And I appreciate that they are trying to use that technology, but in your estimation, how much of the development that has already been done in this program will be salvageable, because we have spent a lot of money on this, and specifically, will there be any new technologies required for the new ground combat vehicles?

General THOMPSON. Ma'am, I will take that question. We just finished, last week, the systems of systems preliminary design review on the FCS program. That was the culmination of the work that has been done in the development of the FCS capabilities, which includes the manned ground vehicle, and in particular, the cannon capabilities, over the last five years.

That was a very successful meeting. It demonstrated that this program has made significant progress in the technology. All of the key technologies in the program—all 44 technologies—are at the right technology readiness level.

And as we go forward, here, with the Future Combat Systems program, we will harvest the investment that we have made to the extent that we can, and use that technology as we go forward and update the requirements in the new Ground Combat Vehicle program, which I can't imagine not including a new Howitzer, because there is a need for precision fires, all-weather, line-of-sight, beyond-line-of-sight capability, which is what a cannon is.

And so the smart business thing for us to do is to make sure that the $15 billion that has been spent on FCS to date is fully leveraged as we go forward. And that is clearly something that we know we have to do, and we are in the process of doing that. And it will take us the next three or four months to be able to do that with all of the contractors that we have got working on this program.

Ms. FALLIN. Thank you, Mr. Chairman.

Mr. ABERCROMBIE. Thank you.

Ms. FALLIN. I appreciate your commitment on that.

Mr. ABERCROMBIE. We will go to Mr. Bartlett, and then I think it will be about 20 minutes. It will be before noon, but we do want to get on the record with some of these things, so I regret I have to ask you to stay. But we are very appreciative of your patience.

Mr. BARTLETT. Thank you very much.

And noting the trust that we have, I will not be able to return, and I have implicit trust in my colleague that he will not lead this committee astray in my absence.

I want to use the few moments we have to use the Joint Cargo Aircraft as an example of the consternation and confusion that we have here as a result of the fact that we were not included in any of the discussions that led up to the submission of the budget.

Several years ago, the Army determined that in the low-intensity conflict kind of a war that we were in now that they needed a new cargo aircraft. That was comparative, by the way, by the Institute for Defense Analyses, which just recently released a study looking at the movement of cargo by C–5s, C–17s, C–130s, and the Joint Cargo Aircraft, and they concluded that in the kind of a conflict that we are involved in now, that as a matter of fact we needed between 90 and 100 Joint Cargo Aircraft.

This was initially an Army program, and since the Air Force was involved in these same conflicts and would logically need a similar kind of aircraft, the DOD decided that the Air Force ought to be a partner in the procurement with the Army. The Air Force very reluctantly became a partner; they were kind of, as some might say, dragged kicking and screaming into this relationship.

So here we are now, after the initial Army study, which indicated that the Army needed 78 of these aircraft. Institute for Defense Analyses said it was really in the upper nineties that was needed. And here we are now with a budget that says that the program is going to the Air Force, which didn't want to be a part of the program in the beginning, and that we now only need 38 aircraft.

We have asked three or four set of witnesses that have come to us before, was there any study that indicated that the need had, in fact, dropped from the 90-some indicated by IDA or the 78 that was the confirmed—the JROC confirmed that this was the need for the Army. By the way, the Air Force need was never added to that 78, so the total number would have gone up. Perhaps that is the 90-odd that was indicated by IDA.

So here we are with a budget that says that the program is going to move from the Army to the Air Force, that the need is only 38 aircraft, and just recently, just less than 4 months ago, the Quadrennial Roles and Missions Review Report says—and this comes from the same organization that now presents us with this budget—that the option that provided most value to joint force was to

assign the Joint Cargo Aircraft, the C–27J, to the Air Force and the Army.

So I hope that you can understand our consternation and our confusion, because we were not a part of any of the discussions that led to this. Indeed, I think that many in the building were not involved—in the Pentagon were not involved in this, because every panel that has come to us before says that we are going to buy at least 38 of these, that this is a discussion matter within the military, that probably the initial number we got was not very well vetted.

Mr. Chairman, I won't ask for a comment to that because I know it is late and we need to go to our votes, but thank you very much for holding this hearing.

And thank you all very much for coming, for your testimony, for your service to our country.

Mr. ABERCROMBIE. Yes. We are going to recess now, and then reconvene as soon as possible.

But perhaps during that time you can reconnoiter with one another and come back with an answer whether Mr. Bartlett is here or not. Let us start with your response to Mr. Bartlett when we reconvene, and then we will probably conclude the hearing relatively quickly after that, depending on the answers.

[Recess.]

Mr. ABERCROMBIE. Thank you for your patience. I regret we had an unanticipated privileged resolution offered on the floor, and it took up the better part of half an hour for that, in addition to the other votes. That was the reason; we weren't being desultory or anything, or casual in trying to get back.

And again, I express my thanks to you all.

We will start again. When we left I had indicated that if it was possible to have some response for Mr. Bartlett——

Mr. Ahern, perhaps you could take it, or anybody else, just for purposes of dealing with that. I don't have the question precisely in front of me, but it concerns his observations about the Joint Cargo Aircraft and the rationale both for the transfer to exclusive jurisdiction, I think is probably the right phrase, to the Air Force, and the question of changing the numbers that would be sought given the context that had been established about strategic necessity.

Mr. AHERN. Yes, sir—excuse me. Yes, sir. And this came up, of course, at the hearing yesterday, as you certainly recall. And I did look at it a little bit more yesterday afternoon and this morning, and in regards to the budget, what that reflects is 38 JCA or 38 C–27s to recapitalize the 38 Sherpa and recognition of the capacity of a C–130 fleet would be sufficient until the department has time—which would be done in the Quadrennial Defense Review (QDR)—to do a full analysis of the intratheater lift requirements.

But in regard to the QDR Roles and Missions that Representative Bartlett—Ranking Member Bartlett mentioned yesterday and again today, there is an additional thought in there that I wanted to mention, sir, and that additional thought really has to do with recognizing the lessons learned from the ongoing operations in theater, that there could be areas for improvement, and by changing—

looking at policy, looking at doctrine, looking at con ops, that there might be an improvement to intratheater airlift.

And so, again, in conjunction with that QDR as well as a transition of the responsibility from the Army to the Air Force and the planning that they are doing on that, there is an opportunity to improve effectiveness, joint synergy, and minimize a duplication of effort, were the two thoughts that I wanted to say. One, addressing the budget for this year, and one, the going forward, the opportunity recognized in the Roles and Missions, that there are opportunities for improvement.

Mr. ABERCROMBIE. Thank you.

Anyone else? It is not necessary. Okay. Thank you.

Mr. Ahern, I want to move to a Future Combat System, and some little bit more general inquiry. What specific FCS—or, if you can tell me at this stage, I would like to know what specific FCS contracts or subcontracts are going to be terminated as the Army carries out Secretary Gates' instructions and when might that occur? That is to say, either the decision about it, or if the decisions have been made or are presently contemplated, what is the timeframe?

We are asking the question because it helps us determine what we are going to try and do with regard to the recommendations to the full committee.

Mr. AHERN. Yes, sir. The major contract—and I will certainly defer to General Thompson to amplify it—is the FCS contract, and I believe the way forward—and I expect the Army is working on it hard now—is in restructuring in that contract, where certain elements of the contract will be restructured, certain elements of it will be terminated.

I cannot give you a time scale for that, but what I believe the direction was after the systems of systems Preliminary Design Review (PDR) was completed would be the time that the Army will begin to address the restructuring of the contract and the termination. And as General Thompson said earlier today, that systems of systems preliminary design review was completed, I think, in this month, recently.

Mr. ABERCROMBIE. Yes. Could you address, perhaps more specific, say, below the system of systems——

Mr. AHERN. Yes, sir.

Mr. ABERCROMBIE [continuing]. Idea, then what contract or subcontracts are you looking at at the moment?

General THOMPSON. Sir, as we go forward the first step is—there was two trigger events that needed to happen for us to begin the work forward on the contract. One was the completion of the systems of systems preliminary design review, which I mentioned happened last week, and so we will gather from that the technology advances that have been done in the program to date.

The second trigger point is the official guidance to the program that comes from the new defense acquisition executive, Dr. Carter, in the Acquisition Decision Memorandum (ADM), which is in the final stages of being put together right now with staffing comments coming from OSD and the Army. And I would expect that within a matter of days, for that to be done. And so that is the official guidance on where we go forward with the program.

We will then look at—the large contract that the Army has got is with Boeing, who has got subordinate contracts with, I believe the number is 22, second-level contractors. We will restructure that major contract, and it will take us between now until the end of the summer to be able to do that because there are so many second and third order effects with that major restructure of the contract.

Part of that will be to—once the ADM is signed and consistent with the guidance that comes in the Defense Acquisition Executive, will be to halt the work on the manned ground vehicle portion of that, and then work to harvest the technology out of that. And then we will restructure the contract to redefine the relationship with Boeing, and then we will subsequently redefine the relationship with their subordinate contractors, in particular, General Dynamics and BAE, who have got the subordinate contracts on the manned ground vehicle. There is going to be a re-discussion and a restructure of that contract between those two and Boeing.

Mr. ABERCROMBIE. So you would be modifying the fee structure in the course of those discussions?

General THOMPSON. Yes, sir. And I have had conversations with the senior executives in Boeing and SAIC who co-lead that effort, and they know fully it is our intent to renegotiate that fee structure and are expecting to do that with us.

Mr. ABERCROMBIE. Okay. What is the relationship, then, of the Army Ground Combat Vehicle program as it is now re-evolving, if you will, in relation to the DOD acquisition policy, this new acquisition policy that you mentioned in a bit more general terms of immediate needs and et cetera? Because inevitably, then, I would think that would, as you just indicated, probably involve—going to involve multiple contracts to develop prototype vehicles.

So what I want to know is, are you doing this—do you have a clear idea—does the Army have a clear idea of what the Army Ground Combat Vehicle program will look like in the context of the emerging acquisition policy, or is the acquisition policy too—still at too vague a stage for you to do that with clarity?

See, you understand the reason why I am asking the question? You are being asked to do a very specific thing here pretty quickly, and I am not entirely sure that the acquisition policy of the DOD is as clear as your new mission.

Does that get you in trouble commenting on that? It is not meant to be a—no, it is not. It is not meant to be a critique of your bosses or anything. I am trying to reflect on what we are going to—I am trying to get an answer on this, if I can, in the next—if not today, in the next two weeks, because I am sure you would agree, this is a key element in trying to figure out what we are going to recommend.

General THOMPSON. Yes, sir. And believe me, I understand your question. And so, if the Acquisition Decision Memorandum is signed within the next few days, as we would expect, then we will be able to come back over and talk to you individually or to the staffers—Mr. Bush or whoever you want us to talk to—to explain the details.

But the path forward on the requirements side is to reevaluate and to look with the Training and Doctrine Command and with full participation with OSD to relook at the requirement for the ground

combat vehicles, and the direction that we are going to follow is to make sure that we have captured all the lessons learned from the war effort——

Mr. ABERCROMBIE. That is fine with me. You will not have to go into any detail, as such. I certainly don't require anything like that. But what I will need to know is, what is the cost of that? Because a lot of—you know, or what—not just in dollar terms, but how do you plan for that? How can we set the foundation dollar-wise for our in that so we can fit it in to all the other demands that are being made?

General THOMPSON. Yes, sir. And subsequently——

Mr. ABERCROMBIE. In other words, we want to fund you correctly.

General THOMPSON. Yes, sir. And we will be able—it is in the budget right now on what we think that needs in fiscal year 2010 to be able to go forward, and as we look at the acquisition approach—the best competitive acquisition approach on the ground combat vehicle—we will come back and lay that out as well. We won't know the specifics of that acquisition approach until the fall, after we renegotiate the restructure contract with Boeing.

What we do know is that the large major defense acquisition program that was heretofore known as FCS will probably devolve into three major programs——

Mr. ABERCROMBIE. Yes.

General THOMPSON [continuing]. One to ground combat vehicles, one a major defense acquisition program that talks about the spinouts and the systems that are in those spinouts, and the third major defense acquisition program will be the network and the software, and then the subordinate program elements that go with that. So you will see the one large——

Mr. ABERCROMBIE. Got it.

General THOMPSON [continuing]. Devolve into three.

Mr. ABERCROMBIE. Yes. And, you know, on paper that looks fine to me, and I think I said that in my opening remarks. I understand that.

But it does raise a logistical question—not a friction question, but a logistical question. If you are going to be restructuring the, if you will, the master contract to accomplish this trifurcation that you have annunciated there, how are you going to keep the spinout one activities on schedule? Or is that part of the negotiation—I presume it is part of the negotiations, because I am sure you don't want to slip on that if you can avoid it.

General THOMPSON. We don't want to avoid—we don't want to have a slip in the schedule if we can avoid it, but——

Mr. ABERCROMBIE. On the spinout?

General THOMPSON. On the spinouts. We think we have put the appropriate amount of dollars in the 2010 budget to do that, but I will be perfectly honest here as I have been perfectly honest inside the Defense Department: It is going to be very, very difficult for us to keep to the schedule for the spinouts, which we had intended to field the first one, the first brigade, in fiscal year 2011, because of the massive nature of the work to restructure this large contract.

Mr. ABERCROMBIE. Okay. And if that happens then that happens. I mean, I meant it in my remarks, and I think you could hear it

from some—in the remarks of some of the other members: It is better to have a realistic understanding of what that is than to try and jam something into a calendar number because it would make us all feel better if we thought that was going to happen.

You don't have to try and make me feel good. I just want to feel confident.

General THOMPSON. Yes, sir. And my basic approach is, I always go to the people that have to execute the work and ask them, "What is a realistic expectation for you to be able to get this done?"

Mr. ABERCROMBIE. Okay.

General THOMPSON. My assessment right now, you know, it could be in fiscal year 2011, as we planned, but if it is it is going to be very, very late in fiscal year 2011. But my realistic expectation is it is probably going to slip a little bit.

Mr. ABERCROMBIE. Okay. In fact, I wouldn't even use the word "slip." It is going to be changed, that is all.

I mean, "slip" has at least some implication that things have been messed up or, you know, that kind of thing, and that is not—I don't have that attitude toward it at all. I just think we are getting more realistic about what we can do, either both in time and money, then that is helpful to everybody, it seems to me. Okay.

Well, do you have any idea, then—maybe Mr. Ahern has this—what the termination cost would be to cancel the manned ground vehicle aspects of the program? I am just thinking about the termination now. Are there some ballpark numbers for that?

Mr. AHERN. Excuse me, no, sir. I don't have any ballpark numbers for that at all, not at this time. Maybe General Thompson——

Mr. ABERCROMBIE. There wasn't some understanding of what that might be should that occur? I mean, that is always implied. It is not like somebody can come in and say, "Oh, I am shocked. You know, there is gambling upstairs."

Somebody can't come in and say, "Oh, I am shocked. We are having to restructure the fee here," or if something gets cancelled we have to have a termination for—you must have a formula there.

General THOMPSON. Sir, we do. We have a government estimate right now on what that termination liability might be.

Mr. ABERCROMBIE. Has that been shared with us?

General THOMPSON. No, it hasn't. The specific number will be as a result of——

Mr. ABERCROMBIE. You can do that in the staff level.

General THOMPSON. At the staff level, but I can say that the termination liability on this major restructure is going to be in the hundreds-of-millions of dollars.

Mr. ABERCROMBIE. I understand that. The main thing to be understood here in turn is, we are trying—we have got to work together on this.

General THOMPSON. Sir.

Mr. ABERCROMBIE. This bill has to be a cooperative and collaborative endeavor that is going to advance the interests of the Nation, and the Army in particular.

So I think you folks, for those—maybe there is some here who are new to this—those of you who have known me for a long time, I always thought the Army was on the short side, particularly because we never resolved the procurement and the research and de-

velopment side versus maintenance and operation and deployment costs. We never dealt forthrightly with the question of—the acquisition of capital assets, a capital budget and an operating budget.

And what has happened now is, the warnings that have been out there for a long time that the procurement side of things was going to swallow everything, and not just undermine, but I think almost eviscerate the capacity to have a sensible operational and deployment maintenance and management side of things—operational side, so things be funded correctly.

So I understand what is going to happen with this. But it has got to be an incentive to us to get an acquisition policy that takes into account getting a capital budget operation of some kind—a capital budget structure, I should say, of some kind. Maybe the new acquisition bill we just passed and sent to the President can help bring that about.

But we do need to know that cost. Because I have got to be able to figure that, and I know I am going to get asked right away, "Well, how much is it going to cost to terminate this," because that immediately impacts everything else that we are dealing with. So if you can come up with either a guesstimate or a good faith figure in the next 2½ weeks, I would be grateful.

Now, if you go to the termination cost estimate for the entire program or anything associated and ancillary to the manned ground vehicle aspect, is it likely, then, that the vehicle portion is less than that amount? The estimate that we have right now is around $1 billion. From the budget materials we have so far and our quick analysis of it, we think that it is going to be in the neighborhood of $1 billion all together, and I am presuming, then that the vehicle portion would be less than that, or would it be a major portion of it?

General THOMPSON. The vehicle portion would be the major portion of it, Congressman Abercrombie.

Mr. ABERCROMBIE. Okay. Well, you see where I am going. I just need to have a clear idea so that I can tell my colleagues and the chairman what is likely here.

General THOMPSON. We believe that in the 2010 budget we calculated in what we think our—what would be the appropriate termination liability cost, but again, the specifics will be the actual discussion with the contractors. But we think we have got it right, and we will get the breakout between what is ground combat vehicles and the rest of the FCS——

Mr. ABERCROMBIE. Once we have that then everything else can follow, in terms of where you want to get to. We need to get that off the table so that we have—then the path is clear as to where we want to go.

Finally, then, you have mentioned as recently as just a comment or two ago, and I hope you heard when I made my opening remarks, talking about the network software and hardware element and the $415 million increase. I extrapolated out of it something—the National Security Agency information assurance requirements, and I am not sure what that means.

Am I correct that the $415 million is related to the "National Security Agency information assurance requirements?" Are you familiar with what I am speaking about?

General THOMPSON. Yes, sir, I am. I don't know at the tip of my fingertips here whether all of that increase in the software cost is related to information assurance requirements, but that is certainly a portion of it, because——

Mr. ABERCROMBIE. What are those requirements? I am not familiar with any, then. I thought I was paying close attention.

General THOMPSON. It is the protection requirements for the software to make sure that they are not—the software is not compromised and the computer network——

Mr. ABERCROMBIE. Why are you having to deal with National Security Agency requirements? Is that the rule?

General THOMPSON. Yes, sir, it is. For the Defense Department, the National Security Agency (NSA) sets the requirements for how to protect the networks not just in the Army but across the Defense Department.

Mr. ABERCROMBIE. But those networks don't exist right now.

General THOMPSON. As we develop the future—there is the network today, and as we develop the increments of capability for the future networks, we have got to comply with the requirements to make sure those networks are protected against——

Mr. ABERCROMBIE. Why would they be coming up this year? Why wouldn't that have been built into the requests that were around the network before?

General THOMPSON. They were in the previous request, Congressman. I just don't know how they were——

Mr. ABERCROMBIE. Were they not differentiated, do you know, General Speakes?

General SPEAKES. Sir, I do not know.

Mr. ABERCROMBIE. Okay.

Mr. Ahern.

Mr. AHERN. No, sir. I do not know, but I do recognize exactly what General Thompson is saying. As we develop the new networks there are—I can't think of the right word; it is not certification—but there is testing for, as he said, information assurance for the networks that NSA provides that oversight. So I think we could get back to you.

Mr. ABERCROMBIE. Okay. That is helpful——

General THOMPSON. Congressman, what I would——

Mr. ABERCROMBIE. That is helpful. I mean, you understand where—I have got—the communication networks I am skeptical about, again time and—it is not that I am trying to argue that you shouldn't do it. But this is my tenth term. I have been hearing about this even before the Future Combat System, about the network and communications and interoperability, and et cetera, for so long, and then that has never appeared, as such.

And so when I see something like this, I mean, you know, that is a considerable sum of money. It is almost half a billion dollars. And I am not quite sure what it is connected to.

And when I am looking at trying to assist you with where you want to go now and the various dollar figures that are going to be required, naturally I am going to look into, can we reallocate funds that we really don't need right now into things that you do need right now to accomplish what you—the direction you are going.

General THOMPSON. And so what we will do, Congressman, in the next couple of weeks, we will come up and see the staff and show them what is the subordinate elements of the——

Mr. ABERCROMBIE. Okay.

General THOMPSON [continuing]. Costs that are in the budget——

Mr. ABERCROMBIE. Fair enough. And can you be prepared, then, to take a look at this whole network communication projection and see what—again, let us be realistic about what we are doing and not doing.

Thank you.

I want to conclude—is there anything you care to add? Any thoughts that you have as a result of everything we have done so far?

General THOMPSON. Sir, I have got just a couple of quick things on some of——

Mr. ABERCROMBIE. That is fine.

General THOMPSON [continuing]. To the members that are no long here.

Congressman Wilson asked a question about the power assist on MRAP doors, and every MRAP variant and the doors on those variants has a cylinder to assist on each door now, and we haven't received any reports to improve the current capability. So as I said in my previous comments, we adjusted the power assist for those doors and I can report you that every MRAP—has those power assists on the doors today.

Mr. ABERCROMBIE. Fine.

In that context, before you go on, I had mentioned to Mr. Ahern yesterday in discussing or responding about the idea of a business plan, or what made business sense, and so on, I think the MRAP, as it has unfolded, and the way you have handled it, is a good example of why what constitutes good business practice for the military isn't necessarily the same thing—I was going to say, like for General Motors, but we can see how great they are doing—how is that going?

It may be small comfort to the Pentagon to finally be able to say, when somebody criticizes you for spending money, how come you can't run it like a business. You would be well within your rights to look out there and say, "Well, what business do you have in mind that we can compare it to?" My point being is that you are dealing, by definition, with a business that isn't necessarily going to comport with what the standard model of corporate manufacturing, and so on.

And I think the way you have handled the MRAP approach is a good example of the right way to do things. You have multiple vehicles done with different companies. They are all in competition, if you will, with one another, and they have come up with different approaches that are suitable for one context and maybe not as good in another, and you are trying to differentiate those.

And they are all being manufactured and brought online for specific purposes, I think in very rapid fashion and with excellent results, whosever been overseeing the programs—and for multiple services.

So I think this is a good example of where you have multiple requirements, fierce competition, and excellent oversight by having the mission clearly in mind, and that the Army was pretty much in control. You didn't subcontract out your own responsibilities, and such. At least this is my perception of the way this has worked.

So just being able to do what you say here, you have got different kinds of vehicles, but you had a common problem you had to deal with in different vehicles, and you oversaw a solution and it got done in rapid order. Is that a fair summary of what has happened?

General THOMPSON. Yes, sir. It is a fair summary. So just a couple of points: One is that it has been a joint effort——

Mr. ABERCROMBIE. Yes.

General THOMPSON [continuing]. Joint Program Office led by the Navy and the Marine Corps, with significant Army participation, so——

And I would say that the MRAP is a great model for how to use the flexibility in the acquisition system, and it is my full expectation, as we work together with OSD, would use the same flexibilities we use with the MRAP program as we would both develop the requirements through the joint requirements process, and the acquisition of the ground combat vehicle so it doesn't take us a decade to get the ground combat vehicle out there, which is a——

Mr. ABERCROMBIE. Okay.

General THOMPSON [continuing]. Capability.

Mr. ABERCROMBIE. Yes, and maybe we can just use what is already working. There is no law against it. You don't have to invent this particular wheel—bad analogy, but——

Okay. Then—excuse me, you weren't finished, though.

General THOMPSON. Sir, the question from Congressman Hunter about the brownout issues: The UH–60 Mike Black Hawk upgrade that we have right now on the advanced handling system is going to give us a capability, once we finish the development, to do automatic takeoff and landing in brownout or whiteout conditions, and I just wanted to get that on the record right now, because of some of the technology that we are going to put in there, particularly the fly-by——

Mr. ABERCROMBIE. We will get that to Mr. Hunter.

General THOMPSON. And we will follow up in more detail on that.

Mr. ABERCROMBIE. Okay.

General THOMPSON. And the last one for clarification was a question asked by Congressman Wilson on the carbine. We will have the rights—the technical data rights to the M–4 Carbine beginning in July.

We are going to have a performance-based competition for the Carbine. The new Carbine requirement is in staffing, as I indicated, that will go to the joint staffing process here very quickly. And we anticipate approval on the requirement by the end of the summer and the Request for Proposal (RFP) release in late summer, which is a few months later than I indicated earlier. And I just wanted to clarify that for the record.

Mr. ABERCROMBIE. Thank you. Excellent.

Any final thoughts, General Speakes? Okay.

Mr. Ahern, I am pleased that you were able to be at both of these hearings, because in a certain sense I am going to rely on our and

our new acquaintanceship for what this subcommittee has as its primary jurisdiction, and that is the Army and the Air Force.

And I hope that you can see from some of the questions and observations made by the members over the last two days that I have my own friction issues to deal with—not necessarily because different interests are rubbing up against one another and causing difficulty, but the politics of defense on the legislative side requires people who are in a position of responsibility to make recommendations to the subcommittee and the full committee to be aware of them, to be cognizant of them, and to be cognizant of the merits—not just the demerits, but the merits of the various positions.

Some of them can seem parochial to those on the outside, but they are also the responsibility of individual members—they happen to be in their districts or something, so be it. That just means they are that much more familiar with it, from my point of view.

So my point here is that, the reason that I am asking so many of these questions and pushing you and the services with regard to how we allocate the funds within the policies established, is that there is competition that I have to take into account, whether it is the Joint Cargo Aircraft, whether it is the F–35, whether it is the F–22s, what is to be done or not done, the Strykers, the various elements of the Future Combat System, et cetera.

I am now charged with the responsibility of blending these requirements and necessities to meet our strategic interests, and at the same time recognize that I have got to have a balance in there that is acceptable enough to get the votes, to make it acceptable to those who have the responsibility of that little plaque out in the anteroom there that says the Congress shall provide for the armies and navies, et cetera.

So I am just putting that on the record, not because I don't think you know it, but rather to make it crystal clear that it is foremost in my mind, and so that both the questions and observations that come from me and the others are entirely based upon, how can we put this together in a way that will satisfy the Nation that we are, in fact, defending the Nation's interests with the maximum possible effort and focus, and understanding of what they are, and meeting the practical responsibilities of putting a defense bill together that can sustain itself in the appropriations process.

So your aid and assistance over the next couple weeks in accomplishing that would be most gratefully received.

Mr. AHERN. Absolutely.

Mr. ABERCROMBIE. And acknowledged.

Mr. AHERN. Absolutely, sir, and I welcome the opportunity——

Mr. ABERCROMBIE. Good. Thank you all very much. Again, I apologize for the length of time that you had to spend waiting to complete this, but I assure you the efforts made here today will be closely attended to when we make our decisions.

[Whereupon, at 1:19 p.m., the subcommittee was adjourned.]

A P P E N D I X

MAY 21, 2009

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

MAY 21, 2009

HOLD UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

MR DAVID G. AHERN

DIRECTOR, PORTFOLIO SYSTEMS ACQUISITION

OFFICE OF THE UNDER SECRETARY OF DEFENSE
(ACQUISITION, TECHNOLOGY, AND LOGISTICS)

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON AIR AND LAND FORCES

May 21, 2009

HOLD UNTIL RELEASED BY THE
HOUSE ARMED SERVICES COMMITTEE

Army Acquisition, Reset, and Modernization Programs
Mr. David G. Ahern
Director, Portfolio Systems Acquisition
Office of the Under Secretary of Defense
(Acquisition, Technology, and Logistics)

Good morning Mr. Chairman, Congressman Bartlett, and Members of the Committee. Thank you for the opportunity to appear before you today to discuss the Fiscal Year 2010 President's Budget request as it affects Army acquisition programs.

On April 6, 2009, Secretary Gates announced key decisions he recommended to the President with regard to the Fiscal Year 2010 defense budget. In his statement, the Secretary said his recommendations were the product of a holistic assessment of capabilities, requirements, risks and needs for the purpose of shifting the Department in a different strategic direction. Further, he made clear that virtually all of his decisions and recommendations were made regardless of the Department's top line budget number.

Secretary Gates' decisions and recommendations were structured to attain three principal objectives:

- First, to reaffirm our commitment to take care of the all-volunteer force, America's greatest strategic asset;
- Second, to rebalance the Department's programs in order to institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead, while at the same time providing a hedge against other risks and contingencies;

• Third, to reform how and what the Department buys, meaning a fundamental overhaul of our approach to procurement, acquisition, and contracting.

The sections that follow address the specific topic areas in your invitation letter. As you will see, the Department of Defense budget for Fiscal Year 2010 as it pertains to Army acquisition programs generally, and the specific programs you asked us to address, is focused on that second objective. Specific programs may have been increased or decreased; restructured, accelerated, or cancelled. But the budget, taken holistically, rebalances programs to enhance our capabilities today and the scenarios we are likely to face in the future, consistent with the Secretary's objective.

Future Combat Systems (FCS)

An update on the status of the Future Combat Systems program changes directed by the Secretary of Defense, including termination of FCS Manned Ground Vehicles, potential changes to the FCS contract fee structure, and the status of the congressionally mandated FCS review for 2009.

The Fiscal Year 2010 budget capitalizes on the Department's FCS investment to-date in sensors, networks, unmanned aircraft systems, and manned and unmanned ground vehicles to accelerate the delivery of militarily useful capability to the warfighter. The FCS investment is being refocused from delivering an FCS Brigade Combat Team to

delivering militarily useful capability developed in FCS to all of the Army's infantry, Stryker, and heavy combat brigades.

The Fiscal Year 2010 FCS budget is based on an evaluation of the overall priorities for Army modernization. Changes to the FCS acquisition are based on a combination of the currency of requirements given ongoing operations, the maturity of the development efforts within the FCS acquisition program, and the affordability of the modernization priorities.

The program changes directed by the Secretary of Defense include termination of the FCS Brigade Combat Team acquisition program, cancellation of Manned Ground Vehicle development, and restructuring of the FCS investment into four elements: ground combat vehicle modernization, spin-out of FCS capability to current forces, incremental network improvements to the ground forces, and development and synchronization of system elements for Brigade Combat Team modernization.

We plan to rapidly move forward with delivering increments of capabilities such as Small Unmanned Ground Vehicles, unattended sensors, and Class 1 unmanned aircraft systems to enhance the effectiveness of our current force.

Additionally in Fiscal Year 2010 we plan to continue development of the tactical ground network with an emphasis on incremental delivery of improved networking capability for the ground force.

Cancellation of Manned Ground Vehicles: As Secretary Gates indicated in his April 6 statement, we will halt development of the FCS manned ground vehicles, including the

Non-Line of Sight – Cannon Special Interest acquisition program, while the Department expedites a strategic re-evaluation of the capability requirements and approach for ground combat vehicles. The concept that FCS manned ground vehicles, with lower weight, higher fuel efficiency, and greater informational awareness, could compensate for less armor, does not adequately reflect lessons learned from counterinsurgency and close quarters combat in Iraq and Afghanistan. A ground combat vehicle modernization program designed to meet the needs of the full spectrum of conflict is essential. We must ensure the ground combat vehicle requirements adequately reflect our lessons learned. Because of its size and importance, we must get the ground combat vehicle acquisition right. We will re-launch a ground combat vehicle modernization program, including a competitive contracting process, once we have reviewed the requirements, technologies, and acquisition approach. The lessons learned from ongoing operations and known threats will be paramount in informing the review of ground combat vehicle requirements. We are targeting a Materiel Development Decision in Fiscal Year 2010.

Furthermore, the Department will leverage the results of the FCS System of Systems Preliminary Design Review (PDR), conducted this month, and capture the design and development efforts (PDR report, PDR baselines, models, specifications, etc.) to-date in the Manned Ground Vehicle development for potential application to the ground combat vehicle modernization program.

Changes to Contract Fee Structure: There will be changes to the FCS contract fee structure as a result of the decisions summarized above. As part of those changes, we

will address concerns we have regarding the fee structure that gives the government little leverage to promote cost efficiency. We are very interested in making changes to the contract structure to more closely tie the company's profit to performance. The details on the plan to modify the contract to reflect the revised strategy will be developed over the next few months as the acquisition details of the decisions reflected in the Fiscal Year 2010 budget are matured.

FCS 2009 Review: The John Warner National Defense Authorization Act for Fiscal Year 2007 (PL 109-364 Section 214) required the Secretary of Defense to carry out an FCS milestone review to determine the correct program structure. The Secretary's decisions regarding the FCS program structure, as discussed above, are reflected in the Department's budget for Fiscal Year 2010. We will review the Army's progress in implementing those decisions later in 2009 and submit a report to the congressional defense committees which will contain the results of the Preliminary Design Review.

Specifics on implementation plans: We plan to continue efforts to further develop, produce, and field FCS developed capabilities in the form of early spin-outs to seven Infantry Brigade Combat Teams. This effort will be treated as a separate Major Defense Acquisition Program (MDAP) and will start as scheduled with a Milestone C decision in the first quarter of Fiscal Year 2010 following a Limited User Test in 2009. Input for this decision will be in accordance with DoD 5000.02, to include an approved Acquisition

Strategy, a Capability Production Document, a Technology Readiness Assessment, an Independent Cost Estimate, and other documents as appropriate.

Additional acquisition program(s) will follow to expand delivery of these capabilities to the remaining Army combat brigades by 2025. The Army will develop an acquisition plan to support acquiring these capabilities and present that plan for USD(AT&L) review in the Fall of 2009.

The contracting approach to acquiring the spin-out systems will include competition, fixed price contracts, and transition away from a lead system integrator as early as practical.

Aerial Common Sensor and Navy EP-X

An explanation of USD(AT&L) support for the acquisition of both the Army Aerial Common Sensor (ACS) and the Navy's EP-X aircraft.

Both the EP-X and ACS capabilities are critical efforts to maintain current warfighting capability and improve multi-intelligence (Multi-INT) based Intelligence, Surveillance, Reconnaissance and Targeting (ISR&T) solutions to the battlespace so as to increase combat survivability for, and mission effectiveness of, the joint force.

The EP-X ISR&T capability supports the Joint Force Commander's requirement to gain and sustain access to the battlespace within a maritime environment. It improves on the current capability of the Navy's aging fleet of EP-3E ARIES II aircraft, currently their only land-based signals intelligence (SIGINT) reconnaissance aircraft. EP-3E

service life issues drive the need to replace this capability to prevent ISR&T capability gaps in the future.

Similarly, the Aerial Common Sensor (ACS) program will provide the Army an improved capability to support the Brigade Combat Teams (BCTs) with multi-sensor data collection, as well as two-way interactive command and control. It will field advanced Reconnaissance, Surveillance, Targeting, and Acquisition/Intelligence, Surveillance and Reconnaissance (RSTA/ISR) capabilities, which will support Expeditionary Maneuver Forces' ability to detect, identify, locate and track targets in near real-time. ACS is intended to replace the Army's aging Guardrail Common Sensor system and incorporate the capabilities of the Airborne Reconnaissance – Low (ARL) systems. Guardrail RC-12 aircraft have been flying for more than 25 years and require significant cost to sustain.

In the near-term, the Department is focusing attention on the most pressing Combatant Commanders' needs through a combination of Military Service and OSD directed Quick Reaction Capabilities. These include increasing tactical capability with improvements to the Army's Task Force ODIN (Observe, Detect, Identify, and Neutralize) , including both manned and unmanned aircraft, and improvements to ground processing, exploitation and architecture improvements These rapid improvements provide a foundation to build upon to meet broader Army requirements balanced against the most likely risks the Department will face.

At this time, the Department is reviewing Military Service plans for Milestone A, and the associated analysis in the form of Analysis of Alternatives to provide affordable solutions. We believe the significant investment in recent theater operations can be

leveraged to exploit modifications to existing and emerging manned or unmanned ISR platforms, supplemented by new development efforts, as necessary. Our ultimate goal in the pursuit of both capabilities is to identify affordable program solutions that field multi-INT ISR&T capability to meet mission needs, leveraging heavily from existing infrastructure, and building upon both successful technology development and systems integration efforts. We anticipate bringing those program solutions to Materiel Development Decision (MDD) reviews by the end of the calendar year for decisions on entry into the acquisition process.

We will assess the ACS and EP-X capability needs as part of the Quadrennial Defense Review to ensure consistency with the Secretary's objective to rebalance the Department's programs in order to institutionalize and enhance our capabilities to fight the wars we are in today and the scenarios we are most likely to face in the years ahead.

Comanche and Armed Reconnaissance Helicopters Lessons Learned

Lessons learned from the failed Comanche and Armed Reconnaissance Helicopter acquisition programs applicable to future programs.

Important lessons can be learned from both the Armed Reconnaissance Helicopter and Comanche programs.

The Armed Reconnaissance Helicopter program was terminated after cost increases breached Nunn-McCurdy thresholds and the Defense Acquisition Executive determined that the requisite certifications could not be made.

The decision to terminate the Comanche program was based on the Army's need to address more expansive Army aviation shortfalls by reallocating available resources. In fact, the Army's re-focused effort to upgrade, recapitalize, or modernize over 70% of the Army rotary wing aircraft fleet is providing significant improvements in operations today. The deliberate termination of Comanche was a consequence of the need to address those aviation shortfalls.

Those Army aviation shortfalls led to a new program, the Armed Reconnaissance Helicopter, to address a critical inventory shortfall, the importance of which became increasingly evident during recent combat operations in Iraq and Afghanistan.

Both the ARH and Comanche programs shared a common objective -- to replace aging armed reconnaissance aircraft inventories. As such, manned, armed reconnaissance helicopters remain a persistent requirement.

The technical goals of the two programs were nearly opposites. Comanche incorporated cutting edge technology and advanced mission equipment packages that permitted significant performance improvement compared to fielded assets. The ARH objectives were to field new aircraft that matched Kiowa capabilities without any significant new technology. Improved performance was acceptable as a by-product of installing modern systems, but was not a program goal. The lesson from Comanche relates to assuring technology maturity prior to, rather than during the system development phase that leads to production. The lesson learned from ARH was the difficulty associated with adapting a commercial system for military use.

Both programs struggled with meeting program schedules. For the ARH program, schedule to field replacement aircraft was an inherent critical goal. The acquisition

strategy was tailored to meeting that goal; however, the plan to use a non-developmental aircraft with a simplified flight certification and installation of an existing mission equipment package could not be executed. In the case of Comanche, technology integration and aggressive schedule required restructuring the program five times. The lessons learned are consistent with recent initiatives incorporated into DoD Instruction 5000.02 to ensure better program definition and the selection of mature technologies before embarking on a full acquisition program.

Army Tactical Wheeled Vehicles

An explanation of USD AT&L involvement in developing an acquisition strategy for Army tactical wheeled vehicles.

The Department continues to modernize the Combat and Tactical Wheeled Vehicle (TWV) fleets by replacing older vehicles and combat losses with new procurement or upgrading existing vehicles through recapitalization. Plans include capability improvements by inserting advanced technologies into the current vehicles as quickly as possible.

During the last several years, ground-based conflicts such as Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF) have increased the demand for ground vehicles. The TWV fleet consists of over 300,000 vehicles and supports the joint forces with critical command and control, maneuver support and maneuver sustainment platforms. The sheer magnitude of the TWV fleet dictates that modernization will have

to be approached incrementally, incorporating decision points along the way. These decision points are based on numerous underlying factors: the availability of new technologies, fiscal realities, resource availabilities, questions of how many vehicles will return and when, as well as their condition when they return. USD(AT&L) provides guidance on individual acquisition strategies, budgets, technology availability and maturity, contracting, testing, and sustainment support. For example, in the Joint Light Tactical Vehicle (JLTV) acquisition, OSD directed the Army and Marine Corps to a Milestone A decision that resulted in competitive prototyping and multiple contractor awards. Consequently, the JLTV program is currently in a Technology Development phase where three teams are building multiple prototypes for testing. In addition, we will be gathering Cost and Software Data Reporting (CSDR) and Earned Value data in order to verify and predict actual vehicle costs.

We are striving to achieve a proper balance between support to current operational needs and that of transforming TWVs to attain future fleet capabilities. We're currently on our way to achieving this balance on the heavy and medium side by continuing to buy existing vehicles. We define our medium TWVs as intra-theater transportable (C-130) with 10,000 - 15,000 lbs payload and our heavy TWVs as inter-theater transportable with greater than 15,000 lbs payload. For light vehicles, we are moving to the Joint Light Tactical Vehicle (JLTV) because the HMMWV fleet is approaching the end of its useful service life. Our light TWVs are rotary wing transportable and have less than 5000 lbs payloads. We have optimized HMMWV survivability improvements to the extent that we can, but we have sacrificed mobility and payload in the process. The JLTV will buy

back those lost capabilities, as well as give us increases in reliability, maintainability, performance, and commonality.

In the interim, we have fielded the Mine Resistant Ambush Protected (MRAP) vehicle. The MRAP is a heavily armored vehicle capable of mitigating the effects of underbody mines and small arms fire threats. It provides survivable, safe, and sustainable vehicles for troops in theater. MRAPs do have limitations, particularly in the area of off-road mobility and transportability. MRAPs are outstanding vehicles for specific missions, and we are working with the services to ensure that this capability remains part of the current and future force architecture.

In short, in line with the Secretary's direction to rebalance programs, we are re-shaping our strategy for acquiring tactical wheeled vehicles to meet the needs of today's forces, while also anticipating and preparing for new risks and contingencies we are likely to face in the years ahead.

Body Armor Programs

An explanation of USD AT&L involvement in weight reduction and improved commonality efforts for body armor programs.

The physical protection of our troops in the current fight remains a high priority in the Department. Both the Marine Corps and the Army are executing aggressive programs to continuously enhance the protection of soldiers and marines. Since the start of the war in March 2003, the Marine Corps and Army have worked hard to ensure that all soldiers and marines going into harm's-way are equipped with the body armor they needed. This

commitment has continued through subsequent rotations, including improvements to small arms protective inserts, extremity body armor, new helmets, ballistic goggles, and more.

It is DoD policy that the procurement, management, and supply of clothing and textiles materiel shall be coordinated and performed on a DoD-wide basis by the Director, Defense Logistics Agency (DLA). Clothing and textiles materiel includes body armor. The DLA Director reports to the USD(AT&L) through the Deputy Under Secretary of Defense for Logistics, Maintenance, and Readiness. The Director, DLA will chair the Joint Clothing and Textiles Governance Board, which was mandated by DoD Instruction 4140.63, dated August 2008, and which includes representation from the Military Services and other DoD Components as appropriate. While the Secretaries of the Military Departments maintain responsibility for new clothing and textiles equipment acquisition, acquisition funding, and fielding, the Director as Chairman of the governance board will work closely with the Military Services to plan for, procure, store, and supply clothing and textiles at authorized levels to support the full spectrum of military operations. This arrangement will ensure collaboration and DoD-wide integration of clothing and textiles activities.

The Defense Logistics Agency (DLA) is in the process of formalizing this Board, to include drafting a charter, identifying membership, creating a governing structure, identifying joint integrated process teams, and implementing the directive as appropriate to orchestrate the end-to-end clothing and textile supply chain. DLA envisions establishing a specialized team to sustain body armor after the DoD Components, in

conjunction with DLA, assess item readiness for procurement transition at a time mutually agreeable to the respective parties. The requiring Components will continue to coordinate acquisition and fielding of new body armor solutions. This coordination ensures that as much of the needs of all DoD Components are met with each new body armor solution. When a Component determines that a design is stable, this team will transition mature body armor designs to sustainment.

The USD(AT&L) continues to support and oversee Science and Technology efforts conducted by the Army, Navy, and Marine Corps that are aimed at reducing the weight of body armor. These efforts include work on high performance ballistic fiber technology, ceramics and composites technologies, advanced materials research, modular body armor designs, biomechanics, as well as longer-term enabling technologies such as carbon nanotube fibers and layer-by-layer nanocomposites.

Small Arms Joint Assessment Team Findings

The findings and recommendations of the USD AT&L's Small Arms Joint Assessment Team regarding Army small arms acquisition strategies.

The USD(AT&L) established a Joint Assessment Team (JAT) in order to conduct an objective assessment of the Department's approach to satisfying small arms and ammunition capability requirements. The team includes participation from all DoD small arms stakeholders. The JAT is nearing the completion of its activities and will be ready to report its findings, conclusions, and recommendations to the USD(AT&L) in the

coming weeks. The JAT's preliminary findings include insights into the importance of training; the challenges in defining measurable, effects-based requirements; and the availability of commercial products that could meet the Department's needs. We will be pleased to share the JAT results with the committee after the JAT completes its activities and the report is provided to the USD(AT&L) for his approval.

Persistent Threat Detection System (PTDS)

The status of funding for the Persistent Threat Detection System.

The Persistent Threat Detection Systems (PTDS) are tethered aerostats equipped with multi-mission sensors to provide continuous surveillance, detection and communications in support of coalition forces.

There are eight PTDS Quick Reaction Capability systems currently deployed, all of which have been funded through supplemental appropriations. The current requirement is for 18 systems. We are awaiting the approval of a Fiscal Year 2009 supplemental funding of $140 million. This procurement funding will pay for the high dollar spares, reconstitution of the PTDS Systems Integration Lab (SIL) that is being deployed to support Operation Enduring Freedom, and procurement of up to seven additional PTDS systems toward Theater requirements. There is also $80 million in the Fiscal Year 2009 supplemental for operations and maintenance.

The PTDS program is a capability procured and supported specifically for the Theater of Operations. It is not a Major Defense Acquisition Program (MDAP).

Accordingly, it falls under the Army's purview for oversight. If this capability should become an enduring requirement, the USD(AT&L) will ensure that it is adequately addressed in accordance with the DoD Instruction 5000.02 and enters the Defense Acquisition System in the appropriate acquisition phase.

Conclusion

The Secretary of Defense said that this a reform budget, reflecting lessons learned in Iraq and Afghanistan yet also addressing the range of other potential threats around the world, now and in the future. It reflects the tough choices the Department has made about specific systems and defense priorities based solely on the national interest. Certainly you can see the implications of that reform and those tough choices in the budget request for Army acquisition programs.

We are grateful for the continued support of Congress which has been critical to ensuring our soldiers are the best trained and best equipped Army in the world. Thank you for this opportunity to testify on the Department's plans to continue to equip them for today's wars and tomorrow's challenges. I look forward to answering any questions you may have.

RECORD VERSION

STATEMENT BY

LIEUTENANT GENERAL N. ROSS THOMPSON, III
PRINCIPAL MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY
FOR ACQUISITION, LOGISTICS AND TECHNOLOGY AND
DIRECTOR, ACQUISITION CAREER MANAGEMENT

AND

LIEUTENANT GENERAL STEPHEN M. SPEAKES
DEPUTY CHIEF OF STAFF OF THE ARMY, G-8

BEFORE THE

SUBCOMMITTEE ON AIR AND LAND FORCES
COMMITTEE ON ARMED SERVICES
UNITED STATES HOUSE OF REPRESENTATIVES

ARMY ACQUISITION, RESET, AND MODERNIZATION PROGRAMS

FIRST SESSION, 111TH CONGRESS

MAY 21, 2009

NOT FOR PUBLICATION
UNTIL RELEASED
BY THE COMMITTEE
ON ARMED SERVICES

Introduction

Chairman Abercrombie, Congressman Bartlett, and distinguished Members of the Subcommittee on Air and Land Forces, we thank you for this opportunity to discuss Army Acquisition, Reset, and Modernization Programs in the Fiscal Year 2010 budget request. We are pleased to represent Army leadership, members of the Army acquisition workforce, and the more than one million courageous men and women in uniform who have deployed to combat over the last seven years and who have relied on us to provide them with world-class weapon systems and equipment for mission success. We thank Members of this Committee for your steadfast support and shared commitment to this goal.

We would like to begin by discussing those who are at the heart of everything we do: the Soldier. They are over a million strong – men and women, Active and Reserve – polished by seven years of war. We have more Soldiers deployed today than at the height of the surge. We now have a generation of Soldiers not seen in over 30 years: hardened by battle, having made sacrifices that most of us cannot begin to imagine, forever embodying the strength of this Nation. We know that they will continue to face a complex and ever-changing operational environment. And as we enter a period of transition – a shift from major operations in Iraq to Afghanistan – it is even more important that we carefully and closely manage how we are equipping our most precious asset, Soldiers. To that end, we are here today to discuss our refined plans for continuing to equip, reset, modernize the force and execute a responsible withdrawal from Iraq.

The Army Equipping Strategy

The Army has had the historical goal of fully equipping all units to their Modified Table of Organization and Equipment (MTOE). Because our operational demands outpace our ability to fully restore readiness, equipping to this standard is no longer possible. Since we began to develop modular formations and implement the Army Force Generation (ARFORGEN) model, we have evolved an equipping strategy to meet the variable needs of a force being managed under cyclic readiness and attain

"equipping balance." Equipping balance is Soldiers operating within ARFORGEN having the right equipment amounts, types, and modernization to meet their mission requirements – whether in combat, training to go to combat, or operating as part of the Army's generating force. The exception to this strategy is units conducting Homeland Defense and Defense Support to Civil Authorities missions: they will always be fully equipped.

To achieve balance, the Army Equipping Strategy encompasses three major lines of operation. The first one, the unit-focused main effort, is ARFORGEN-based equipping. The second is focused on using equipping sets to manage "friction." The third is targeted at institutional processes, and is called "building enduring readiness." This strategy provides a framework by which the Army, through full partnership between the Active Army, the Army National Guard, and the Army Reserve, can more effectively manage equipment to meet mission requirements.

ARFORGEN-Based Equipping

ARFORGEN-based equipping is defined by a series of equipping metrics or goals tied to each phase of the ARFORGEN cycle: Reset, Train-Ready, and Available. Units in reset should have minimal specific equipping expectations. However, this does not mean that they will not have equipment. Units will have much, but not all, of their individual equipment and other equipment that is not subject to reset outside of their units, such as at depots. Equipment will be delivered or fielded to units during the reset phase to prepare them for entry into the Train-Ready Pool. The delivery of this equipment will require careful synchronization with the arrival of new personnel into the unit and to ensure that the unit is prepared to receive, account for, store, and maintain the equipment. Also during this phase, the Reserve Component units will be properly equipped to meet their obligations in support of HLD and State and Territory Governors.

Within the next phase, Train-Ready, units can expect to have about 80 percent of their MTOE authorization. This is essential to provide the Army strategic depth and flexibility. The Army has long insisted that Soldiers "train as they will fight." The reduced equipping levels in the Train-Ready phase of ARFORGEN will require

Commanders to adapt and plan training with consideration of the expected levels of equipment fill. Because the equipping goals of the strategy provide some level of predictability, developing effective training should be achievable.

As units approach the Available phase, they will be filled to the full requirements for their assigned mission. Some equipment authorizations will be specific to that mission and will not reflect what is authorized in the unit's MTOE. This level of fill can be referred to as "90%+." The equipment needed to move to 90%+ may be provided before deployment, but in many cases the final equipping will be provided by Theater Provided Equipment (TPE) or other equipment sets. For those units without an assigned mission that enter the Available phase, they will be equipped to their full MTOE requirements.

Managing Friction

The second line of operation addresses "friction." It reflects the reality that a significant percentage of equipment is in strategic transportation or in reset and unavailable to the unit. The Army has done extensive studies which suggest that roughly 20 percent of Army inventory, within certain capabilities, can be characterized as "friction." Whether the equipment is providing needed utility in our equipping sets, fielded as a result of an operational needs statement, deployed with "ad hoc" formations, going through reset or is in transit over strategic distances, the equipment is not present in a unit whose MTOE or TDA originally justified the procurement. Success in the managing this friction is measured by how well the Army can see its own equipment inventories and make informed decisions about how to allocate that inventory to build Army readiness, how to meet the goals established in the ARFORGEN-based Equipping, and what new equipping goals will be feasible over time.

The Army will continue to plan for and procure equipment at the level defined by the "Army Acquisition Objective (AAO). This AAO represents the level of procurement the Army requires to fill all MTOE and TDA authorizations, including Army Prepositioned Stocks, as well as a small quantity of additional systems to provide maintenance floats and war reserve stocks, as well as dealing with friction. Some outside observers have

viewed the differing readiness expectations of the early phases of the ARFORGEN cycle to imply that we can achieve equipping efficiencies, and therefore buy equipment at a quantity less than the full Army requirement. This observation, however, fails to account for the impact of friction. It also fails to account for the requirement to provide some level of strategic depth above and beyond the dedicated forces in the Available pool. It is precisely those differing readiness expectations during the ARFORGEN cycle that allows the Army to provide the flexibility and agility necessary to address the "costs" of friction. Procuring any lower than the AAO would have significant impacts on the ability of the Army to respond to changing equipping requirements in active theaters (i.e., Operational Needs Statements), compromise our strategic depth, and weaken surge capability in the DoD industrial base.

Building Enduring Readiness

Building enduring readiness is the third line of operation. This line of operation is focused on Army management policies and structure. The Army has performed essential, creative, and effective work to develop new ways of dealing with equipping challenges in the current strategic environment. This line of operation is focused on capturing that good work and indoctrinating it and improving it. Success in this line of operation is measured by the Army's ability to improve the utility of equipping goals and guidance over time as we better understand how varying levels and types of equipment affect Army readiness in all phases of ARFORGEN. This will enable to the Army to bring resources and requirements into better synchronization with cyclic equipping readiness requirements.

Achieving Equipping Balance

These three lines of operation establish the primary vision and guidelines the Equipping Strategy. They will be operationalized primarily by the work of the Army Materiel and Readiness Enterprises, and in annually updated annexes with the Army Campaign Plan. Most importantly, they will be operationalized as we institutionalize the culture of equipment stewardship and ARFORGEN-based equipping.

Equipping an organization as large and complex as the Army requires sophisticated planning, synchronization, and execution. Success is primarily measured by increasing how well equipping contributes to overall Army Readiness, or achieving equipping balance. As we move toward the goal of increased readiness, Soldiers and Commanders should have clear expectations as to what level of equipment they will receive – and when. Commands and staffs should have a clear understanding of how to allocate equipment most efficiently and effectively to support Army training and readiness goals. Finally, the Army should be postured to ask itself the hard questions on how to best position Army Equipping for the future.

Reset

Just as important to readiness as ensuring Soldiers have the right equipment to fight is ensuring their needed equipment is returned from the Theater and properly reset. Reset is a cost of war, and it prepares our Soldiers and their equipment for an unpredictable future and evolving threats. I cannot overstate the importance of resetting units and rebuilding their readiness in a deliberate way – it is the difference between having a hollow force and one that's truly ready for whatever missions the Nation requires. If we pause for a moment, we will fall behind.

Over the past year, we have reset nearly 130,000 items of equipment, and we expect to sustain this pace for as long as we have substantial forces deployed. To stay on track, we require the FY09 OCO request of $3.5 billion for reset by July. The FY10 OCO request of $11 billion includes $7.9 billion in Operations and Maintenance and $3.1 billion for procurement. We will continue to work with Theater to determine the impact of the withdrawal from Iraq and its impact on FY10 funding.

Modernization

The adage that "we never want to send our Soldiers into a fair fight" is at the core of the Army Modernization Strategy. Modernization is the key to ensuring our Soldiers maintain a decisive advantage over whatever enemy they face, while improving their survivability. We are pursuing a strategy that rapidly fields equipment to the current

force; upgrades equipment for Soldiers going into combat and modernizes select systems; spins-out technologies, and modernizes Brigade Combat Teams. In every aspect of modernization, we leverage lessons learned from Soldiers in the current fight to speed fielding of enhanced capabilities to the force, and concurrently develops capabilities Soldiers need today.

We are transitioning immediately from a Future Combat System (FCS) Brigade Combat Team (BCT) Strategy to a BCT Modernization Strategy. To more rapidly develop the capabilities the Army needs for today's fights, our BCT modernization strategy is focused on building a versatile mix of mobile, networked BCTs that can leverage mobility, protection, information, and precision fires to conduct full spectrum operations across the spectrum of conflict. Such an approach will enable Soldiers to receive key "high-payoff" systems that are quickly integrated into BCTs.

With respect to the **Future Combat Systems (FCS)** program, the FY2010 President's Budget calls for us to 1) accelerate fielding of spin-outs to all 73 BCTs starting in FY2011; 2) halt the development and procurement of FCS manned ground vehicles; and 3) halt the development and procurement of the Non-Line-of-Sight-Cannon (NLOS-C).

The Army plans to halt the current FCS program after the System of Systems Preliminary Design Review. We will move from a modernization strategy focused on fielding 15 FCS BCTs and spin-outs of FCS systems, as mentioned earlier, to a BCT modernization strategy focused on building a versatile mix of networked BCTs and enablers that can leverage mobility, protection, information, precision intelligence and fires to conduct effective full spectrum operations across the spectrum of conflict.

This BCT modernization strategy will incorporate the valuable technological and network advances we have drawn from the FCS program, as well as the key technologies that are already in use in Iraq and Afghanistan (e.g., MRAP, biometric devices and intelligence systems), into our modular formations to enhance their full spectrum capabilities.

To fill our need to replace our Cold War era ground combat vehicles, we will develop a ground combat vehicle concept that incorporates the lessons of the past

seven years at war and the technological advances from the FCS program to build a vehicle capable of full spectrum operations. We plan to field this vehicle in five to seven years.

With regard to existing vehicle upgrades, the Army's combat platform modernization program is focused on standardizing 31 Heavy Brigade Combat Team (HBCT) sets with two variants of the **Abrams** tank and **Bradley Infantry Fighting Vehicle**, two of the Army's highest priority combat vehicle recapitalization programs. This modernization will provide 27 operational HBCTs and four strategic HBCTs. At present, the Army has nearly completed fielding modularized HBCTs, which gives every brigade a common structure. The short term modernization goal is to populate these brigades with only two variants of the Abrams and the Bradley – the Abrams M1A2SEP v2 is being paired with its partner the Bradley M2A3 and the Abrams M1A1AIM SA is being teamed with the Bradley M2A2ODS SA. This modernization plan aligns compatible combat platforms with common modular formations.

Stryker has planned procurement of 3,616 vehicles with 2,765 having been accepted to date. The Stryker program received a Full Rate Production decision on eight of 10 configuration variants, including the Infantry Carrier Vehicle, Reconnaissance Vehicle, Commander Vehicle, Mortar Carrier Vehicle, Fire Support Vehicle, Anti-tank Guided Missile Vehicle, Engineer Squad Vehicle, and Medical Evacuation Vehicle. The remaining variants – the Nuclear, Biological and Chemical Reconnaissance Vehicle and the Mobile Gun System – are in Limited Rate Production. The Secretary of Defense authorized, and the Army has funded, the procurement and fielding of seven Stryker BCTs to fulfill National security requirements. This will equip seven brigade-size units including maintenance floats, a strategic pool of ready-to-fight systems, Institutional Training Base, Test Articles, a Depot Repair Cycle Float Pool managed by the U.S. Army Materiel Command, other operational requirements, Nuclear Biological and Chemical Reconnaissance Vehicles to fill non-SBCT armored Chemical, Biological, Radiological and Nuclear requirements, and vehicles to support theater operations in Afghanistan.

Modernization of the Army's **Tactical Wheeled Vehicles** continues to be a critical step in providing the Soldier with the best possible protection, payload and performance in each vehicle of the fleet. We are working to balance competing factors, including support to current operations and future readiness while synchronizing our wheeled vehicle procurement, recapitalization and sustainment efforts.

We continue sending **Up-Armored High Mobility Multipurpose Wheeled Vehicles (UAH)** into theater and upgrading the vehicles' ability to protect our Soldiers. Initiatives such as Fragmentation Kits 6 and 7 are being procured for installation on UAHs to counter Improvised Explosive Device (IED) and sniper attacks. At the same time, we are investing in a myriad of technologies that will increase the platform's capabilities to engage the enemy. Systems such as acoustic gunshot detection systems, Remote Weapons Stations, and Long Range Advanced Scout Surveillance System are intended to increase the ability of our Soldiers to identify and engage the enemy.

In other areas of our Tactical Wheeled Vehicle (TWV) fleets, we plan to field within the next few months the first of approximately 6,000 medium vehicles built in line with our Long Term Protective Strategy (LTPS). These vehicles will be capable of easily accepting armor kits that provide better protection when needed and allow removal of the kits when the protection is not needed. We are working with the U.S. Army Training and Doctrine Command to finalize LTPS and ensure that the TWV fleet armoring requirements reflect the latest lessons learned. LTPS trucks will be fielded to the next deploying units to ensure that Soldiers receive the most capable armor protection during their deployments.

For survivability against the current threat, the Army delivered more than 10,600 Mine Resistant Ambush Protection (MRAP) vehicles to Iraq, Afghanistan and Kuwait in the last 15 months, of which nearly 9,400 are in operational use. During that time, we received insightful assessments from commanders and Soldiers regarding MRAP performance, capabilities, and recommended improvements. The next evolution of MRAP is the **MRAP-All Terrain Vehicle (M-ATV)**. A Request for Proposal was released in December 2008 and evaluation of vendor proposals is underway. One of

the Army's equipping tenets is to provide our Soldiers with the best available equipment and capabilities that technology will allow.

Our future plans include production of an affordable, sustainable, long-term system such as the **Joint Light Tactical Vehicle (JLTV)**, a family of vehicles with companion trailers capable of performing multiple mission roles that will replace the High Mobility Multipurpose Wheeled Vehicle starting in 2015. JLTV is a Joint Army/U.S. Marine Corps and U.S. Special Operations Command program designed to provide protected, sustained, networked mobility for personnel and payloads across the full range of military operations. JLTV will require a design that supports inherent and supplemental armor, scalable to mission.

The Army provides every Soldier in theater with **Interceptor Body Armor (IBA)**, a centerpiece program for the Army that is saving lives every day. IBA is a modular design that provides protection against fragmentation and small arms ammunition. The current Army body armor provided to Soldiers – **Improved Outer Tactical Vest (IOTV)** equipped with Enhanced Small Arms Protective Inserts (ESAPI) plates – meets operational requirements and is proven both in rigorous testing and in combat to be the best body armor in the world.

The Army has continually improved its body armor over time in response to emerging threats and warfighter needs. The current IOTV has three primary improvements: (1) a quick release, (2) less weight, and (3) more area coverage. The quick release allows removal of the body armor in case of an emergency, to avert drowning, or enable medical personnel ready access to an injured Soldier. In seeking the next generation of body armor, the Army continually collaborates with industry to meet Army requirements.

The Army is investing research, development, test, and evaluation funds to develop technologies at the system and component levels that can reduce the weight of body armor and for future developments of the next generation body armor. In the near term, the Army is looking into the use of plate carriers which offer a further weight savings by reducing the area of coverage of ballistic protection while enhancing Soldier survivability through increased mobility and operational effectiveness. Special

Operations Forces are already using a plate-carrier vest called the Modular Body Armor Vest (MBAV), and the Marine Corps is using a plate carrier called the Scalable Plate Carrier. The Army just completed an evaluation of the MBAV, and plans to issue MBAV with ESAPI to approximately 500 Soldiers deploying to Afghanistan, for an in-Theater assessment.

A Soldier Protection Demonstration – ongoing from May 11-20, 2009, at Yuma Proving Grounds in Arizona – is evaluating six plate carrier systems, including the Special Operations Forces MBAV and the Marine Corps Scalable Plate Carrier. The results of the demonstration will provide Army leadership with the information necessary to determine which plate carrier vest is required to meet the needs of units in Theater.

The latest advancement in Soldier protection is the introduction of the **Next Generation Small Arms Protective Inserts (XSAPI)**. An XSAPI plate weighs (depending on size) approximately 6-11 ounces more than an ESAPI plate but protects Soldiers against an emerging threat projectile. Currently, Headquarters Department of the Army approved a requirement for a contingency stock of 120,000 sets of XSAPI. XSAPI is currently in production with deliveries to Theater expected to be completed by November 2009.

The Army intends to conduct a **competition for a new carbine** in FY2010. The new carbine's requirement document is in staffing within the Army Staff and will soon be forwarded to the Joint Staff for Joint Requirements Oversight Council (JROC) approval. The draft Request for Proposal (RFP) will be released to industry as soon as the requirement document is approved. The release of a formal RFP will start the process for a competition that may result in a new carbine for the U.S. Army. Additionally, the PM continues a rigorous improvement program of the Army's current carbine, the Colt M4.

Joint Tactical Radio System (JTRS) is a DoD initiative to develop a family of software-programmable tactical radios that provide mobile, interoperable, and networked voice, data and video communications at the tactical edge of the battlefield. For the Army, JTRS will initially provide a tactical radio communications network for Spin Outs as well as Infantry, Heavy, and Stryker Brigade Combat Teams (BCTS) by

providing the tactical networking transport capability through scalable and modular networked communications. It will also provide the current force a mobile, ad hoc networking capability using, new advanced waveforms --- Soldier Radio Waveform and Wideband Networking Waveform.

The majority of the radios in the Ground Mobile Radio (GMR) Program and the Handheld, Man-pack and Small Form Fit Program will be procured for the Army. GMR will provide the Army a multi-channel (up to four channels) operation, allowing full functionality of each legacy radio it replaces. In addition, GMR will include an integrated global positioning system (GPS) capability based on the Selective Availability Anti-Spoofing Module-based GPS receiver with a Precise Time and Time Interval output.

HMS will provide a Scalable and modular Software Communications Architecture compliant networked radio frequency communication capability to meet Army Handheld, Man-pack (Mounted & Dismounted) and Embedded Radio requirements. The program will deliver a Handheld (2 Channel) radio, a Man-pack (2 Channel) radio, and various Small Form Fit radios for various ground sensors/unattended vehicles/unmanned air vehicles.

Warfighter Information Network – Tactical (WIN-T) is the transformational command and control communications system that provides the backbone wide area tactical network at echelons from theater through company in support of full spectrum operations. Following the program's restructure in 2007, the Army plans to field the latest networking capability to our Soldiers in four increments, as advanced technologies for enhanced communications becomes available. At present, the Army has already fielded Increment 1 to more than 50 percent of the total force giving our Soldiers a communications network that is largely satellite based, allowing for beyond line-of-sight communications and commercial Internet networking technology.

Increment 2 brings initial networking on-the-move capabilities embedded in various platforms to allow a fully operational and connected communications networking capability for our Soldiers (from brigade down to the company level). Increment 2 features include commercial routers, radios, and antennas that are technologically mature, with waveform technology optimized for high-capacity broadband networking

and support that enables high throughput while the unit is on-the-move. Increment 2 is expected to achieve a low rate initial production decision this August, with fielding expected to begin in 2011.

Increment 3 capabilities bring the full on-the-move capabilities that feature a single radio combining the line-of-sight and the satellite waveforms from Increment 2 in a military chassis which includes Global Broadcast Service receive capability. Air-tier development work planned under this increment brings even more robust communications, providing three tiers of communications that result in less reliance on satellite communications. Network Operations will continue to develop in both Increments 2 and 3 to achieve a fully integrated capability for planning, initializing, operating, and managing the entire on-the-move network.

WIN-T Increment 4 represents the last of the developmental program elements and will provide technology insertions to enable enhanced satellite communications protection.

With regard to **Army Aviation**, it has been five years since the Army with the support of Members of Congress and the Office of the Secretary of Defense (OSD) terminated the Comanche helicopter program to allow modernization of the entire Army Aviation fleet. In just those few years, we have seen steady and substantial progress. Today, nine of the 13 systems identified for funding at Comanche termination are in production. By Fiscal Year (FY) 2011, we will have started fielding all the aircraft programs, except the Armed Reconnaissance Helicopter. That means 69 percent of all these programs are in some form of production today – low, initial, or full rate production, with 54 percent in full rate production.

These programs will contribute directly to overseas contingency operations by priority fielding to units preparing to deploy to combat operations or currently deployed in support of combat operations. We want to emphasize that every one of these programs will be fielded to units next in rotation to the warfight or units now supporting the warfight. Currently operating in combat operations are the CH-47F and UH-60M helicopters, the Sky Warrior Alpha, Sky Warrior Block '0', and Raven Unmanned Aircraft Systems and a pre-production variant of the Micro Air Vehicle spun out of the Future

Combat Systems. The Light Utility Helicopter has enabled the return of UH-60s to the warfighting fleet and has allowed retirement of UH-1 and OH-58s in both the Active and Reserve Components.

The Army Aviation fleet is performing extremely well in Iraq and Afghanistan under exceptionally challenging and dangerous conditions. More than 3 million flight hours have been flown since hostilities began in Iraq in March 2003. Our monthly operational tempo (OPTEMPO), depending on the aircraft type, is three to five times higher than normal peacetime mission requirements. Despite these demands, our mission capable rates met or exceeded the 75 percent standard established for Army aircraft.

These numbers have been achieved as the demand for aviation forces and platforms has continued to increase. While numbers of troops deployed ebbs and flows, the demand for aviation forces continues to grow and will be at its peak as a sixth aviation brigade will deploy to theater. Army Aviation has an essential role in overseas contingency operations, and will continue to perform that role until the last Soldier comes home.

The Army is currently managing a number of major aircraft programs that provide the current capability to the commanders in the field, and will provide enhanced capability in the future.

The **UH-60 Black Hawk** is the work horse of Army Aviation. The current UH-60 fleet is comprised of 1,748 aircraft, including 951 UH-60As (produced between 1978 and 1989), 689 UH-60Ls (produced since 1989) and 108 new UH-60Ms. The Black Hawk helicopter is in its 32nd year of production. To date, the Army has employed seven multi-year, multiservice production contracts. The current contract extends from FY2007 to FY2011 and includes Navy H-60 aircraft, as well as Foreign Military Sales aircraft.

The ongoing UH-60A to UH-60L recapitalization program extends the service life of the Black Hawk program while providing the improved capability and safety margin of the UH-60L. The Army plans to induct 38 aircraft in FY2009 and 228 aircraft between FY2010 and FY2015.

The UH-60M program incorporates a digitized cockpit for improved combat situational awareness, lift, range, and handling characteristics for enhanced maneuverability and safety. These improvements also extend the service life of the aircraft. The Army plans to improve the safety of the UH-60M platform with a Preplanned Product Improvement upgrade through the installation of digital source collectors, and improved handling capabilities provided by Fly-By-Wire technology, plus increased rotorcraft interoperability through the integration of a Common Aviation Architecture System shared with the CH-47F Chinook and Special Operations helicopter fleets. Additionally, the Army intends to pursue a Common Engine Program shared with the AH-64 Apache fleet.

The **AH-64D Apache** is the world's most lethal and survivable helicopter. It is the most feared weapon system in the current theater of operations. Continued modernization, including the ongoing fielding of the Modernized Target Acquisition Designation Sight/Pilot Night Vision Sensor, is critical to maintaining that position.

The Block III Apache is essential to the Army's current and future forces. It is the Army's only manned aviation platform able to meet the network centric requirements of the future force as well as Joint Force requirements. It is also the first aircraft designed for and fully capable of complete control of Unmanned Aerial Vehicles (UAVs). This characteristic fully enables the synergistic manned-unmanned teaming between attack aircraft and UAVs that is showing such promise on the battlefield. The Apache Block III System Development and Demonstration remains on schedule and within budget. All Acquisition Program Baseline milestones have been met or exceeded to date. A Longbow Apache, with Block III technologies installed, performed well in the recent Future Combat Systems Experiment 2.1/Joint Expeditionary Force Experiment Spiral 3.0 and was the only Army aviation platform participating.

High OPTEMPO in Iraq and Afghanistan, coupled with repeated deployments of Longbow units, have consumed an inordinate percentage of the Apache airframes' useful life. The majority of aircraft will enter Block III remanufacture with less than 50 percent of the airframe's design life (10,000 hours) remaining. Block III remanufacture

is an ideal opportunity to insert new airframes into the Apache fleet at minimal additional cost, providing 100 percent of the design life back to the fielded unit.

The Army is on track with its commitment to modernize the remaining AH64A battalions in the National Guard. The Army will remanufacture two of these battalions in FY10 and 11 leaving only two AH64A battalions in the Army. The modernization plan for the last two battalions of AH64A will be dependent on the outcome of the 'Analysis of Alternatives' for the Armed Scout Helicopter.

The **Light Utility Helicopter** (LUH) program is successfully executing the Army transformation strategy and meeting all cost, schedule, and performance targets as specified in the acquisition strategy. The aircraft has been fielded to the National Training Center at Fort Irwin, California; the Joint Readiness Training Center at Fort Polk, Louisiana; and the U.S. Army Transportation Corps at Fort Eustis, Virginia. Additionally, the LUH has been fielded to Army National Guard (ARNG) units.

The Army is procuring 345 aircraft with a firm fixed price contract. To date, the Army has purchased 128 UH-72 Lakota aircraft -- 58 aircraft have been delivered and more than 54 fielded. The UH-72A has demonstrated exceptional readiness rates that exceed 90 percent. The Lakota is currently conducting Medical Evacuation, VIP, and general support missions. It has also been fielded to ARNG units to conduct disaster relief, counter drug operations, and institutional training missions.

Production of the LUH is transitioning from Germany to Columbus, Mississippi. Forty aircraft were produced in Germany and the remaining 305 will be produced in the United States as part of a three phase production duplication plan. The complete domestic production line operation has begun and will be fully transferred to Columbus by the end of 2009. Increasing domestic content is also part of the production duplication plan and is expected to exceed the 65 percent goal.

The ARNG is pursuing funding to procure, apply, and sustain a Mission Equipment Package – searchlight, Forward Looking Infrared, situational awareness/command and control moving map displays, hoists and Medical Evacuation kits to support the Security and Support battalions in their support of the homeland security/homeland defense/counter-drug mission.

The **CH-47 Chinook** is a proven heavy-lift helicopter, supporting our Soldiers every day in Iraq and Afghanistan and conducting missions that no other helicopter on the battlefield can accomplish. It is the Army's only helicopter capable of intra-theater cargo movement of payloads up to 16,000 pounds. The Army is fully committed to the procurement of 513 Army CH-47F and U.S. Special Operations Command MH-47G aircraft. To date, the Army has taken delivery of 61 CH-47F and 49 MH-47G aircraft, has an additional 222 CH-47F and six MH-47G aircraft on contract, and has fielded four operational CH-47F Chinook units – two of which have deployed to the theater of operations.

The U.S. Army signed a five year firm-fixed price contract for 181 CH-47F Chinook aircraft that will achieve a minimum savings of $450 million or 11 percent. The multi-year contract provided for 34 option aircraft, 10 of which were executed with the basic contract. The CH-47F Chinook program is on-cost, on-schedule, and has met or exceeded all performance requirements.

The Army and the Department of Defense remain committed to the requirement for a manned **Armed Scout Helicopter** (ASH) capability and the need to deliver this capability to our Soldiers in a responsible and timely manner.

As a capability bridging strategy, the Secretary of the Army approved a strategy to maintain the Armed Reconnaissance Helicopter (ARH) funds within Army aviation and redistribute them into three primary efforts: (1) sustaining and improving the OH-58D Kiowa Warrior; (2) modernizing the ARNG AH-64A fleet; and (3) conducting a competition for and procuring the capabilities associated with the future ASH. The Vice Chief of Staff of the Army and the Army Acquisition Executive jointly signed a Memorandum for the Record codifying this strategy.

To support the potential procurement effort, the Army is conducting a bottom up review of the armed reconnaissance capability requirement to include a thorough assessment of the specific requirements identified for the initial ARH program, as well as initiating a formal 'Analysis of Alternatives'. The analysis will cover the entire spectrum of options – from the potential use of UAVs to the use of a manned/unmanned aircraft mix to the procurement of a new manned platform.

Due to the time required to complete these assessments, the Army is currently evaluating what additional enhancements and life extension work, if any, will be required to continue to safely sustain the Kiowa Warrior fleet until a replacement is procured.

The U.S. Army Audit Agency completed an official After Action Review to identify lessons learned from the termination of the ARH program. The results are being evaluated for assimilation into Army acquisition programs and for use in developing an acquisition strategy to meet the manned ARH requirement.

The **Joint Heavy Lift** (JHL) was intended to be a Vertical Take Off and Landing heavy-lift aircraft supporting mounted vertical maneuver. The JHL requirement has been incorporated into the U.S. Air Force lead **Joint Future Theater Lift** (JFTL) effort. The JFTL requirements document is under development. The envisioned aircraft will provide a heavy lift (20+ ton) payload capability at 200+ miles, aerial sustainment to the point of need, the ability to operate over tactical and operational distances to/from land or sea bases, and the ability to self-deploy.

The **Aerial Common Sensor** (ACS) program is the Army's future multi-intelligence, manned, fixed-wing, Reconnaissance, Surveillance and Target Acquisition/ISR system that carry multiple highly accurate intelligence sensors, processing tools, air/ground/satellite communications, and onboard operators/analysts. This unique combination of attributes provides the ground tactical commander an assured near-real-time operational view of unprecedented clarity enabling tactical ground forces to operate at their highest potential. ACS is awaiting Defense Acquisition Executive approval to release the Technology Development (TD) Request for Proposal. A successful source selection will result in the award of two competing TD contracts which call for preliminary system design and prototyping efforts. The JROC approved the ACS Capability Development Document in November 2008.

Unmanned Aircraft Systems (UAS) are a rapidly growing capability that Army Aviation has helped to develop. As an example of how quickly this capability has grown within the Army, when Operation Iraqi Freedom (OIF) began in March 2003, there were only six aircraft deployed in support of that operation. Today, we have more than 1,100

air vehicles in either OIF or Operation Enduring Freedom (OEF). This capability continues its fast growth. For example, it took the Army 13 years to fly the first 100,000 hours of UAVs. It took us less than a year to fly the next 100,000 hours, and we fly more than that each year in theater.

The Extended Range/Multipurpose (ER/MP) UAS, **Sky Warrior**, will be deployed and integrated with the Combat Aviation Brigade, with immediate responsive Reconnaissance, Surveillance, and Target Acquisition to the division commander.

ER/MP can carry multiple simultaneous payloads to include: (1) Electro-optical/Infrared/Laser Designator; (2) Synthetic Aperture Radar; (3) Communications Relay; and (4) Weapons. ER/MP UAS will use both Tactical Common Data Link and Satellite Communications data links. The program is on track to deploy a Quick Reaction Capability to OIF in July 2009 and another in summer 2010. The Program of Record will field its First Unit Equipped in FY2011.

The hand-launched and rucksack portable **Raven Small Unmanned Aircraft System** (SUAS) provides the small unit with enhanced situational awareness and increased force protection through expanded reconnaissance and surveillance coverage of marginal maneuver areas. Commanders at the company level have greater ability to shape over-the-hill operations with their own dedicated UAS.

The Raven is fielded to the U.S. Special Operations Command, the U.S. Marine Corps, the U.S. Air Force, and the ARNG to provide increased capabilities for domestic mission responsibilities as required. There are over 1,318 Raven SUAS fielded and more than 300 Raven SUAS supporting Soldiers in Iraq and Afghanistan. The program is meeting all cost, schedule, and performance targets.

The **Shadow** Tactical Unmanned Aircraft System (TUAS) provides DoD and coalition partners with a high quality, reliable, and interoperable UAS. Currently, units are flying at an OPTEMPO of up to three times what was originally envisioned for the system. While the OPTEMPO remains high, the accident rate has been reduced each year.

The U.S. Marine Corps is partnered with the Army for purchase of systems, support equipment, and performance based logistics services. Through this approach,

economies of scales provide efficiencies for cost, commonality, and joint operations. Currently, 66 systems have been delivered and fielded to the Army and six to the Marine Corps. The readiness rate of the Shadow system averages above 94 percent. As of March 2009, the total hours flown by Shadow in support of theater operations were 352,101 hours, out of a total program history of 385,118 hours flown. More than 90 percent of all Shadow hours flown since 2000 have been in support of theater operations.

The **Future Combat Systems Class I and Class IV UAS** will provide significantly enhanced networked capabilities to the force. Class I systems are ducted fan air vehicles with a single integrated gimbal consisting of an electro optical camera, infrared camera, laser range finder, and laser designator. The Class I mission is to provide reconnaissance, surveillance, and target acquisition (RSTA) to the platoon and company. The system's hover and stare capability allows it to stay in one place for an extended period of time while its maneuverability allows it to operate in complex environments that would be impractical for current force fixed wing UAS.

The Class I leverages technologies developed by the Defense Advanced Research Projects Agency as part of the gas Micro Air Vehicle (gMAV) program. The gMAV has interchangeable electro optical and infrared camera and is currently used in OIF by the 56th Stryker BCT. The Class I block 0, a gMAV variant, is in development and testing by Program Manager FCS as part of the Spin Out effort.The Class IV UAS is a brigade-level Vertical Take Off and Landing UAS that provides the brigade commander with a day/night and adverse weather RSTA and communication relay capability. The Class IV UAS has an endurance of 5.3 hours with Vertical Take Off and Landing ability at unprepared and unimproved landing zones. The Class IV carries multiple sensors and communications suites simultaneously and performs onboard processing and sensor cross-cueing while providing full motion video and sensor data using the FCS network's communications. Class IV missions include: RSTA, minefield detection, ground moving target indication, wide area surveillance, wideband communication relay, meteorological survey; and, Manned/Unmanned teaming with manned aviation. Currently there is no Vertical Take Off and Landing UAS fielded.

The **Persistent Threat Detection System** (PTDS) is a Quick Reaction Capability program with a tethered aerostat equipped with a high resolution electro-optic/infra-red camera system. It is integrated with existing radar, infra-red, and acoustic systems that cue the aerostat payload to provide near real-time eyes on target for continuous surveillance and detection in support of missions in theater. Currently, a total of five systems have been deployed in OEF and three in OIF.

Constant Hawk is another successful Quick Reaction Capability program supporting counter improvised explosive device (C-IED) efforts in OIF. It provides airborne persistent surveillance capability that allows analysts to backtrack a sequence of events, detect the event and identify its origin. We currently have four systems deployed in OIF as part of Task Force Observe, Detect, Identify, Neutralize (ODIN). Due to its demonstrated capability and successes in Iraq, we have three Constant Hawk systems programmed for Task Force ODIN-Afghanistan.

Other Critical Equipping Topics

Equipping the National Guard. The Army has made significant progress in equipping the Army National Guard (ARNG) to enhance their role as an operational reserve. In 2001, ARNG funding was $1 billion. Since then, with the great support of the Congress, ARNG funding has increased significantly. The average funding for National Guard Equipping from FY02-13 is anticipated to be around $3.9 billion per year, a 290 percent increase. In addition, a bow wave of equipment is beginning to be delivered to the National Guard: from January 2009 to December 2010, almost 600,000 pieces of equipment are projected to be delivered. So far this year, over 90,000 pieces have been fielded to the ARNG.

Similarly, the ARNG has seen an increase in capabilities through modernization. For instance, the UH-1 Huey has long been a work horse of the ARNG. Now, with the increased numbers of Blackhawk and fielding of the new Light Utility Helicopter, the last Huey is expected to leave the ARNG by the end of FY09. Another example is the famous "deuce and a half," or 2 ½ ton truck, which has been used for decades by the ARNG for a variety of cargo missions. In 2001, the ARNG had 16,504, or 62 percent, of

these vehicles in the Army. We anticipate that the last 2 ½ ton truck will leave the ARNG by FY11.

Finally, due to increased levels of equipping the 2009 Hurricane Season is the first season since 2004 for which the ARNG has assessed itself as having sufficient equipment on hand to provide the necessary response. This is being done without relying on loaned equipment from the Active Component or the Army Reserve.

Just like the Active and Army Reserve components, however, shortages in equipment remain. This budget request continues progress towards resolving these shortages but it does not complete the requirements. According to the ARNG, their most critical shortages remain in: Army Battle Command Systems, medium trucks, and various Combat Service Support items as such as water purification systems, generators, material handling equipment, and field feeding systems.

Achieving Transparency. Transparency is the process that provides accountability and traceability of a specific piece of equipment, from budget submission through funding authorization and on to procurement and delivery to Army users. One would think that this would be a fairly straightforward task. It is not. Today, we have individual financial and acquisition systems built to control and track funding and contracted amounts. Further, we have property accountability systems designed to keep track of property, but are not linked to the funding source. The gaps between these disparate systems are wide and difficult to link. However, we are on a deliberate path to obtain full transparency. Right now, the Army is collecting data manually and through selected systems to gather the needed information. Our first full set of data is expected to be prepared by July 2009. For the long-term, we will adjust automation systems and adapt processes to support transparency reporting. The Army is fully committed to mastering the challenge of achieving full transparency in the equipping process.

Challenges in Equipping the Force

We are entering into a delicate period of transition between theaters that will either result in the restoration of the force or creation of equipping challenges similar to those faced at the beginning of this war. As the Nation begins a responsible drawdown in Iraq, a critical element of restoring readiness and building strategic depth is the return and restoration of U.S. equipment. Diversion of U.S. equipment that contributes to the Army MTOE will have a negative effect on Army readiness. If it is the National will for the Army to transfer equipment to the Iraqi forces, compensation for those items is needed for replacements so we do not further degrade readiness. For example, there are over 19,000 tactical wheeled vehicles in TPE in Iraq. These vehicles would address some of the truck shortages we have in non-deployed forces. Once the equipment is distributed, it will have a favorable impact on non-deployed readiness – an area of great concern to us.

Of more immediate concern to the Army is the timely passage of the Overseas Contingency Operations supplemental for the remainder of this fiscal year. At the current rate of spending, we will exhaust during the month of July all funds to pay active duty Soldiers and all funds for the day-to-day operation of the Army.

Closing

Modernization is providing our Soldiers with leading-edge technologies and advanced capabilities to fight the wars we are engaged in today while simultaneously preparing them for future threats. It is our duty to ensure that our Soldiers are equipped for mission success, and we thank you for your strong support and demonstrated commitment to this goal.

WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING

MAY 21, 2009

RESPONSES TO QUESTIONS SUBMITTED BY MR. WILSON

General THOMPSON. The M4 carbine has $20.5 million budgeted in FY10. [See page 15.]

General THOMPSON. Soldier protection is our number one priority. The M-ATV requirement for safety and survivability regarding the doors is defined by the Soldier's ability to ingress/egress the vehicle when the vehicle is without power. A complete safety assessment and human factors study was performed to ensure the vehicle met the ingress/egress requirement. The results were confirmed by independent test and evaluation. The tests concluded that the M-ATV base vehicle met the requirement without an additional power assist system for the doors. However, when the add-on armor used to protect against Explosively Formed Penetrators (EFPs) was installed, the EFP-armored vehicle did not meet the ingress/egress requirement. Consequently, the EFP armor kit provides a door equipped with a power assist to meet this requirement. The power assist door incorporates several safety mechanisms including sensing devices to prevent injuries to Soldiers while closing the door. The power assist door also contains a dedicated battery for operation of the system which is not dependent on the base vehicle but is recharged during operations of the vehicle. The power assist can open the doors, even when the vehicle is on its side, as long as the doors are not combat locked, blocked, or jammed. The doors can be opened 50-60 times before requiring a battery charge. [See page 16.]

RESPONSE TO QUESTION SUBMITTED BY MR. MARSHALL

General SPEAKES. The Army's unfunded requirements list included two items that fall under the categories of test sets and diagnostic equipment, and test infrastructure items. The Army requires $47 million in Other Procurement, Army (OPA), under Test Measurement and Diagnostic Equipment for the life cycle replacement of 2,412 Maintenance Support Devices. These man-portable general purpose automatic testers are used to verify the operational status of weapon systems and to isolate faults within the systems. Within the category of Army Test Infrastructure, $31 million in OPA is required to accelerate new capabilities to the warfighter and reset the accelerated wear of test infrastructure. [See page 17.]

RESPONSE TO QUESTION SUBMITTED BY MR. KISSELL

Mr. AHERN. The Marine Corp's four "Angel Fire" capable C-12s returned from the Iraqi Area of Responsibility to CONUS in April 2009. The platform carrying the "wide area persistent surveillance" capability was an unpressurized King Air A90; one of the oldest King Air versions in service today. All four Angel Fire platforms returned to CONUS and were dissembled in April 2009 based on a January 2009 Marine Corps Central Command message stating the capability was no longer required in theater. Angel Fire is 2007 vintage technology and is being replaced by newer capabilities integrated onto more capable platforms, such as the King Air 350. One such capability is the Army's "Constant Hawk," which will have the latest wide area persistent surveillance technology available and will deploy to Afghanistan in 2QFY 2010. Beyond that the Air Force continues to procure and deploy Liberty Extended Range King Air 350s (C-12s) to provide rapid ISR capability. [See page 14.]

RESPONSE TO QUESTION SUBMITTED BY MR. HUNTER

General THOMPSON. The Army concluded a functional solutions analysis for safe operations in degraded vision environments (DVE) and complex urban terrain. The functional solutions analysis report recommends multiple materiel and non-materiel solutions to this problem.

Training tasks that capitalize on current modernized aircraft equipment, upgrades to existing equipment, and new materiel approaches to the DVE challenge

are identified to resolve many gaps in DVE flight profiles. This report provides the analysis to establish capabilities requirements documents for DVE solutions.

The Army Research and Development program has a technology effort under development in Program Element 0603710A, Night Vision Advanced Technology, to support helicopter pilots during landing and take-off operations while in brownout conditions. In fiscal year 2010 the effort is funded at $4.3 million dollars. This effort employs a number of multispectral sensors distributed around a UH-60/CH-47, providing imagery to both pilots and crew members via an optical head tracked display.

These head tracked infrared sensors will allow multiple pilots and crew members to view imagery all around the aircraft providing multiple sets of eyes the ability to track aircraft position relative to the ground and other objects that may require avoidance and also the ability to see through dust. This enhances crew coordination in degraded visual environments (e.g., one pilot can focus on front left objects say a rock or tree, while the other pilots can focus on front right side scenery, and crew members in the rear cabin can concentrate on the trail wheel and objects directly underneath the aircraft, while all can be communicating with each other as to the relative closing rate of the aircraft with objects in their area). Everyone can also view what the others are seeing if need be.

Sensor tests schedule: Ground and flight testing will be conducted before this calendar year 2009 ends. (November 2009 and December 2009). [See page 26.]

○