

**HEARING TO RECEIVE TESTIMONY ON ARMY
MODERNIZATION IN REVIEW OF THE DE-
FENSE AUTHORIZATION REQUEST FOR FIS-
CAL YEAR 2009 AND THE FUTURE YEARS
DEFENSE PROGRAM**

Thursday, April 3, 2008

U.S. SENATE
SUBCOMMITTEE ON AIRLAND
COMMITTEE ON ARMED SERVICES
Washington, DC.

The subcommittee met, pursuant to notice, at 3:15 p.m., in room SR-222, Russell Senate Office Building, Hon. Joseph I. Lieberman, chairman of the subcommittee, presiding.

Committee Members Present: Senators Lieberman, Inhofe, and Cornyn.

Committee staff members present: None.

Majority staff members present: Daniel J. Cox, Jr., and William K. Sutey.

Minority staff members present: Michael V. Kostiw, Republican Staff Director, William M. Caniano, Professional Staff Member, Paul C. Hutton IV, Research assistant, and Gregory T. Kiley, Professional Staff Member.

Staff assistants present: Benjamin L. Rubin and Brian F. Sebold.

Committee members' assistants present: Frederick M. Downey, assistant to Senator Lieberman, Jon Davey, assistant to Senator Bayh, M. Bradford Foley, assistant to Senator Pryor, Gordon I. Peterson, assistant to Senator Webb, Anthony J. Lazarski, assistant to Senator Inhofe, Nathan Reese, assistant to Senator Inhofe, Todd Stiefler, assistant to Senator Sessions, and Brian Polley, assistant to Senator Cornyn.

OPENING

**STATEMENT OF HON. JOSEPH I. LIEBERMAN, U.S. SENATOR
FROM CONNECTICUT**

Senator LIEBERMAN. The hearing will come to order.

I apologize both to our witnesses and, of course, to my colleagues. I blame this totally on the acting ranking member of the committee, the former chairman, Senator and squire from Virginia, John Warner, who engaged me in conversation on the floor during this vote. I apologize.

Before we begin, I want to take a moment to embarrass Dan Cox—or to recognize Dan Cox. That is what I meant. [Laughter.]

Senator LIEBERMAN. Yes, okay. Dan is a longtime staff member of this subcommittee and, if I may say so, a true patriot who has dedicated his entire adult life to public service. He came to this committee after a distinguished career in the U.S. Army and has staffed the members of this subcommittee ably for the past 11 years.

He is now leaving the U.S. Senate family for a position in private industry, which is not unrelated to the work that we do here, and perhaps, after the passage of a year or so, we may bump into him again.

But this is the last hearing of this subcommittee for Dan, and I did not want this occasion to go by without thanking him for his service to our country, for his service to the Senate, for his service to this committee and subcommittee, and to tell him what a pleasure and an honor it has been for me to work with him. Thank you, Dan. [Applause.]

Senator LIEBERMAN. Today we welcome Lieutenant General Stephen Speakes, Deputy Chief of Staff, G-8, U.S. Army, and Lieutenant General Ross Thompson, Military Deputy to the assistant Secretary of the Army for Acquisition, Logistics, and Technology.

This is the second Airland Subcommittee hearing this week which will focus on the urgent and important task of answering the big question, which is what kind of Army do we want to have for the future.

The Army recently released Field Manual 3-0, Operations, its new Capstone Doctrine, which is its answer, if I can put it that way, to that big question. This new doctrine places the conduct of stability operations on the same operationally required level as conventional warfare, and that is very significant.

Today's hearing is in some sense a continuation of Tuesday's hearing. We want to ask about how the Army is adapting its program to the requirements that have emerged from this new Capstone Doctrine.

The fiscal year '09 Army budget request was developed over a year ago and delivered to Congress before FM 3-0 was released on March 7th of this year. And the Army's unfunded priority list does not appear to support either the Army's priorities, nor does it address the additional need for resources. The budget request is heavily tilted toward resetting, modernizing, and transforming the existing heavy force.

So we need to find out whether it includes enough money to fund the changes that the new doctrine would seem, logically, to require, and we need to find out whether we should begin to make changes to either the programs or the priorities that have been requested.

Today, we also look forward to hearing from the witnesses and receiving from them an update on the Army modernization plan with emphasis on transformation to the future combat systems, Army aviation modernization, and the individual soldier programs, weapons, mobility, and protection and situational awareness programs, which will give our troops engaged in both irregular warfare, conventional warfare, and stability operations capability equivalent to the best that we would want them to have.

I look forward to your testimony. Again, I apologize to my colleagues, and I would call at this point on my distinguished colleague and ranking member, Senator Cornyn.

STATEMENT OF HON. JOHN CORNYN, U.S. SENATOR FROM TEXAS

Senator CORNYN. Well, thank you, Mr. Chairman. Thanks for calling this hearing, and I join you in welcoming Generals Speakes and Thompson to this hearing and expressing my appreciation, along with all of us, for your many years of distinguished service to our Nation.

The transformation and modernization of our Army is vital to maintaining our technological edge over potential adversaries, providing better protection for our soldiers and giving our men and women in uniform significantly improved capabilities to accomplish their mission. These are matters of highest priority.

In testimony before the full committee in November and again in February of 2008, Secretary Geren and General Casey testified that our Army remains the best led, best trained, and best equipped army in the world, but is out of balance. They described a plan to return the Army to a proper balance. The plan stressed four imperatives: sustain, prepare, reset, and transform.

Today's hearing follows logically, as the chairman said, on the subcommittee hearing we had on the new Army field manual and provides an opportunity to explore in greater detail the Army's plan for transformation and modernization. An area of special interest to the subcommittee will be the future combat systems. This multi-year, multi-billion dollar program is at the heart of the Army's transformation efforts. It is also the Army's major research, development, and acquisition program. The witnesses will be asked about the importance of FCS, the cost of the program, the characterization that FCS is high risk, and the challenge of networking all of the FCS subsystems together, and the testing of the future combat system technology currently ongoing at Fort Bliss in El Paso, Texas.

In addition, the witnesses will be asked, among other things, about how the Army's modernization program will meet Army Reserve and Army National Guard requirements, progress toward resetting all components of the Army, how Army modernization and transformation plans will impact future requirements for strategic and tactical mobility, the Army's requirement for joint cargo aircraft, the modernization of the Army's helicopter fleets, mine-resistant ambush protection vehicles, whether or not the Army's transformation and modernization plans are in concert with the new Army doctrine, and specifically whether or not the Army's modular organization in FCS can meet the Army's requirements for full spectrum operations as described in the new field manual.

In closing, I would like to say that though the focus of this hearing will be on Army programs and systems, it is the individual soldier identified by his or her courage, dedication, and loyalty who is the core of our Nation's military forces.

Mr. Chairman, thanks for convening the hearing and I look forward, along with you, to hearing the testimony.

Senator LIEBERMAN. Thanks, Senator Cornyn.

Normally the committee practice is to limit opening statements to the chair and the ranking, but Senator Inhofe, if you would like to add anything, I feel that I now owe you because I was 15 minutes late.

Senator INHOFE. No. You do not owe me a thing. I am anxious to hear the opening statements, and I have a couple of questions and areas I want to pursue having to do with FCS. So we can just get on with the hearing.

Senator LIEBERMAN. Good. Thank you.

General Speakes, thank you for being here. We look forward to your testimony now.

STATEMENT OF LIEUTENANT GENERAL STEPHEN M. SPEAKES, USA, DEPUTY CHIEF OF STAFF, G-8, UNITED STATES ARMY

General Speakes: Mr. Chairman Lieberman, Ranking Member Cornyn, and distinguished members of the committee, on behalf of the Army and our great soldiers, Lieutenant General Thompson and I thank you for the opportunity to appear in front of you today to discuss Army modernization in all of its aspects, as you have illuminated in your opening statements.

I would like to submit our draft written statement for the record, and I would also like to ask that we be permitted to make a short opening statement to put in perspective the questions you have—

Senator LIEBERMAN. Please do. We will accept your full statement, and it will be printed in the record.

General Speakes: Thank you, sir.

Our modernization strategy is designed to ensure that we accomplish every mission that is given to the Army and that our soldiers are never placed in a fair fight.

Our testimony today will focus on two specific topics. First, we will talk about the implementation of FM 3-0. I brought it with me here today to symbolize the continuity in our testimony to that of General Caldwell who has appeared before you earlier. He eloquently shaped for you the perspective of an Army at war that understands the nature of the war that we are fighting and understands how we must continue to transform and shape this Army not just for today, but for tomorrow in an era of persistent conflict. So FM 3-0 provides that perspective and it also shapes and illuminates the programs that General Thompson and I are jointly responsible for developing.

FM 3-0 is important because, in addition to the familiar offense and defense operations that we are familiar with, it also adds to stability operations. Stability operations is vital for all of us as we consider the nature of involvement today and what we project for the next several years of this century, which is that we will operate among soldiers, we will operate in a network-dependent environment, and we will have to put great trust and confidence in soldiers who are on their own to carry out the Nation's bidding. So, thus, FM 3-0 is very important for all of us as we shape the strategy and the equipping that will illuminate the way for our soldiers.

Now, modernization is the strategy that we use to improve the capabilities and to enhance the ability of our soldiers to accomplish

their missions. The Army modernization strategy has four essential elements to it.

First, what we want to do is ensure that we provide soldiers the very best possible new equipment, and with your support—and I would like to single out this committee in particular for the extraordinary support you have given the Army—we have 94 new systems that we have been able to field to the tune of over \$100 billion worth of new capability over the course of the last 5 years since the start of the war. I would single, for example, the support of MRAP, a capability that Lieutenant General Odierno, as he left command in Baghdad, singled out as being responsible for saving the lives of soldiers as an example of the quick response between the identification of a capability and then the immediate ability to field that, thanks to you.

Also, we see the need to upgrade and modernize existing systems. For example, if we take a look at the tanker Bradley that we have today that soldiers are fighting with in Iraq, it is substantially improved over the tanker Bradley that we started this war with, once again thanks to vigorous support of recapitalization and modernization programs that have enabled us to materially advance the quality of the current formation and the current fleet.

Then, third, we have to incorporate new technologies that are derived from future combat systems. You rightly singled out future combat systems as absolutely essential to the Army. For the last several years, it has been our single major focus for research and development. That research and development that you have so well supported is now bearing fruit. So as we look at soldiers in Baghdad today, we see capabilities that are directly traceable to the investments we made in future combat systems.

And now, as we look forward to Fort Bliss, Texas and the soldiers who are operating with FCS capabilities, the first Spin-Outs that are now in evaluation by the Army, we also see FCS bearing fruit.

So the point is where FCS was once a distant promise, FCS is now a reality. It is directly benefitting soldiers in combat today, and it has immediate promise for the future. And we are excited about that promise and we will be thrilled to tell you about it.

And then finally, what we have to do is we have to set conditions to field actual FCS brigade combat teams. As you know, those have remarkable promise. Stryker showed us the benefit of a common platform with a common view for creating a brigade combat team. FCS will bring that to the next level.

So for all these reasons, the Army modernization and its four elements is a vital strategy for us. It is one that is absolutely essential. As we look at soldiers today, we know that they are brilliantly equipped because of you. We also want to ensure that soldiers that go into whatever it is we ask them to do in harm's way in future years are properly supported and equipped. Our modernization strategy is designed to do that and will continue to do that with your support.

So thank you very, very much. And I would like next now to defer to General Thompson. [The prepared statement of General Speakes and General Thompson follows:]

Senator LIEBERMAN. Thanks General Speakes.

General Thompson?

**STATEMENT OF LIEUTENANT GENERAL N. ROSS THOMPSON
III, USA, MILITARY DEPUTY TO THE ASSISTANT SECRETARY
OF THE ARMY FOR ACQUISITION, LOGISTICS & TECH-
NOLOGY**

General Thompson: Chairman Lieberman, Senator Cornyn, Senator Inhofe, first I want to thank you for holding this hearing today because the modernization of our weapon systems and equipment is absolutely essential to our soldiers. Every day our soldiers make great sacrifices to help win the global war on terror and to fulfill our other worldwide commitments.

I want to thank you, as General Speakes stated, for your strong and steadfast support of all of our men and women in uniform and particularly the Army. We are meeting our equipping demands for our soldiers because of the guidance and the resources we are provided by this committee and the Congress. We constantly strive to be good stewards of these resources.

And I would just like to echo your comments about Dan Cox and his long service not just to the committee, but to the United States Army. He is just an example of the many professional staffers and personal staffers represented around the room today in this committee where you can always have a candid and frank dialogue and see a reasoned approach to where we need to go with our Army modernization programs. But in particular, I would like to thank Dan today because this is his last hearing.

I was here yesterday before a different subcommittee, and I would just like to go on record here and say I do not want to make this a daily occurrence, nor do I want a building pass. But I am delighted to be here again today.

Mr. Chairman, we are a high technology Army and we have a comprehensive strategy for our continuous modernization. Of all of our high priority programs, force protection is probably the number one concern, and that includes the continued fielding of MRAP and eventually our joint light tactical vehicle. Our other high priority programs—and they are in no particular order—are improving the soldier and the system, our tactical wheeled vehicle modernization program, modernizing our aviation platforms, fielding the first increment of the warfighter information network tactical, and fielding unmanned aerial systems, and then the continued development of our command and control enhancement to provide the means to share critical and timely information.

Our future combat systems is the foundation of our Army modernization and the cornerstone of the Army's future modular force. The FCS program is structured to bring advance capabilities to today's force as rapidly as possible in a system or process known as Spin-Outs. Our first Spin-Out equipment set is currently in the hands of combat-experienced soldiers at Fort Bliss, Texas, as part of the Army Evaluation Task Force. The FCS program is currently undergoing 75 tests. So it is no longer just a development program. When you start to test capabilities, you are on the cusp of fielding those capabilities to soldiers, and we are starting to do that today in Fort Bliss, Texas.

Mr. Chairman, the General Accountability Office recently issued its annual report on FCS, and the Army welcomes the helpful insights from the GAO and I mean that sincerely. I want to provide my perspective on just a couple of key areas out of that GAO report, and I will take some further questions on that during the hearing.

First, the GAO pointed out that capability demonstrations frequently fall late in the schedule. And like I just stated, we do have the Army Evaluation Task Force in Fort Bliss, and we have 75 tests ongoing today.

One of the things that the GAO stated was there was less content in this program, and that is true from the standpoint of we went from 18 to 14 systems because of our experience in Iraq and Afghanistan that led to a reduction of the number of UAV platforms and the elimination of the armed reconnaissance vehicle and our intelligent munitions systems.

Independent cost estimates are pointed out by the GAO that are higher than the Army's, and I would say that we have consistently demonstrated the credibility of our cost estimates by operating within our budgets.

And then finally, high level requirements, the GAO pointed out, are poorly defined and/or late. The yearly budget cuts that have been inflicted on this program have driven the program to change their schedule, and in many cases it changed the work to be performed. And this was reflected also in the software development process, and we will talk about that more later in the hearing.

We are continuing to conduct wartime operations while preparing for our future commitments. Our challenge is to balance these two requirements to ensure that we can defend the Nation today and prepare ourselves to continue to do so tomorrow.

I would just like to leave you with two thoughts. First, our 19-year-olds today use cell phones to talk to one another, access the Internet, send e-mail, transmit photographs, and transmit videos. Should these young people as soldiers not have the same capabilities? On today's battlefield, they do not in many cases. We are working through our modernization programs to make sure that they do as quickly as possible, and FCS is the cornerstone of our modernization programs.

And second, we face an adaptive enemy who is always acquiring new technologies and new ways to frustrate and defeat us. In my opinion, our greatest risk is the failure to realize that the world has changed and so too must the Army. We must stay ahead of a resourceful enemy, and our comprehensive modernization strategy is designed to do just that. It is a living, working document that reflects current operational experience and results.

This concludes my opening remarks, Mr. Chairman. I look forward to your questions.

Senator LIEBERMAN. Thanks very much, General. I appreciate the opening remarks.

Perhaps we will go to 8-minute rounds so we can keep it moving.

I want to focus in first on the future combat system. This subcommittee has been quite supportive of the FCS and actually has gotten into some battles over the years over it. We continue to be-

lieve in it. But let me express some concerns and invite your response.

The future combat system has, I worry, become a bill payer for other programs in the last few years. It was cut by over \$300 million last year and over \$200 million the year before. Some have criticized it now for being over budget and over schedule, but these shortcomings have been compounded, I am afraid, by congressional cuts and unpredictable funding, which is unfortunate because as you have said and as I believe, this is the Army's number one modernization program.

There are now reports that I have heard that the Army is working on a plan to accelerate aspects of the program, possibly fielding the first FCS brigade combat team and producing prototypes of the manned ground vehicles earlier than originally planned.

So I want to ask you to respond to some of those concerns and describe where the program is basically to talk about the current issues being faced as a result of past cuts in the FCS. And what are the military risks that could result from future restructuring of the program?

General Speakes: Mr. Chairman, if it is all right, what I would like to do is start and discuss the fiscal element and then turn it over to General Thompson who has the specific programmatic responsibility.

Senator LIEBERMAN. That is fine. Sure.

General Speakes: Sir, you are absolutely right. From the standpoint of our fiscal program, the cuts are a serious concern, and the fact that it has been an annual event for the past 3 years has greatly complicated the work that General Thompson and his team have had to undertake.

We have a plan. It is a performance-based plan in which early on we undertook the research-development activity that would then bear fruit as we begin to bring the first elements of the strategy forward for formal evaluation this summer. The challenge of delivering these capabilities to the level required on the schedule has been something that has been very complicating as we try to bring this program along.

From my standpoint, the other challenge is this, that in an Army at war, we seek to balance the needs of soldiers at war as our pre-eminent requirement. But we also recognize the vitality and importance of this DNA strand of modernization.

So the first point that we make is that right now FCS is about no more than one-third of our basic investment strategy out of the base program of the Army. And so as we look at the base program of the Army, we think it is eminently affordable within the current construct that we are operating under.

And so we seek then to ensure that we keep this program moving ahead and delivering capability. The first critical evaluation will be Spin-Out 1 this summer, which then sets conditions for the fielding of Spin-Out 1 to the force in fiscal year '10 and '11.

We are, obviously, always looking at opportunities to accelerate capability. In fact, part of the concept of Spin-Out says evaluation of capabilities is done as they are developed and then they are spun out to the force as fast as we can. You identified in your question some of the things that we would like to consider accelerating.

Senator LIEBERMAN. Right.

General Speakes: You talked specifically about some capabilities such as manned ground vehicle. There is enormous attraction, for example, in accelerating MGCV because what you bring is modern capabilities in terms of efficiency, you bring modern capabilities in terms of the ability to protect soldiers. And so to the extent possible, we would always look at opportunities to ensure that we do it correctly.

However, as the GAO noted in their report, there is the issue of the technical maturity of the systems we are trying to bring and the ability to ensure, when we bring these systems forward, they have the requisite capabilities to meet the needs of soldiers at war. As we evaluate these twin dynamics, we will always try to ensure we do the right thing and do not rush to something that would not bear fruit and properly protect soldiers.

Senator LIEBERMAN. Yes. I think you have answered the follow-on I was going to ask, which I appreciate, which is you want to accelerate some of these programs, but obviously, you do not want to move them out before they are ready to be moved out.

General Speakes: Absolutely, sir. And that is a key issue because we have a responsibility, obviously. There is nothing like having soldiers in combat to steel the eyes of all of us who are in a support role right now to ensure that the capabilities we bring will stand the test of soldiers.

And that is the great thing about the Army Evaluation Task Force. We are not going to speed a system now quickly to Iraq. What we are going to do is we are going to bring it to the Evaluation Task Force and they, under the tough leadership of soldiers who are combat-experienced, will evaluate these systems before we bring them to the Army. That is the first challenge, sir.

And then I would defer to General Thompson to talk about what he is trying to do to manage the program to deliver capability.

Senator LIEBERMAN. Go right ahead.

General Thompson: Well, Steve, I am not sure I have a lot to add to what you just said because your answer was very thorough and comprehensive.

I will say from an acquisition perspective that the insights that we gain from the soldiers at the Army Evaluation Task Force at Fort Bliss really help us to adjust the program. There have been reductions to the program over the last 3 budget year cycles. We have adjusted the cost schedule and delivery inside of the program. We continue to operate within the budget.

The program is very well run. We have an annual review not just inside the Army, but also with the Office of the Secretary of Defense to look at all the requirements on that program. We will have another one of those annual reviews again this summer.

We are looking, as General Speakes pointed out, at existing Spin-Outs and then beyond those Spin-Outs, which have got four of the FCS systems that are planned to be part of the Spin-Out 1, is what else can we accelerate. And what else we can accelerate is dependent on the technological maturity and also the resources. And we are taking a very balanced approach, and that is really no different than we do anytime when we build the program, the POM, if you will, for not just the next budget year, but also for the 5 or 6 years

after that. We always look at what is the balance, and FCS, since it is such a large program and really the cornerstone of our modernization efforts, is really central to that.

Senator LIEBERMAN. But, obviously, there are no second thoughts about the priority of the program. This remains, as you just said, the cornerstone of the Army modernization program.

General Thompson: Yes, sir, and I choose that word very carefully.

Senator LIEBERMAN. Understood.

What is your response to the adequacy of the funding for the program in the budget presented to the Congress this year?

General Thompson: We think that the funding in the budget presented this year is adequate, but I would say there is a caveat. We do have currently a reprogramming request that is on the Hill for \$27 million that gets at the issue of accelerating the small unmanned ground vehicle and the class 1 UAV, to put that capability in the hands of the soldiers at Fort Bliss. Candidly, we have already cash-flowed that a little bit, and that is in the hands of the soldiers at Fort Bliss today, and we would like to continue to do that because that is one of the challenges that the Chief of Staff gave us.

Senator LIEBERMAN. Are you meeting any resistance on that reprogramming?

General Thompson: It has passed through three of the four committees, and we are working our way through the last committee right now.

But beyond that, Mr. Chairman, there is another reprogramming request coming that allows us to keep the non-line-of-sight cannon and the Spin-Out 1 capabilities on track. That is a larger reprogramming request. It is a result of the budget cuts that have happened over the last three years. The last budget cut in 2008 was a little too much, and we are committed to keeping the non-line-of-sight cannon and the Spin-Out 1 on track. Therefore, we need to get the support for the reprogramming request to go with that.

So the short answer is the budget is nearly adequate but not quite, and that is going to be reflected in the reprogramming request that comes over here.

Senator LIEBERMAN. My time is up, but I want to ask you maybe a big question and ask for a short answer.

Is there any potential for the other services to participate in this program? You are doing some really pioneering breakthrough work. Is it possible that they may consider procuring parts of the system? And what effect might that have on the cost sharing?

General Speakes: Sir, the first thing is this is a joint program in the sense that the network, for example, is a system that comes out of the joint network concept. In terms of service integration, we have had a sharing relationship at the program office level with the Marine Corps because, obviously, it is our fellow member of the ground component. We have to develop systems that at least have compatibility, if not the same capabilities. And we are working that now, and so therefore, there is vigorous information sharing between us and the Marines.

General Thompson: Beyond just the FCS program, Mr. Chairman, if I might, the Army and the Marine Corps have an Army-Marine Corps board where we meet at different levels, the three-star level, even on a very periodic basis, to share ideas on how do we do things jointly together.

Senator LIEBERMAN. Thanks.

We are about 8 minutes into a vote. Do you want to go ahead?

Senator CORNYN. I will go vote and come back.

Senator LIEBERMAN. All right. If you do not mind, with apologies, we are going to recess. We will go vote quickly and then we will be back. And Senator Cornyn will be next. [Recess.]

Senator Inhofe [presiding]: If I could have your attention, I am going to go ahead and reconvene this. Are we in recess now? Is that where we are? All right. Well, we are now out of recess. I thought I would get a chance to ask a couple of questions while we are waiting for them to return since I have another commitment.

While it was not this committee, it was the Readiness Committee—I used to chair it, and we were dealing with the same issues at that time.

I think the chairman was getting into most of the concerns that I had. I think this is kind of unique, though, that we have the two of you. I do not want to lose this opportunity. As I said to you earlier, we had General Thompson on how do we get it and then General Speakes on what do we do with it once we got it.

My concern has always been, of course, the sliding of the future combat system, going back in years when some of our areas of weakness were there, such as the NLOS cannon. We are still using the antiquated Paladin. At one time, we were going to go into the Crusader, and it was President Bush that axed that program. Quite frankly, there was no warning. I thought it was the end of the world. I believe that probably has a silver lining in that we would not be where we are today with the FCS, in my opinion, if that had not happened. And this is far, far more significant and more important.

I know that with all the competition that is out there, normally—and with the testimony of General Cody and others talking about how stressed things are—the way we respond to things is you just let off what is not bleeding today. That has been my concern about the modernization program.

I made a talk on the floor this morning talking about how we got to this position of where we are today, and that during the '90's we let the military slide and some of the modernization programs in an amount of about \$412 billion over what it would have been if we just had level spending. We saw a lot of programs were falling behind at that time.

The chairman asked you about the possible acceleration of the FCS program, and I think I left right before we got the full answer of that. I would like to ask you to comment on the discussion that has taken place on accelerating the FCS program. But more importantly, do we have the necessary resources to keep the FCS on track as it is today?

General Speakes: Sir, let me address the adequacy of resources. You correctly identified the challenge of the '90's and the fact that we lost critical capabilities to bring research and development

through its cycle so we could field capabilities. And we have spent the first years of this decade now recovering from those challenges. Thanks to your support and the support of other members, we have been able to generate the capital to invest the capital then to bring programs very quickly to the Army, an Army that very much needed additional capabilities for protection and a host of other issues.

So at this point, we believe what we have done is within an overall budget that we understand, we have put FCS into a place in our modernization strategy that is approximately one-third of our overall investments that we are making for new capability. We think that that third of a share of investments is affordable. We think it enables us to proceed with the other elements of modernization that are essential. Obviously, we need trucks. Obviously, we need command and control capability. So we need a host of other capabilities that essentially must move along with FCS to bring the Army as an entity forward.

So we are in the process of continuing that balanced strategy, a strategy that will bring us forward, bring capabilities online in a balanced way. And we believe that this program is appropriate for the size budget that we have today, and we have for the planning period out through '15.

So in short answer, the plan that we have today will provide us an FCS program that will give the Army what it needs. It is affordable within the overall construct of an Army at war. We will continue to work that.

And General Thompson has identified in his testimony the impact of the cuts that we have taken over the past years, and those cuts are important because they disrupt the program's ability to execute the plan that they have. And they also cause this issue then of realignment of program requirements over time that causes others to believe that we have challenges with the delivery of programs and the ability to make the contribution that people would expect.

Senator INHOFE. That is a good answer, and that is what I wanted.

General Thompson, did you have anything to add to that?

General Thompson: Sir, what I said when you had to step out is that we have a near-term reprogramming request that has been through three of the four committees on the Hill—and we are working our way through the last committee—to accelerate the small unmanned ground vehicle and the unmanned aerial vehicle to get that into the hands of the soldiers at Fort Bliss to be able to experiment and test with that.

Following behind that is another reprogramming request that is essential for us to be able to keep the non-line-of-sight cannon and the Spin-Out 1 program on track. If you take the fiscal year '06, fiscal year '07, and fiscal year '08 reductions to the FCS program that were taken in the budget, it totals \$789 million. We have not reduced the scope of the FCS program as a result of those cuts. And so those two reprogramming requests—one is an add to accelerate. The other one is to maintain the schedule for near-term capability. But we will have to put money back into the FCS program in order to keep the scope and maintain the schedule, and that is one of the things we are looking at in our '10 to '15 POM.

Senator INHOFE. That is good.

You were talking also about the Spin-Out program and what is happening at Fort Bliss. I told my friend, Senator Cornyn, that I had already planned one trip to come down. I would like to see what is happening there.

On the FCS, until we have everything fielded—that is the day we are looking at. Do any of these Spin-Out programs adversely affect the ultimate fielding of the total system in a negative way?

General Thompson: No, sir, they do not. As a matter of fact, it helps us reduce risk. When the technology readiness is such that we can accelerate those and put them in the hands of soldiers, we will do that. I characterize the FCS blueprint as still being the blueprint of capability that we want to see in the future. I can deliver against that blueprint sooner with some capabilities, and that is what we are trying to do when we look at acceleration.

Senator INHOFE. I have often said, not because of any parochial concern, but the NLOS-C and NLOS-M are two of the areas where are most deficient with what we have right now. That is why I want to make sure they are probably going to be the first components that we will be fielding and that it stays that way.

What I would like to ask of you, if either of you gentlemen see a problem that you do not see today coming up, if you would let me know and advise your staff accordingly, I would appreciate that very much.

General Thompson: And one comment on the non-line-of-sight cannon system. It is the first of the eight manned ground vehicles. And because of the way the program has been constructed, which is good operational sense and good business sense, that is the foundation for the common chassis for the other prototypes. So 70 percent of the manned ground vehicles are going to be common from a components standpoint.

So this year at the Army birthday, the Chief of Staff gave us a challenge of having on display the first prototype of the non-line-of-sight cannon. So when you attend our Army birthday in June, we will show you that capability here in Washington, D.C.

Senator INHOFE. I will be there singing.

Thank you, Senator Cornyn, for allowing me to go in front of you.

Senator CORNYN. Happy to do it.

I know Senator Lieberman is en route back, and I think we will just stand down until he returns.

Senator INHOFE. His staff advised me we could go ahead.

Senator CORNYN. Is that right? Okay. I did not want to usurp any privileges of the chair. Thank you, Senator Inhofe.

Gentlemen, forgive me if I am repeating some things that you have already responded to, but due the centrality of the future combat systems is so much of what we are talking about in terms of modernization, I think it bears nailing down some of these things that I want to ask you about specifically.

While everyone in the room appreciates the importance of this weapons system, I think it is important for the American public that we get it on record for this hearing why FCS is important to our men and women in uniform. And I would ask you to briefly tell us why FCS is important so the public can fully understand the critical role in our Nation's defense.

The reason why I say that is so important is because some elected officials have stated that they want to slow down the development of the future combat system, implying that it is not taxpayer money well spent. And I will just footnote that by saying I am one of those that if our military tells me they need something to do their job, as far as I am concerned, I am going to do everything I can to see that they get it. On the other hand, if it is going to result in waste of the taxpayers' dollars and it is not efficient use of those resources, then I want to know that too so we can take appropriate corrective action.

So if you would just sort of—perhaps both of you—tell us and tell the American people why you think development of the future combat system is important, why its development should not be slowed down, and why you believe, if in fact you do—and I think you do—that it is taxpayer money well spent.

General Speakes: Sir, let me begin. The first point that we would make is the future combat system has the kinds of capabilities that are directly needed and identified as being essential. FM 3-0 lays out a blueprint for what we think is going to be the operational environment that we are going to be able and required to operate in both today and tomorrow. What this manual says is that we are going to operate with the American soldier on land, that on land, we will have a need to defend this country, and that America's critical interest will be involved on land and the American soldier will have a pivotal role to play.

We have also said that when we put that American soldier out wherever it is to defend American interests, he or she will have to operate in and among other populations. So what we need then is a capability that we can deploy, that we can operate with efficiency, that enables us to be able to be precise and also to be economical. We cannot afford large operating footprints and we cannot afford cumbersome and inefficient systems. We need to bring the power of the network to not just the headquarters, the general, the colonel, but to the soldier on patrol or to the soldier at the check-point.

So all of this is reflected right now when we assess the adequacy of our current equipment. Our current equipment is the best in the world at this point, but what we have had to do is invest major efforts just to make it operational for this war. We have essentially put appliques of new capability on to try to make it relevant. We would liken it to your family car that you put a GPS on if it is a 20-year-old family car. Yes, it has GPS capability, but it is not the same as a car that was born and bred with that capability in it.

And so although we have made enormous investments and improvements in our current force, we see the need for the future. We see the need for an Army that is able to operate much more efficiently and much more effectively and an Army that we think will have the need to be committable and usable to a greater degree than many of us would like.

And so if that is the case, then what we need is the power of the network. We need the power of a common platform to drive us to greater efficiencies and operating capabilities, and we need the ability to be precise with everything we do because we are going to be operating in populations, among people where there will be

both friend and foe, and we need to be able to distinguish between them.

So these then are the capabilities that we see in future combat systems. So we replaced a series of platforms that were born and bred to operate in Central Europe in the last century, and now we face an Army that must operate in very different environments with much more taxing capabilities. And we believe the future combat systems answers those requirements.

General Thompson: Senator, if I can just—

Senator CORNYN. Please.

General Thompson:—very briefly from an acquisition perspective. It is really a misperception that some people may have. FCS is not just one manned ground vehicle platform. It is a family of systems designed to provide a capability for our brigade combat team, and a brigade combat team in today's Army is the coin of the realm. And so the FCS program has got the network and the connectivity we want, as I said in my opening remarks, to give the soldiers out there, whether they are in a vehicle or dismounted from a vehicle, the ability to see, transmit information, to know where their buddies are, to know where the enemy is, and to be able to operate and create an environment where they are in an unfair fight because they are so advantaged that the enemy does not have an opportunity.

So you have got the network. You have got eight manned ground vehicles. You have got a couple variants of unmanned ground vehicles, and you have got a couple variants of unmanned aerial vehicles. And you look today in Afghanistan and Iraq at the great success that we are having with unmanned aerial vehicles, and the FCS UAV's, if I can use the acronym, are the next generation of that, again powerful, powerful capability to give the information and the surveillance and the reconnaissance capability and link it not just down to the commander but link it all the way down to the soldier level.

So there is that misperception that FCS is just a system. It is a family of systems. And the function that the FCS performs is it causes us to have to align all of the other modernization capabilities in the Army. So all of these things we call complementary programs.

In the last year in great detail, I have personally gone down and looked at 67 other programs that are not part of FCS to make sure that the schedule and the operational capability and the technical capability of those programs, like JTRS, like WNTE, like the joint light tactical vehicle are all aligned so that they operate together as a brigade combat team. And we do not develop individual systems and then later on figure out how they have to work together. That is the different approach that we are taking from an acquisition perspective.

Is it challenging? Yes, it is. Do I have the best people in the Army and the best people in the country working on this? Yes, we do. And we are getting there.

Senator CORNYN. Well, perhaps it is because while this subcommittee and the Senate, I believe, has been very supportive of FCS in particular, I think the House has, from time to time, cut FCS a number of times, to the point now where, if I understand

correctly, it is not just cutting fat, it is not cutting muscle, it is cutting into the bone, and perhaps create the impression that FCS can pay for other programs, other weapon systems, and the like, which I think is wrong from what you have told us and everything I know.

But could you elaborate on the negative effects of slowing down and consequently delaying the fielding of FCS would have on our troops? And I am thinking of a conversation I had with General Odierno, who just got back from Baghdad, and what you alluded to in terms of the Spin- Out capability and its present-day applications to the warfighter in Iraq and Afghanistan. What would be the effect of slowing down or delaying the fielding of FCS in its entirety?

General Speakes: Sir, I think that there is one very simple answer right now, and that is that when we take a look at the operational needs statements that are the commanders' call for help as they communicate back to the Pentagon and tell the Pentagon that they need capabilities they do not have, 80 percent of the operational needs statements that we have seen in this war have been directly related to our ability to deliver capability in FCS.

In other words, we answer their calls for help when we bring FCS on because what they are asking for are the critical capabilities that General Thompson so well explained, the ability to ensure that we bring the network to soldiers so we can get them the communication they need, the ability to put a UAV out overhead, the ability to use robotics to separate the soldier from the IED. All those things that are so obvious and so relevant that we see that are lacking, to a large degree, in some of the formations we fielded over the last years are now fixable and eminently improvable if we bring FCS online.

That is why the urgency of the program is so obvious to those of us in the Army who understood the nature of this war and understood that FCS has a direct relationship to fixing those issues, as General Thompson said so well, on a systematic basis because I think that is the thing that he explained so well.

We are fielding a brigade system when we bring the first brigade combat team with FCS capabilities online. It is harmonized. It is synchronized. There is enormous agility in it because it has a common platform, common logistics, common operating capabilities. As you know, today what we are fielding individual capability improvements incrementally, and then what the soldier in the field has to do is make them work together. That puts the soldier in the field under enormous stress that he or she should not have to operate under.

So this is important. You are exactly right, sir. We need to bring the capability. It answers directly the requests of commanders in the field, and that is what makes us so excited about FCS.

Senator CORNYN. Thank you.

Mr. Chairman?

Senator Lieberman [presiding]: Thanks, Senator Cornyn.

Let me ask one sort of follow-on question on the future combat system. General Speakes, you used a phrase, which is a common sense phrase, that we are in a period of persistent conflict and that

will continue with all probability in the generation ahead. Part of that persistent conflict brings us into counter-insurgency warfare.

I have seen some comments from independent military analysts that the Army—they expressed a concern—let me put it that way—that the Army may be overstating the role for the future combat system in counter-insurgency warfare. I wonder if you have seen any of those and whether you would comment on that.

General Speakes: Sir, that is a very challenging point. I think the first thing that FM 3-0 tells us is that the Army of today and tomorrow must be full spectrum. We cannot have a myopic focus on today's war and ignore the potential for what we may have to do in a year or 5 years or the next decade. And the great thing about future combat system is it is deliberately designed to provide us capabilities that are not just usable in counter-insurgency operations, which I think they are—they are very usable and very flexible and very applicable—but also to give us the kind of capabilities that should we be in a mid- or high-intensity operation, that would be enormously important.

When we take, for example, the capabilities of active protection, the ability to essentially repel an inbound threat to an armored vehicle, we are giving ourselves capabilities that if you would have asked me 10 years ago could you even imagine such a capability, I would not have believed it possible. Now in testing, we are showing that we are getting positive results in testing and we believe that it is part of the capabilities we want to bring forward.

So those are the things that tell me that this FCS concept is applicable for the future operating environment, one in which we cannot predict how it will be used. We cannot predict the nature of the enemy. We cannot predict the operating environment.

Senator LIEBERMAN. Including counter-insurgency work.

General Speakes: Absolutely.

General Thompson: Absolutely.

Senator LIEBERMAN. Do you want to add to that, General Thompson?

General Thompson: I would just like to make a couple of clarifications. General Speakes used the term "operational needs statement," and I know many of you know the answer to this, but we normally develop a requirement through the Joint Requirements Oversight Council process. An operational needs statement is a statement of need from a commander in the field today that we try to meet very quickly.

And what General Speakes was adequately pointing out is that a lot of the operational needs statements that we see from commanders today, that 80 percent he referred to, could be met by FCS capabilities. And that really to me means that FCS has applicability in the counter-insurgency environment and then beyond that.

And then the active protection system, rather than just add more armor on there—you know the challenges we have today with IED's. The active protection system is the ability to sense an incoming RPG or an incoming missile and take it out before it hits the manned ground vehicle platform. You will be able to sense it. And the testing is going on right now at White Sands Missile Range for the active protection system as part of the FCS program, actual rockets being fired where the sensor sees the incoming mis-

sile, fires a rocket, it orients itself, and it takes out the incoming missile before it hits the vehicle. That is an incredible capability, and that is one of the things we would spin out early on.

Senator LIEBERMAN. That is miraculous. Of course, this is, over the history of warfare, the ability to take the technologies that are breaking through in the rest of society and then apply them first and best to warfare, which you are doing in this program.

Let me ask you a very different kind of question. You happen to be here today and you probably saw in the Washington Post this headline story, Contracts for Body Armor Filled Without Initial Tests. The lead sentence is, "Government auditors said yesterday that nearly half of 28 contracts to manufacture body armor for Army soldiers were completed without the gear ever going through an initial test." Of course, we all remember the emotional reaction here in Congress and the pressure that we all put you under and the money we appropriated because of the public concern about the inadequacy of body armor. So it is in that context.

But I wanted to give you an opportunity, since you are here, to let us know, this committee, and for the record what the Army position is on the findings of the DOD Inspector General. I suppose the bottom line question is whether the people to whom we are giving the body armor, our troops, can have some confidence that it will work to protect them.

General Thompson: Sir, the first thing I would like to say is the troops can have the absolute confidence that they have got the best body armor in the world.

Senator LIEBERMAN. Right.

General Thompson: We will meet tomorrow inside the Army and then meet with the DOD IG and then come over next week and talk to any Member of Congress or any of the professional staff members or individual staff members to explain the position.

But let me just point out a couple of things that I think are very important to understand.

First off, a first article test. A first article means a pre-production model, an initial production sample. We do first article tests before we go into a contract with any producer. Every producer of body armor has had to go through a rigorous first article test to make sure that what they were going to potentially go and contract for passed that rigorous testing.

Once a producer begins to produce body armor for the Army and they stay in continuous production and there is no change to the design, we do not go back and do a very expensive first article test, but we do lot acceptance tests on every batch of armor that is produced.

Every producer of body armor for the United States Army has gone through a first article test and passed and every lot that has been produced under contract has had a lot acceptance test and sampling done. We reject some of those lots and do not take them until we have confidence that the body armor produced in that lot—and there may be a change in the manufacturing process, but we do the proper sampling. We have that data to be able to demonstrate that we have done the first article testing. This is called out in the Federal acquisition regulation. It is the way it is taught in the Defense Acquisition University.

I do not quite understand why the DOD IG drew the conclusions that they did. I have great confidence in the DOD IG, but we need to reconcile the scope of this audit and the evidence that we have got that we have done the proper testing. But I can assure you and I assure the soldiers out there in the field that we have the best body armor in the world. And we will be over next week with the DOD IG in order to explain that.

Senator LIEBERMAN. Good enough. I appreciate the answer.

Let me go back to FM 3-0 and ask you a similar question that I asked General Caldwell. But from your perspective, what impact does this new Capstone Doctrine have on the Army's fiscal year 2009 budget request and, insofar as you can see, on succeeding budget requests? Because, obviously, the doctrine is important. It has some quite revolutionary changes in it, but it is not going to mean as much as it should mean if we are not giving you the money to carry it out.

General Speakes: Sir, the value of doctrine is something that our Army recognizes. We had the last publication of doctrine right before the events of 9/11. And so over the course of the period of the time from 9/11 to now, the Army has been living an update of how we are doctrinally organized. I would typify that with the modular transformation of the Army that we began with some detailed thinking in 2003, put into execution in 2004, and now more than 50 percent through.

We also took a very serious look at the other elements of how we operate. For example, we have already done major work to transform how we train our formations. Formations now, as they prepare for combat, are trained in substantially different ways than we used to train formations back prior to the 9/11 experience.

Those are but two examples of the kinds of very important changes that our Army has been making in progress.

FM 3-0 was about 2 and a half years in the writing and coordinating and vetting. And I think that is very important because the Army leadership took the view that when we put this together, we would ensure we had it right because everybody who had a view about what the Army was doing within the Army had a chance to work it, comment, and have their voice heard. So at this point then, the publication of this manual in February only recognizes or documents what most of the Army has been operating on and changing the face of the Army on over the course of the past several years.

Senator LIEBERMAN. So you would say that the budget request for fiscal year '09, therefore, reflected the changes that are expressed in FM 3-0?

General Speakes: Yes, sir. But I would also liken it to building an airplane in mid-flight. What I do not want to portray is that we have made all the changes and that they are all complete. This voyage of putting the airplane in flight continues.

So part of the challenge of the Secretary of the Army and the Chief of Staff of the Army is to continue a very thorough evaluation of how we can continue to improve and transform our Army to make it more relevant for what we see as the future operating environment. We are, for example, changing the way we train lead-

ers. Leaders require a different education than what we knew before.

Senator LIEBERMAN. Right.

General Speakes: That is a part of this voyage in progress. So the Army will continue to change and evolve. This is a continual process.

But I can assure you that the basic operating concepts that are in FM 3-0 are understood and supported by what we have in fiscal year '09 even though this document was produced after we had submitted the fiscal year '09 budget.

Senator LIEBERMAN. I am a little over my time. I would ask Senator Cornyn's indulgence just to ask a final question that is relevant.

General Caldwell said—and I am sure you agree—that FM 3-0 will add mission requirements appropriately so. Looking forward, what kind of investment changes do you think we will need to make to meet the additional mission requirements that are associated with this new Capstone Doctrine?

General Speakes: Sir, you ask a question that we do not have a final answer to. But I can point to several illustrations of the kind of effort that is underway within the Army to continue the transformation of the Army to support the vision that this manual outlines.

One element of it is a concept that says we have to continue to develop new ways to train the force. The Chief of Staff of the Army has been in dialogue with the leaders of our training community over the past several weeks. And his challenge to them is now how do we align what we call our combat training centers, the places you know as Fort Irwin or Fort Polk, to support not just a mission rehearsal exercise for forces that are bound for Iraq or Afghanistan, but let us look past that to where we want to be in several years when we begin to actually prepare forces that are not immediately destined to go back into combat in Iraq or Afghanistan. So what he described was training in a more full spectrum way where, yes, they would be counter-insurgency capable, but they would also have within that same experience the ability to do high-intensity training verification. So that is one of the challenges that we point out.

The other issue in this same vein that is being worked very seriously is a concept for how we alter the training of leaders and the educational programs of leaders. Obviously, language is an area that the Army that the found itself very deficient in.

Another area that the Army is exploring, for example, is how we train and educate our civilians. The civilian work force of the Army has been enormously important and, frankly, ill-recognized in our training strategies. General Casey's challenge was let us figure out how to institutionalize that.

So there are additional resource requirements that we will have to build into our program in the upcoming years. Our assurance is that they are going to be thoughtful, they are going to be well-considered, and they are going to be relevant to the kind of an Army we need for the future.

Senator LIEBERMAN. Thank you very much. I note in your bio that you speak both Mandarin Chinese and Spanish. Presumably you do not speak Mandarin Chinese with a Spanish accent.

General Speakes: It was a challenge, sir.

Senator LIEBERMAN. That is very impressive.

Senator Cornyn?

Senator CORNYN. Last year, Secretary Gates established the MRAP vehicle as the top priority program within the Department of Defense, and Congress responded with \$22 billion—is that right—to fully fund more than 15,000 of these armored vehicles. Today, almost 3,600 MRAP's are operating in Iraq.

I might say that when I was there back in January, I had a chance to visit Ghazaliya on the edge of Baghdad and ride in an MRAP. I can tell you that the soldiers are very happy to have that capability and it has served as additional protection for them.

Could you tell us, though—we know the enemy in Iraq has been extremely effective at adapting to past protective measures to our troops. Things like the Iranian-provided explosively formed penetrators come to mind for one. Could you tell us how these may affect the future production needs for these vehicles or additional requirements over and above what is already contained in the 2009 budget?

General Thompson: Sir, let me start and I will ask General Speakes to jump in for any amplifying points.

First off, the MRAP has been a very successful program and one where every soldier and marine out there truly appreciates the support of the Congress to give us the resources to accelerate that capability.

We have pretty much settled on what the requirement is, although we are not quite to the definitization stage for the Army requirement. The Marines, I know, have settled on their number that they think of the MRAP vehicles. We are still in a range of somewhere between 10,000 and 12,000, and we have adjusted the production of the MRAP over time so that the acquisition and the delivery matches up with the requirement.

That capability will be used in the future. One of the things that we have done with our route clearance companies, which go out and obviously clear a route in advance of a convoy or a soldier patrol, and our explosive ordnance disposal teams is we looked at the need for the vehicles for those kind of units. And 1,000 of the MRAP's we will buy will meet those long-term enduring needs. So we have tried to not look at MRAP as just a now capability, but also what will be the capability that it will be used for in the future.

So 1,000 of the Army's MRAP vehicles will have an enduring mission, and I am pretty sure that is not going to be the end of the use of the MRAP's. I suspect a large number of them, when the requirements come down for the demand for forces, will probably be reconditioned and put in pre-position stocks. We are looking at what is the right number of those vehicles to do that.

We are also looking inside the department at the rationalization of our long-term vehicle strategy, both combat vehicles and wheeled vehicles. So MRAP's are part of that equation. As you know, we have got close to 150,000 high mobility, multi-purpose wheeled ve-

hicles, HMMWV's, in the Army today. We are looking at the future requirement for the joint light tactical vehicle, which is out on the street right now with a request for proposal, and we expect the industry bids back in here in about 30 to 45 days. But MRAP is part of that equation.

So it is the rationalization of the HMMWV's today, the JLTV's in the future, and MRAP is part of that. And we owe an answer back to ourselves and also to the Office of the Secretary of Defense here within the next couple of months on what is that long-term strategy.

Senator CORNYN. I know just while we have been in Iraq, we have seen where HMMWV's, which were sort of the standard transportation because of force protection concerns, were then up-armored and then, of course, now the evolution into the MRAP with enhanced protection due to the V-shaped hull and other aspects of it.

You did describe, General Thompson, that the Army is looking at this vehicle design not just for today's threat but for threats that may arise in the foreseeable future. I realize you cannot predict everything, but that process is going forward.

General Thompson: Yes, sir. And if I can make another thing that comes to mind, another linkage there—and it gets back to the importance of the FCS program. The continued investment by the FCS program in armor development has been the foundation for the armor protection kits that we have put on HMMWV's and has been the foundation for the armor protection we have put on the MRAP vehicles. So it is a very smart acquisition decision on our part.

And again, that is another strength of the FCS program. So we look at the testing on MRAP and it informs the future development of FCS just like the development of armor in the FCS program has informed what we have put on the up-armored HMMWV's and on the MRAP program.

Senator CORNYN. Well, as I noted earlier, as far as I am concerned, whatever warfighters need I am willing to support appropriations for that need. But occasionally you will have people come up, constituents and others, who say, well, you know, the Army and the military is not providing X, body armor. I do not know whether you call them urban myths or not about soldiers having to purchase their own body armor.

But I know that sort of the requirement in the case of these vehicles has changed over time. And I do not know and perhaps maybe you could comment on whether there has been an evolving standard in terms of what the Army would provide the warfighter in the field in terms of body armor and other equipment and resources. Could you respond to that?

General Thompson: Yes, sir, I can. We are on our fifth upgrade of body armor since the war started. It is Frag Kit, the armor protection kit, 5 that is on most of the HMMWV's today and we are looking at the development of Frag Kit 6, which gets after the explosively formed penetrator threat. So it is a continual evolution of capability.

Again, going back to the FCS program, one of the strengths of that program is the fact that we will be able to have the attach-

ment points for upgraded armor on the vehicles that we produce under FCS, so we do not have to bolt them on after the fact. So it is an integrated development approach.

We do the same thing with all of our systems, whether it is rifles or body armor or night vision goggles. We are always looking at cutting in upgrades or changes of those programs that make sense. So there is no static program out there, helicopter to what the individual soldier wears. And I use the body armor as a great example.

Senator CORNYN. Well, I know that sort of seems like a shocking statement for someone to make, that a soldier would have to buy their own body armor. And I have never really confirmed that to be the case.

But I am wondering if with this evolution of systems, whether it is body armor, up-armored HMMWV's or MRAP's, we are continually setting a higher standard. And in one sense, there may be the perception that because the latest and greatest is not deployed universally, that somebody is getting less than what we are capable of providing them for either their protection or ability to do their job.

General Thompson: I think we can say, though, Senator, that the latest and greatest of the capability that we have got is with the soldiers that are deployed in harm's way or the soldiers that are getting ready to go into harm's way. So you are always chasing that next increment of capability, and once we achieve that next increment of capability, it first goes to the soldiers that are in harm's way.

Senator CORNYN. Well, I cannot help but recall what Chairman Lieberman said when the stories broke in the Washington Post over Walter Reed and the outpatient housing. I remember his statement that this was embarrassing. I thought that was a good way to describe it because I have to tell you that our commitment is to do whatever is needed to provide for our warfighters and service members and our veterans. That is, I would say, a universal commitment of this committee and Congress.

So when somebody throws out a curve ball like that and suggests that we are not doing it, my first reaction is I hope that is not true. And second is if it is, this is embarrassing because certainly it runs counter to every impulse, every instinct that I know Congress has when it comes to providing for our warfighters or their families or veterans across the board.

Mr. Chairman, thank you.

Senator LIEBERMAN. Thanks very much, Senator Cornyn. Of course, I totally agree with what you have said.

I have got just one or two more quick questions for you. I wanted to talk for a moment about the Land Warrior program which is one that I have been quite interested in. It just strikes me that with the formal recognition of the equal importance of stability operations, which will be executed in large part by small units of dismounted soldiers, that the Land Warrior program, which was the program of record, as I saw it, for modernizing those dismounted soldiers' abilities may deserve a second look.

Obviously, it was cut after a decade of development and right after it was being sent into theater for its true operational test, which I gather has been extremely successful. I have heard reports

from the 4th Battalion of the 9th Infantry Regiment that they feel it has really added to their capabilities and also their protection.

So I wanted to ask you, in terms of our own work here this year in authorizing and appropriating, whether you have thoughts about expanding the fielding of Land Warrior, and whether, if that is the case, we can help you avoid some undesirable reprogramming by authorizing and appropriating for that purpose. So overall, give me your sense of the importance of Land Warrior, whether you are leaning forward on it now, and to what extent we can help by funding it instead of forcing you to reprogram.

General Speakes: Sir, your knowledge that we have a very, very strong basis of support from 4–9 and the Manchus who are using it in Iraq today is absolutely correct.

Accordingly, the strategy that has been adopted by General Wallace, the TRADOC commander in collaboration with the Chief of Staff of the Army and the Secretary of the Army, is to move forward with this program. The concept would be that the next thing we need to do is equip a brigade combat team. The brigade combat team would then use it in training as a part of their pre-deployment training and then as a part of our process of preparing forces and certifying them for deployment, would then deploy with this capability.

So at this point what we have is a request for reprogramming that is about \$102 million, and \$102 million is approximately what it takes to equip one brigade combat team with this capability.

Now, the capability that we tested several years ago and the capability that is now in Iraq today are substantially different. We have cut the weight, for example, of the radio that is on the back of each individual soldier by about one-third. It is a remarkable transformation that shows how fast—just like our cell phones today—we are evolving capability with incredible speed. So we continue to develop and refine, based upon this experience in combat, what Land Warrior is, what forms it takes, what information it displays for the soldier, and how it integrates with the rest of our tactical operating environment.

We will continue that effort then with the brigade combat team, and we would like to go ahead then and prepare that brigade combat team with a set of this stuff and then deploy them as a part of our normal force generation process.

Senator LIEBERMAN. Well, that is great news. I really appreciate that decision. I think this is a great program. I know everything you give a soldier that is improved is good for the soldier, but listening to the exchange you had with Senator Cornyn about the body armor, this Land Warrior program, obviously, not only increases the capability of the individual soldier, but I think also increases his security, the protection.

But we will take it under advisement, if we can help you by authorizing and appropriating to that level so you do not have to reprogram more. But I thank you very much for that decision. That is great to hear.

The final question is on the Army's current basic rifle needs. There have been some statements that the Army's current basic rifle needs to be replaced, and I wanted to ask you what the cur-

rent requirement, as you see it, is and what kind of program you have for the rifles within the Army at this point.

General Thompson: Sir, the current rifle in the Army is an M-16A4. And the current carbine is the M-4 carbine.

Senator LIEBERMAN. Right.

General Thompson: We are looking with a capabilities-based assessment, which is done by the requiring activity, TRADOC, at what should be the future requirement for the rifle. That capabilities-based assessment took a long time to develop. It is now out of the infantry school and has been reviewed once at TRADOC. It is soon on its way to the Pentagon to go into that staffing process and then to go into the joint requirements process.

We feel like we have got very capable individual weapons out there in the hands of our soldiers today, both with the M-16 version and the carbine, which has been evolutionarily changed over time with engineering change proposals. We always continue to evaluate all of our weapons. We recently ran a test on the M-4 carbine, found some issues when we were working with the manufacturer in order to improve that capability.

And we also found with that test that we need to replace the magazines because the magazines were the source of some failures in the testing that was done. We had an ongoing development program to improve the magazine. We are going rapidly into production on that, and then by the end of this year, every soldier in theater will have an improved magazine to reduce the possibility of stoppages with the weapon.

But the soldier feedback on all of our weapons—and we have done a number of independent surveys not done by the acquisition community. The one survey that was done recently I think was done by the Center for Naval Analysis to give some independence. And the soldier feedback has been positive on the weapons.

The weapons work well. They are engineered well. They have to be properly taken care of. The soldiers that have the least problems with weapons are the soldiers that use them because they are infantry men, are out there on the front lines, and so it is not just the weapons themselves but also how you take care of it. So it is a package deal in making sure they meet the requirement.

But the short answer is we are updating the requirement and then we will look at that and decide whether an acquisition or a materiel solution is the best thing in order to upgrade the capability if the requirement—

Senator LIEBERMAN. Thanks.

Is Senator Cornyn returning, do you know? I am questioned out. So let us assume that Senator Cornyn is too.

I want to thank the two of you. I was thinking, as I was listening to you, that we really ought to thank you not only in general for your service to our country, but you are really two impressive individuals. You are obviously smart. You are very well-spoken. And you give me a sense of confidence that you are on top of the very significant responsibilities you have. So I did not want this occasion to go by. We hear a lot of people testify in a lot of committees up here in many subject areas, but honestly, I would say no witnesses have handled questions with more authority and directness in any of the committees I have been on over the long term than the two

of you. And we, therefore, ought to express our gratitude to you that not only are you good witnesses, but you happen to be wearing the uniform of the United States Army.

Senator Cornyn, do you have any additional questions?

Senator CORNYN. I do not. Thank you very much.

General Thompson: Sir, before we go—I do not want the last word, but this body armor thing is really so important. I would just like to make a clarification on something I said earlier because I always like to be as precise as possible.

I said something about the first article test. We, obviously, award a contract because a manufacturer is not going to give us an article to test unless he has got a contract. But we do not go into production unless that manufacturer passes that first article test.

And if I can—and this is a quote from a GAO report that was just issued in April about the body armor for the Marines and the Army. And I just pulled this piece of paper out, and it is so significant to make the point. And this is from the GAO report, and I quote. “In this review, we found that the Army and Marine Corps have taken several actions to assure testing. They have controls in place during manufacturing and after fielding to assure that body armor meets requirements, and they share information between the services regarding ballistic requirements and testing and the development of future body armor systems.”

On page 5 of the report, “The Army and the Marine Corps have controls in place during manufacturing and after fielding to assure that it meets requirements.” I am restating that. “Both services conduct quality and ballistic testing prior to fielding and lots are rejected if the standards are not met.” And that is the GAO report from April.

So again, I go back to we have to reconcile the differences between the DOD IG report. I regret sincerely that that made the NBC nightly news. I am not sure that all that all due diligence was done before that was reported. But my key point here is I want soldiers in the field to understand that there is no reason for them to have a lack of confidence in the equipment that we give them today and particularly the body armor. And that is my last statement.

Senator LIEBERMAN. Well, I appreciate that statement.

General, you were not suggesting that a television station or network would put a story on without due diligence. You do not have to answer the question. [Laughter.]

General Thompson: Sir, I will not answer that, but I will say—

Senator LIEBERMAN. I can testify by personal experience to the accuracy of that suggestion. [Laughter.]

Senator LIEBERMAN. Thank you both.

We are going to hold the record of the hearing open for 10 days in case any of the members of the subcommittee want to submit questions to you in writing or you want to add any testimony in writing.

But again, thank you very much for your service and your assistance to this subcommittee today.

The hearing is adjourned.

[Whereupon, at 4:45 p.m., the hearing was adjourned.]