

**HEARING TO RECEIVE TESTIMONY ON ARMY
MODERNIZATION IN REVIEW OF THE DE-
FENSE AUTHORIZATION REQUEST FOR FIS-
CAL YEAR 2013 AND THE FUTURE YEARS
DEFENSE PROGRAM**

TUESDAY, MARCH 27, 2012

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

The subcommittee met, pursuant to notice, at 3:58 p.m., in room SR-222, Russell Senate Office Building, Senator Joseph I. Lieberman (chairman of the subcommittee) presiding.

Committee members present: Senators Lieberman, Blumenthal, Brown, and Inhofe.

Majority staff member present: William K. Sutey, professional staff member.

Minority staff member present: Paul C. Hutton IV, professional staff member.

Staff assistant present: Brian F. Sebold.

Committee members' assistants present: Brian Burton, assistant to Senator Lieberman; Ethan Saxon, assistant to Senator Blumenthal; Anthony Lazarski, assistant to Senator Inhofe; and Charles Prosch, assistant to Senator Brown.

**OPENING STATEMENT OF SENATOR JOSEPH I. LIEBERMAN,
CHAIRMAN**

Senator LIEBERMAN. The hearing will come to order.

This is my first time in the refurbished room. It is quite beautiful, isn't it? Yes, I don't know. This is meant to be progress, I am sure.

Do you remember how long—excuse us. [Laughter.]

How long John Warner really worked hard to design that previous table, and it was grand.

Senator BROWN. It was.

Senator LIEBERMAN. Yes. I know.

I apologize to our distinguished panel of witnesses. We, and I particularly, were held up on the floor because there is a bill on the Postal Service, and it comes out of the other committee that I am privileged to serve on. But we thank you.

Senator BROWN. We are cosponsors on it.

Senator LIEBERMAN. And Senator Brown and I, marching in tandem.

Senator BROWN. Lockstep again.

Senator LIEBERMAN. Lockstep again. Yes. He is a courageous man to put himself in that position.

So, good afternoon. And the Subcommittee on Airland will come to order.

We meet today to receive testimony on Army modernization, as we do, of course, every year before we go into markup of the National Defense Authorization Act at the full committee level. This happens to be my last annual Army modernization hearing as a Senator. Don't be shocked, Senator Brown.

In 1993, I became a member of what this subcommittee, which was then called the Coalition Defense and Reinforcing Forces Subcommittee, chaired at that time by none other than Senator Carl Levin of Michigan. The following year, I attended my first hearing on the Army long-term modernization requirements and modernization programs.

In 1995, the subcommittee was renamed Airland Forces, and since 1999, I have had the great privilege of being either the subcommittee's ranking member or chairman. And I must say in that capacity, I have had the really high honor of getting to know a succession of leaders of the U.S. Army and members of the U.S. Army who really are the best of the best. So it has been one of the great parts of my service here in the Senate.

As I recall the first Army modernization hearing I attended in 1994, the subcommittee was pursuing a better understanding of the Army's plans for improvements in equipment and joint operations based on the lessons of the First Gulf War. At that time, the Army was beginning a very large end strength reduction from the Cold War high of 780,000 soldiers to 530,000. And subsequently, even lower, finally stopping at 480,000 soldiers in 2001 before September 11. Rising again in recent years, and now with the target of 480,000 sounds vaguely familiar, close to that for end strength reduction in the current FYDP.

The active Army forces structure went from 18 divisions down to 10. At that time, we were already 7 years into what was a 13-year decline in Army procurement spending.

Today, as I sit in this last Army modernization hearing, it is ironic that I think we find ourselves for very different reasons in a very similar situation. I hope we have learned some of the lessons of the past 10 years about how unpredictable future threat environments can be.

Because the budget submitted to us this year for fiscal year 2013 I think includes unacceptable levels of strategic risk, mostly brought about by compliance with an active Congress, which was the Budget Control Act. But as I keep saying, part of our responsibility I think, as we go through the authorization process, is to decide whether everything we did in the Budget Control Act makes sense or whether we want to adjust some of the numbers. And of course, I hope we do because the obvious fact is we face an uncertain and dangerous global security environment.

The Army fiscal year 2013 budget request includes several program cancellations, earlier than planned completions, or delays of equipment modernization that not only would increase strategic

and operational risk, in my opinion, but could undermine the health of our National combat and tactical vehicle industrial base.

This is particularly concerning, given the real progress that the Army has been able to make in stabilizing its requirements and modernization efforts under the leadership of former Secretary of Defense Gates, but really to give credit where it is due, former Vice Chief of Staff for the Army General Corelli, who launched the Army's comprehensive review of its investment strategies across the capabilities we need and expect the Army to have.

The subcommittee today looks forward to an update on the progress achieved in what came to be known under General Corelli as the "portfolio review process," also how you will sustain the momentum of this important part of your requirements determination process and how portfolio reviews are leading changes in the acquisition strategy.

The top three modernization efforts identified in the Army's fiscal year 2013 budget request are the tactical network, which will conduct the various communications data, video, and applications systems used by the Army, which I think there is broad support for and consensus about; the Ground Combat Vehicle, a developmental program to replace some of the armored infantry fighting vehicles in the Army's armored brigade combat teams; and the Joint Light Tactical Vehicle, another developmental program to replace some of the Humvees that do not provide sufficient crew protection to operate adequately in an IED environment.

I do want to ask our witnesses today whether the higher costs of those two new vehicle programs are justified by increased capabilities they will buy, as opposed to sustaining current programs for the Bradley fighting vehicle and the Humvee.

I am going to jump around a little bit in deference to the time. I do want to make this point finally. I am very encouraged that the Army has taken pains—and I mean it, pains—in this fiscally difficult environment to protect its investments in aviation.

One of the most important lessons I think from the wars in Iraq and Afghanistan is Army aviation provides unique capabilities that are absolutely essential to our soldiers in the field. I am pleased that even amidst all the planned cuts to end strength and force structure, the Army is going to continue to expand its aviation force to 13 brigades.

Though it represents a significant investment, I think it is a necessary one, essential, I think, also to see that this process goes to completion. And I say that because I am sure that the Army is going to be under pressure to cut into aviation funding to pay for other modernization areas.

We have got a great panel of witnesses here with extraordinary experience, and I will introduce them when we get to that point.

At this point, I am delighted to call upon my friend and colleague and ranking member, Senator Scott Brown, whose own military experience, as well as his personal insights, have proven extremely valuable to the work of this subcommittee. And we will again work together to produce our mark for the full committee this year.

Senator Brown.

STATEMENT OF SENATOR SCOTT P. BROWN

Senator BROWN. Well, thank you, Mr. Chairman.

I wanted to—obviously, I have spoken to—well, first of all, thank you for your service and your leadership. Out of all the committees, I have truly enjoyed this one the most. I know we have tackled some really good issues, and what you did on the insider trader bill has showed a lot of courage.

Thank you all for your service. I know we spoke earlier. I am not going to do a long and extensive opening, but I do recognize that the Army faces great challenges in the fact that in the Army, change is a constant because the threats against our country are constantly changing. We need to adjust and adapt.

I know that. You know that, as obviously probably much more than I do. And you have an unprecedented history, and you are ready for any mission that comes forth. I understand that, and I appreciate that.

And I am concerned, as I said, about the role of the Guard and Reserve. In particular, I am concerned about the sequestration cuts and how that is going to affect our military preparedness. I want to make sure that we can respond professionally and provide the tools and resources to our men and women to serve, serve well, serve safely, and then come home. That is very important.

And then what do we do with them thereafter? Being a member of the Veterans' Affairs Committee, I take that role very seriously as well.

The success or failure of the Army's efforts to realign and become the most effective possible fighting force depends on what we do in this committee and what we are doing here today and what we do in the markup. I think it is critically important to try to wrestle with a lot of these challenges, these budgetary restraints and the like.

And it is our responsibility here in this committee to understand what those challenges are so we can better advocate for you and make sure that we do the things as they should be done with the limited budgets that we have.

I will submit any additional comments for the record. I am interested in hearing the testimony.

Thank you.

[The prepared statement of Senator Brown follows:]

[SUBCOMMITTEE INSERT]

Senator LIEBERMAN. Thanks, Senator Brown.

The four witnesses before us—and I will put full statements of your history in the record—but is Lieutenant General Robert Lennox, who is Deputy Chief of Staff of the Army, G-8; Lieutenant General William N. Phillips, Principal Military Deputy to the assistant Secretary of the Army for Acquisition, Logistics, and Technology.

Appearing for the first time before the subcommittee, and we welcome you with thanks, Lieutenant General Keith Walker, Deputy Commanding General, Futures, and Director, Army Capabilities Integration Center, and Lieutenant General John F. Campbell, who is Deputy of Chief of Staff of the Army, G-3/5/7.

I gather that General Lennox will begin? Thank you, sir, for being here, and we welcome your testimony at this time.

STATEMENT OF LTG ROBERT P. LENNOX, USA, DEPUTY CHIEF OF STAFF OF THE ARMY, G-8; ACCOMPANIED BY LTG WILLIAM N. PHILLIPS, USA, PRINCIPAL MILITARY DEPUTY TO THE ASSISTANT SECRETARY OF THE ARMY FOR ACQUISITION, LOGISTICS, AND TECHNOLOGY, AND DIRECTOR, ACQUISITION CAREER MANAGEMENT; LTG KEITH C. WALKER, USA, DEPUTY COMMANDING GENERAL, FUTURES, AND DIRECTOR, ARMY CAPABILITIES INTEGRATION CENTER, U.S. ARMY TRAINING AND DOCTRINE COMMAND; AND LTG JOHN F. CAMPBELL, USA, DEPUTY CHIEF OF STAFF OF THE ARMY, G-3/5/7

General LENNOX. Well, Chairman Lieberman, Ranking Member Brown, Senator Inhofe, and all the members of the subcommittee, on behalf of the Secretary of the Army, Secretary McHugh, and the Chief of Staff of the Army, General Odierno, and all, in fact, of the 1 million plus men and women in the U.S. Army, we want to thank this subcommittee for its enduring support and commitment to our soldiers.

Chairman Lieberman, in fact, on behalf of all the members of the subcommittee, we want to thank you for your support, your 24 years of service, your leadership, and your personal care and commitment for our soldiers. And I want to make sure we say that up front.

In modernization, the Army really has two priorities, and the first is win today's fight. And General Campbell has come back from a year of command of Regional Command East. General Phillips and I have had a chance to visit over there in Afghanistan in the last month, and we bring insights as far as what we are doing to support those soldiers today.

And our commitment to support them, as you know, is number one. And I want to thank you all for your support in equipping those soldiers to be successful today in combat.

Our second priority is to make sure we are prepared to win in an uncertain future. And as you know, the Secretary of Defense published in January the new strategic guidance, and we have attempted to shape our forces and our strategy to support that in a way for the armed forces for the foreseeable future.

And for the Army, we really have three priorities then for the future, and the first is empower, protect, and unburden soldiers. And we have tried to do that with a number of programs, improvements to things like body armor, sniper weapons, indirect fires, improved helmets, protective ballistic undergarments, and things like that.

The second priority is to network the force, and we would be happy to talk to you about any of those programs from Net Warrior to the Warfighter Information Network-Tactical, any of the joint tactical radio systems that we think are foundational to that approach.

And the third priority is to be able to deter and defeat hybrid threats by looking for improvements for our aviation, our combat vehicle fleet, and our tactical wheeled vehicle fleet. And Chairman Lieberman, you mentioned some of those areas and those programs.

One of the key facets for us is looking for parity across all the components in the Army—the active force, the National Guard, and

the United States Army Reserve. And we think we have achieved that, both in equipment on hand. We have reached about in the 70 percent level for equipment on hand for all different components. I am sorry, in the 90 percent level for equipment on hand for all components.

And then in percent modernized, and we are in the 70s, high 70s for all components. So we have reached parity, we think, in both those aspects in all components for the Army.

As you know, we are facing tight fiscal challenges in the next couple years. In order to address that, we have looked at things like incremental modernization, and we have really looked at our acquisition processes and the tradeoff in requirements early on in the process and then throughout the process to get affordable modernization programs.

And we would be happy to talk to you about areas like the Joint Light Tactical Vehicle, the Ground Combat Vehicle, where we think we have made good trades, and we have yet to finish some of those trades in the way ahead. So it is a real tremendous effort led by Acting Secretary Shyu and General Phillips in that regard.

In closing, the Army's goal is really to equip soldiers for the current fight and future contingencies. Although we are a force in transition in a period of declining resources, we have got to continue to provide our warfighters with modernized and capable equipment so they can prevail on any battlefield against any foe.

Mr. Chairman, distinguished members of the subcommittee, I thank you again for your steadfast and generous support for the outstanding men and women of the United States Army, the Army civilians, and their families, and we look forward to answering your questions.

[The prepared statement of General Lennox follows:]

Senator LIEBERMAN. Thanks very much, General Lennox.

General Phillips? Am I right that the three of you are prepared to, at least for now, accept General Lennox's statement as your own?

General PHILLIPS. Sir, that is correct.

Senator LIEBERMAN. Okay. Thank you.

We will proceed to the questions. We will have 7-minute rounds. I want to welcome my colleague from Connecticut and fellow member of the committee and subcommittee, Senator Blumenthal.

So I mentioned in my opening statement that—is somebody keeping the time? Yes, okay, good.

I mentioned in my opening statement my concern about the two, the Ground Combat Vehicle and the Joint Light Tactical Vehicle programs, and the unit costs of those new systems, which are projected to be double or triple that of the upgraded current generation Bradley fighting vehicles and Humvees that they are replacing.

Obviously, they bring some improvements, the two new programs. But, so the question really, the broad question I want to ask you first is to elaborate, if you would, on the operational need for those new development systems. And why, given the tremendous fiscal restraints we are all under, you think that the incremental money we are spending on the GCV and the JLTV are worth it,

essentially, as opposed to maintaining and upgrading the two existing programs?

General LENNOX. If I could start, Senator Lieberman—

Senator LIEBERMAN. Please.

General LENNOX.—I think others on the panel may want to join in.

In the infantry fighting vehicle, we found over the last 10 years that there is a number of shortfalls that we are aiming to correct with the Ground Combat Vehicle program. Things like the Bradley is underpowered, its ability to carry a full squad, growth potential for the future, and a number along those lines.

Right now, we are right after Milestone A. So we have just really launched the Ground Combat Vehicle, and I think we are on a very good path of investigating do we have our requirements right? Is our cost range right or not?

We are also looking at nondevelopmental vehicles by other countries, and we are experimenting with them as part of our network evaluation at Fort Bliss, TX, this spring.

And then, finally, we are looking at what industry has been able to provide us in terms of technical development, the new starts, by both the two industry partners. And we are evaluating those to see if we have our requirements right and if this is the right path ahead.

So I think we are taking a very prudent, measured approach to making sure we have our requirements right for the Ground Combat Vehicle.

The Joint Light Tactical Vehicle, we have spent the last year really working with the Marine Corps to make sure that we have the requirements right in that regard. We have driven down the price substantially. It was about \$450,000 a copy. We now think in the request for proposal it is around \$250,000 a copy.

We think it has got the capabilities we need for the future. The Humvee, as you know, is not a vehicle that soldiers can operate in today outside of the fence line. We desperately need a replacement for that, and we think we are on a good path for that as well.

Senator LIEBERMAN. So why don't you talk just a little more about the advantages of the two new programs over the two existing ones, the Humvee and the Bradley fighting vehicle? And particularly, what potential is there to upgrade the two existing programs so that they could do better than they are doing now for our troops?

General LENNOX. I would be happy to be joined by anybody who has got thoughts on this. But for me, the Humvee, for example, is incapable of going off the FOB.

Senator LIEBERMAN. Right.

General LENNOX. It doesn't provide the protection for soldiers today. We have overburdened it with the weight and things on that frame. So there are roles that it is probably suitable for, and we are going to have a number of them in the force for probably 10 or 15 years.

Senator LIEBERMAN. We have a large number, don't we?

General LENNOX. Yes, sir. So they will probably in there for homeland defense, those kind of mission areas. Or if the environment is permissive, we could use those vehicles.

The Ground Combat Vehicle, what we found with the Bradley is—and we have done an analysis of alternatives that have said that the price is much closer to a new vehicle of fixing up the Bradley, to give it the growth potential and protection that we would need in a similar version.

We are not done with that analysis. Improving the Bradley is an option for the Army in the future, and it is being looked at as well.

Senator LIEBERMAN. General Walker, did you want to add anything?

General WALKER. Sir, just talk about—you had asked about your concerns about what we do for risk mitigation, given the uncertain future. So, as we look at the rather—you know, we do our concepts work based on strategic guidance we receive and informed by joint concepts. And we have a broad mission set.

But there is a part of that mission set that remains, and that is our ability to conduct combat operations. And when we look at ways that we might mitigate risk, that capability is fundamental, and only—the Bradley does not have the maneuverability and the protection for our rifle squads that we believe we might encounter for those adversaries that would employ hybrid-like tactics against us.

I am reminded in November of 2004 was the fight in Fallujah. We had three Army task forces led that fight, led three acts of advance with the Marine Corps. And it was despite the fact of the—and we talk about the counterinsurgency operation. It was a tank fight, protected by riflemen in Bradleys.

And if we did that again today, given the advances that we have seen in IEDs and EFPs, we would lose a lot of people, and I think we can expect more of that in the future. So this does mitigate risk.

Senator LIEBERMAN. Okay. I appreciate that.

So what I am hearing is that it is hard to, at this point, conceive of a sensible upgrade to the Humvee to meet the challenges. But on the question of the Ground Combat Vehicle, although as you have just said, there are problems with the Bradley, that that is still a question that is being pursued. Am I hearing it right?

General PHILLIPS. Sir, if I could just add?

Senator LIEBERMAN. Please.

General PHILLIPS. You are absolutely right, sir. We have—we think we have the absolutely right strategy going forward for GCV. We call it the three-pronged strategy. We have the two contractors in TD phase that General Lennox mentioned that are actively looking at through modeling and sim how to build this vehicle. At the same time, we are looking at what a stretch Bradley might look like or what it might be able to do.

We are looking at also potential foreign systems, like the Namer. Other systems like Puma that we will look at as well. That is going to inform us going into the Milestone B about 20 months from now the exact right vehicle that we will enter into Milestone B through engineering, manufacturing, development. So we think we have it about right.

In terms of cost, sir, if I could just add, you know we refined the cost of GCV as we pulled back the original RFP and then reset. We think we can bring this vehicle in, and we are pretty confident, somewhere between \$9 million and \$10.5 million.

As General Lennox mentioned earlier, that is not far above what it would cost to really do a Bradley, a stretch Bradley to give it the capability of the GCV.

Senator LIEBERMAN. So, just a final question because my time is out. You are looking at the German Puma and the Israeli is it Namer? So what is possible there? That we would adapt those designs to our own use, or that we would actually purchase from them?

General PHILLIPS. Sir, I will start and then turn it over to General Walker to finish. But really, sir, what we want to do going into Milestone B is to make sure we get our requirements documents as right as we can. We learn as much from those systems to include what the two contractors are doing and to make sure that we are fully informed so the Army can make the best decisions.

Senator LIEBERMAN. Gotcha.

General WALKER. And sir, to follow up, by putting those vehicles in the hands of soldiers in a brigade operational context at Fort Bliss and White Sands, what we can do is we can dynamically adjust our requirements if we have got the requirements wrong. So it is a way to really ask ourselves do we have it right, based on seeing some other alternatives.

Senator LIEBERMAN. Very good. My time is up.

Senator Brown.

Senator BROWN. Thank you, Mr. Chairman.

So, with the reduction in end strength not only impacting the availability of soldiers, obviously, it is going to affect the Army's equipping plan. And General Lennox or Walker, or both, there is going to be some excesses which includes modernization of tanks and fighting vehicles.

What does the excess in vehicles mean for the continuation in production of tanks, trucks, and Bradleys? And how do you plan to distribute the excess equipment caused by the reduction to—for example, do the Guard and Reserve play a role in that?

General LENNOX. Senator Brown, we are undergoing analysis right now on what the future force structure will look like. So what is our actual force design as we draw down from 547 to 490 in the Active Force?

That final decision, to be made by the Secretary of the Army and Chief of Staff of the Army, will drive whether or not we do have excess or whether or not we are employing our Bradleys and our Abrams tanks today. So it will help us define whether or not we do have excess.

Our plans then would be to—and we don't see a lot of excess, frankly, in tanks and Bradleys. We do see some excess tactical wheeled vehicles, trucks in particular. And our plan is to make sure that we get rid of the oldest trucks in all our formations, active and Guard, first and then give excess—and then divest the excess trucks. Make them available for divestment.

Senator BROWN. Thank you.

How does—the Guard and Reserve's more active role in the President's new national security plan is evident. But how does the Army intend to resource training and equipping of the Reserve components? I am a little unclear. And are the Army Reserve and

National Guard sufficiently funded to support the current and prospective missions, do you think?

Maybe General Lennox, I think?

General CAMPBELL. Sir, I can take a shot at that. First off, sir, thank you, for the members of the committee, for your continued support.

And Senator Lieberman, thank you very much for your service.

Sir, we have what we call now the Army force generation model, and that has been used for the last several years to make sure we provide manned, equipped, and trained ready forces for the combatant commanders. We are going through a process right now to make sure that we take all the lessons learned from the last 10 years and apply that as we revamp the R4 Gen process. Included in this is the National Guard and the Reserve and the active component.

As we go through that, we will determine how many brigades are required to combatant commanders over a certain amount of time, and we can provide those resources at that time. So we have really gone from a tiered readiness piece to a progressive readiness piece with the R4 Gen getting supply/demand, and now we are looking hard, as we move forward, how many National Guard brigades, Reserve, we will actually need in an operational Reserve concept versus strategic Reserve.

We talked earlier, sir. In Afghanistan, I had two National Guard brigades underneath my command and control. They had battle space just like the active components. You couldn't tell the difference unless you knew the patch that was on their shoulder.

So they are manned, equipped, and trained just like the active brigades. They perform excellent, and we have got make sure that we can do everything we can to maintain that capability we have had in the past.

Senator BROWN. Thank you.

General Walker, in regard to the new weapons programs, they sometimes seem to be weighed down with unaffordable or, some cases, technologically unrealistic requirements. In some circumstances, requirements change in the middle of program development and, as a result, generate poor cost and schedule outcomes and increase the chances that a program will be canceled prior to fielding it. And we all know instances of that.

What is the Army doing to improve those requirements generation process, and what could we do, probably General Phillips and/or Walker, what could the Army acquisition community do to assist in this area?

General WALKER. Senator Brown, to start at the beginning of when we do requirements, we have adjusted how we go about it. We formed integrated capability development teams with all stakeholders early in the process so that we don't come up with something that might defy the laws of physics or not make sense. So that is one thing that we have started doing routinely that helps the process.

The other is we have adjusted the way we write requirements so that the requirements have a more open architecture, and we don't end up painting ourselves into a corner early in the process when

we don't know enough about that capability that we seek to develop.

The other thing we try to do is—or that we are doing is not being so resistant to changing a requirement once we write it, and we can do that by getting that capability in the hands of the soldier earlier in the process and let them try it in an operational context and give us some feedback. So I like to say that we can dynamically adjust the requirement as we go.

And those have already started helping a lot as we get into the trades process when that time comes, working with my partner General Phillips.

General PHILLIPS. Senator, I would just add that we are very serious about changing the acquisition paradigm. And I used to call it acquisition reform, but I really now refer to it as acquisition transformation. And Ms. Shyu and I are both really, really focused on that aspect.

We are teamed with our partners to my left and right. We are serious about teaming with the requirements generation, Keith Walker and his folks. We now have PEOs and PMs embedded with those that are looking at the requirements not only to review the requirements, to make sure that we have cost analyst folks, smart folks that have modeling and sim to make sure that we know the cost of those programs as they come forward.

Two of the programs that have been critical for the way that we changed the acquisition paradigm has been the Ground Combat Vehicle and JLTV. In the case of GCV, we went from the original RFP that was going to cost about \$20 million, through cost-informed trades—looking hard at the requirements, looking how we can do it faster and bring it in within 7 years—and we went to a cost of about \$9 million to \$10 million.

For JLTV, it was well over \$400,000 per copy, and we got it down to about \$250,000, working with our Marine counterparts. Bringing forth mature technologies, using competition, using fixed-price incentive fee or cost-plus incentive fee type contracts.

And one of the key aspects, sir, that I want to emphasize is industry builds these systems. So, in the past, we have probably not listened to industry to the extent we could, and now we are listening to industry and taking their feedback to make sure that we build our requirements and our acquisition strategies appropriately.

Senator BROWN. Just one final question. So if the Congress doesn't do anything with regard to sequestration, when do you need to start planning for sequestration?

General LENNOX. Tough question, Senator Brown, and a good one. It really doesn't take much planning for us to know that there is a catastrophe coming with sequestration.

For us, it is about manpower first. That is relatively fixed. In the Army, you can get rid of it very quickly. But if you get rid of the manpower quickly, you have to pay unemployment, and you have to pay for people to go. So you won't get any savings in manpower. And we will come back and ask for reprogramming money to pay those bills.

We can't close our installations very quickly. So you can't put a padlock on them and send people home. So we will have to pay those bills, and we will have to come back and ask for help.

The bill payers for those have to be modernization. They have to be training accounts, and you know the cost of those is that will very quickly have hollowing effects on the Army. I don't want to predict the outcome.

So it doesn't take a lot of preparation or mathematics to know the impacts for us are going to be catastrophic in this case.

Senator BROWN. Okay. Thank you.

Senator LIEBERMAN. Thanks, Senator Brown.

Senator Inhofe.

Senator INHOFE. Thank you, Mr. Chairman.

I will make this kind of quick because I have a time conflict. But I will direct this question at both—to both General Phillips and General Lennox, since I know what your answer is going to be.

As an old Army guy, you have heard me talk about before my last year in the House before I came to the Senate on the House Armed Services Committee, I remember we had expert witnesses that came in, and they said that in 10 years we would no longer need ground troops.

And as time went by and we looked forward, modernization, it seemed like that was an attitude at that time we were not modernizing our ground capability. Other countries around the world were. And I remember the Crusader came along. That was going to be the answer to all this thing. We were all excited about that.

And as a Republican, I readily admit it was a Republican President that axed that program.

Senator LIEBERMAN. So noted.

Senator INHOFE. So noted is right. In fact, we—[Audio Disruption.]

Then the NLOS came along. Then, of course, Shinseki was there. We had the FCS. They just axed all these things.

Now we are down to the PIM program, recognizing the Paladin was actually just a little after World War II technology. But still, this Paladin management integrated system is a good one. I have been watching it very carefully. And after seeing the others slide by, I just want to see what level of assurance the two of you would give us that this program is going to be seen through, and then also why it takes so long to do it?

General PHILLIPS. Senator Inhofe, I will start off, and then turn it over to General Lennox to add to my comments. But upfront, I can tell you that Paladin/PIM is a critical part of our modernization strategy.

And Senator Lieberman, you mentioned up front the value of the CPRs, capability portfolio reviews, and how General Corelli sort of brought that into fruition inside the Army. That was absolutely critical for us to take a critical look at our programs and figure out which ones are most important. And one of those that rose to the top was Paladin/PIM.

And since that time, about 2 years ago when we started working PIM harder than we had in the past and putting more resources against it, it was 2 years ago we brought a new strategy forward for PIM. We have kept Milestone C as June 2013, and we are high-

ly confident that we will make that date, and we thanked the Congress last year for adding money into PIM that allowed us to keep the milestone on track.

We have two critical paths between now and Milestone C to really finalize PIM and the way ahead. One is the business case analysis that needs to be done in case of determining do we proceed with a sole source, or do we go competitive? We expect that to be done probably within the next 30 days. And Senator, we will come back and make sure that we brief you on that strategy.

And the second would be as we drive toward the Defense Acquisition Board review with Mr. Kendall, the acting DAE, that we get all the testing completed prior to that milestone event so we are ready to go into LRIP and soon after there into full-rate production. It is a high priority for us, sir.

Senator INHOFE. Thank you. Thank you very much.

General LENNOX. Senator, I don't know that there is much more that I could add. I want to echo your original comment that we do often get our strategies wrong. In those cases, you have to have a modern Army.

And what we are trying to do is do incremental modernization to the extent possible so we are not going out on a limb, but that the things we undertake are achievable and affordable.

Senator INHOFE. Well, you know, when we are out on the stump and talking to people, there is an assumption that the United States of America, or specifically the U.S. Army, has the best of everything. When their kids go out, their best equipment.

But there are some areas where that is not true. And so, I think that should be a goal for those of us who are looking into the future, to make sure that does happen.

Well, I appreciate that assurance. And if you would, General Phillips, in the next month or so, update us. Perhaps me in my office or give me a ring so we can talk about that.

The only other area I was going to ask you about is the reset issue. We haven't experienced this before in our country, being out there in battle for 10 years, and we have all been over there. We have all seen the condition of our equipment.

We know that reset is going to have to happen. We know that the OCO funding is going to stop. How are you going to handle that?

General LENNOX. Senator, we have been—I think all of Army leaders have been very consistent about needing to have some sort of reset funding for several years after the end of any conflict. So we are out of Afghanistan—or out of Iraq, as you well know. But the equipment is not yet completely out of Kuwait.

Some is on ship coming home. Some has just shown up in our depots. It will probably take 2 years for us to clear the backlog of equipment out of Iraq and get it into the hands of our soldiers.

Afghanistan will be even more challenging, and we are going to need the support, frankly, of Congress to help us make sure that we get the equipment home, get it reset, and get it into the hands of soldiers. And we have been pretty consistent, as I said. I think it will take about 2 years after the last soldier is out. We will need that kind of support.

Senator INHOFE. Yes. All right, well, I appreciate that very much, and thank you for your responses.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Thank you, Senator Inhofe.

Senator Blumenthal.

Senator BLUMENTHAL. Thank you, Mr. Chairman.

Thank you, gentlemen, for being here today, and thank you for your extraordinary service to the country.

I want to focus first on the defense against IEDs. I know that each of you knows about and cares about this issue at least as much, certainly more than I do. But I note in your testimony, General, that in the section dealing with support to the warfighter in Afghanistan, at least so far as I can see—I may be missing it—there is nothing in reference to the protective gear or to better detection and the various series of devices and so forth that can be mounted in that regard.

I notice enhanced combat helmets is part of what you list, and I am just wondering whether there is more that you might say about that problem?

General LENNOX. I would ask the entire team to help me here because I know they have lived it and have been challenged with this from the beginning, Senator. So if I did leave it out of the opening statement and written remarks, it is a complete oversight.

Top priority and commitment to overcome this. So there has been a series of different items that we have fielded to soldiers in Afghanistan to help deal with the threat, from SPARKS mine rollers to go in front of the vehicles to protective ballistic undergarments to help those that are struck with the ability to better survive those kinds of effects.

We have had a series of upgrades to our MRAPs and MRAP all-terrain vehicles to include underbelly protection that we—General Phillips and I visited the facility while we were over there a month ago to watch the progress of this new and improved vehicle. And a number of hand-held devices that help dismounted soldiers find the threat and get in front of the threat.

So it is top priority investment, a top area, and if I neglected to mention it, it is my oversight.

Senator BLUMENTHAL. And I would just, I know that you—by the way, my question was not to ask whether you have done everything you can. I know that you have and you are. I am wondering whether there is another iteration of gear, detective devices that you are developing because from everything I know—and I am new to this committee, new to the Senate—this will be one of the threats to our armed forces going forward for years to come, unfortunately and tragically.

So I am just, you know, anything we can do to help you, and I am wondering whether there are other program areas that you are developing?

General PHILLIPS. Senator, I would just add that we continue to look hard at this. IEDs is something that we are putting a lot of S&T effort into, science and technology, research and development. One of those areas that we continue to improve, one is body armor also helps to protect. We have done nine improvements.

And when we have gone forward to ask for funding, whether it has been Congress or working with OSD, no one said no when it comes to IED protection or soldier protection. We have got the resources that we need, and we have to continue the investment in S&T and research and development as we go forward.

One of those that we have just recently learned from England, as a matter of fact, two systems. One is pelvic protection and then the GOLDIE system that is used to detect command wire. Those are systems that we are fielding today.

And pelvic protection, this is probably first generation.

Senator BLUMENTHAL. Right.

General PHILLIPS. But we have also got other generations. And sir, General Campbell has an organization called the REF that works with them, and they do some remarkable work in this area.

General CAMPBELL. Yes, sir. The Rapid Equipping Force for the last several years gets out in front, is able to provide equipment to soldiers working through JIEDDO to get it out very quickly to the soldiers.

Where we are making the turn now, just this year, is we are finally getting some of that equipment back here to stateside so that soldiers are able to train on that before they go over to Afghanistan. So, in the past, our policy, our strategy is really to get it into theater very quickly, get it into the hands of the soldiers that are in harm's way.

But a lot of times, again, that is a first time they have seen it. And now we are finally getting it back here. So each post, camp, and station has a set of training equipment. They are able to use that before they go. And that has been with the help of Congress providing additional funds to do that.

Senator BLUMENTHAL. Right. Well, I am hopeful that there will be iterations and development in the future that will be even more effective. And obviously, it all depends on the troops using it, which I understand now they are more and more doing so.

And I would be happy to follow up on this. I have been in touch with JIEDDO, but any way that I can be helpful, I would like to be.

On the Black Hawk H-60, the procurement is down. I think the numbers are 72 to 59. Are you satisfied that you will have enough of those helicopters not only to equip, but also to train and maintain the skill sets of your pilots?

General LENNOX. Senator, I think that the key issue for us, that we are able to continue modernizing in this constrained fiscal environment. So the key for Black Hawk is to keep improving and keep replacing things like the body and the frame of the aircraft, and the Mike model does that.

So we are able to keep that going and hope to have a multiyear contract completed I think in the next several months that will allow us to keep producing the Black Hawks. They are performing phenomenally in combat. General Campbell can give firsthand experience.

Apache also, with the Block III, the Apache Block III is a question of first giving you enhanced capabilities and then also finally replacing the frame on that vehicle. So, as you know, we have just flown these things to no end over the last 10 years, and it is time

to now start—we have tried to keep them up through reset, but now to replace the frame and to actually get a long-term replacement.

So we have been able to continue that in our strategy, although at a lower level.

Senator BLUMENTHAL. Did you have anything you wanted to add, General Campbell? He mentioned that—

General CAMPBELL. Sir, General Lennox was right on point. I mean, what I would add is just the courageousness of the pilots and the crews and the performance they have both in Afghanistan and Iraq in probably the hardest conditions that you can ever fly in, whether it is mountainous, whether it is the weather, the terrain. I mean, they continue to perform superbly.

So we are very, very fortunate. And we need to continue to modernize the Black Hawks.

Senator BLUMENTHAL. Thank you.

General PHILLIPS. Senator, can I just add—

Senator BLUMENTHAL. Sure.

General PHILLIPS.—that we have worked hard to sustain the multiyear. So thanks for supporting us on that.

I would also add that just from what General Campbell just said, 5.1 million flight hours, combat flight hours for Army aviation. Today, there is 569 aircraft flying in combat—or in theater today serving in combat operations in the most austere environment that General Campbell just described. It is remarkable what our aviation forces have done in this war in both Iraq and Afghanistan.

Senator BLUMENTHAL. And the helicopter has performed well under very difficult conditions, matched by the courage and expertise of our pilots.

I have one more area, but my time has expired. And maybe I can—

Senator LIEBERMAN. Senator Blumenthal, go right ahead.

Senator BLUMENTHAL. Thank you.

Senator LIEBERMAN. It is just you and me, and I am going to be here a while. [Laughter.]

Senator BLUMENTHAL. Well, thank you.

I wanted to ask about the Kiowa. You mentioned it in your testimony, General. I know that a decision will have to be made either to replace it or to use the Service Life Extension Program. And I wonder what is being done, in essence, to prepare the industry to adapt to your decision, which I guess will be made sometime in fiscal year 2013?

But are your industry partners being kept informed, and will they be prepared to adapt to whatever your decision is on that?

General PHILLIPS. Sir, we are quite excited about how industry has come back to the Army and expressed interest in the Armed Aerial Scout, as well as the Kiowa program, working with Bell and the potential to upgrade that aircraft or to go through a Service Life Extension Program.

Last year, at the Army Aviation Association of America, I spoke to industry, and I will do that again here in about another 10 days. Last, it wasn't too long ago that General Lennox and I were on a stage together, and we spoke to a host of industry partners here

in Washington, DC, that were interested in this program as well. So we have gotten extraordinary feedback.

We think there is probably between six and seven, somewhere around six and seven industry partners that are interested in the AAS program. And I will just quickly describe our way ahead. It is really twofold.

We are doing the Kiowa Warrior cockpit and sensor upgrade program today. That is going well, actually, working with Bell Helicopter. It is not a SLEP, though. It is not a formal SLEP program.

It is simply putting in a new cockpit and sensor, which upgrades the capacity of the Kiowa and reduces weight. So we will continue that program.

At the same time, we expect an acquisition decision memo from OSD around the 23rd of April that will allow us to go forward with a formal Armed Aerial Scout flight demonstration. So that will occur sometime this summer within 4 months of receipt of the ADM from OSD.

Then shortly after that, we expect to have a Defense Acquisition Board about April of next year. So it will be fiscal year 2013, sir. And we will make a decision on whether we have a good enough solution with industry and what they can provide based upon the flight demonstration, or is the Kiowa Warrior Service Life Extension Program good enough for us to go forward with?

So I think we—our dual path strategy sets us on the right course, sir. And again, we are getting great feedback from industry.

Senator BLUMENTHAL. Great. Thank you very much.

Thank you, Mr. Chairman.

Senator LIEBERMAN. Thank you, Senator Blumenthal, for those important questions.

I just want to follow up on the Black Hawk. Am I correct that the Army is still committed to the full planned buy of 511 aircraft, though the acquisition is down for this year?

General LENNOX. Senator, I would have to take for the record the exact number. We are committed to continue buying the Black Hawk—

Senator LIEBERMAN. Right.

General LENNOX.—beyond the program. So what we have done is just slip it to the right. We aren't going to stop at the end of the program.

Senator LIEBERMAN. Right. Okay. So I appreciate checking to confirm that that is the still the buy.

And I was going to ask about the multiyear negotiations with Sikorsky, when you thought that would conclude. But what I heard you say I think is that it is going to be sometime in the next period of months?

General PHILLIPS. Senator, I think we sustain the multiyear. I will go back and check on that and make sure that we get you the correct response for the record.

Senator LIEBERMAN. Right.

General PHILLIPS. But I believe we sustain the multiyear through the budget.

General LENNOX. The funding is there, Senator, but I think they haven't resolved it yet. So I think it is within a matter of months.

Senator LIEBERMAN. And am I right that there are going to be certain price advantages for us, for the Army, for the Government, as a result of that?

General PHILLIPS. Yes, sir. We normally look for about a 10 percent—

Senator LIEBERMAN. Right.

General PHILLIPS.—advantage for going with a multiyear, and actually, Sikorsky and the president of Sikorsky has committed to at least a 10 percent savings, sir. So that is good for the Army and good for our aviators and our soldiers.

Senator LIEBERMAN. Yes. That is what I had heard. I appreciated Senator Blumenthal's questions about the Kiowa replacement, potential replacement. I happen to be—General Hodges was in Connecticut the other day and visited Sikorsky. I happened to be in the State. So I spent some time with him.

But it was also a first opportunity for me with him to get a briefing on the proposed aircraft at Sikorsky, other proposals that Sikorsky will make for what they call the Raider, the S-97 variant of their X2. It is a fascinating aircraft, and it will just be something to watch how it develops because it has a combination of capabilities. It is quite remarkable.

Let me ask a few other questions, if I might? I wanted to go back and look a little bit more broadly based on the study that was done in 2010, the Decker-Wagner study, which was, as you remember, quite critical of Army acquisition programs, saying that since 2004, the Army had spent \$3.3 billion to \$3.8 billion annually on weapons programs that ultimately were canceled.

And there was pretty critical language there. "The Army lacks a credible quantitative model and process for determining realistic, achievable requirements for modernization and recapitalization, given reduced budgets."

So I say that. I put that into the record because I viewed the work that has been done over the last year, as we referred to the work that has been done under General Corelli, as a response to that report and to the general concern about the cost of the programs and the amount of money that was being spent for programs that didn't materialize.

So I wanted to ask you if you could analyze the fiscal year 2013 request in the context of the Decker-Wagner criticisms and perhaps what I will generally refer to as the Corelli reforms. In other words, what did you do differently this time based on that experience and that report?

General PHILLIPS. Sir, from an acquisition perspective, and then I will let General Lennox and our partners join in. But we really used something that Congress gave us in terms of the Weapon Systems Acquisition Reform Act and the ability to execute configuration steering boards.

So we in acquisition had the authority for the first time to sit with those that had the requirements and the resources. So all of us together, through the CPR process that you defined, sir, and the CSBs, could really look hard at everything from requirements generation to what we are bringing forward, all the way through to the acquisition strategy.

And through some very tough discussions in and among the Army family, we were able to come to closure on what requirements were. Do we have them right? Can we refine them? Do we have cost-informed trades? Do we have the right strategy? What did we no longer need that we can divest in terms of systems that might be in a given portfolio?

But we tied that together in a way that it really allowed us to make sure that we are buying what we should be buying and, at the same time, leveraging Decker-Wagner, which was a blueprint for us to improve. Really, we looked at all 76 findings, and we have already implemented about 42, which a part of that has been the CPRs and the CSBs being tied together.

And it has been very positive for us, sir, and I think you see that reflected in the fiscal year 2013 budget.

Senator LIEBERMAN. That is great to hear. Anyone want to add? General Lennox?

General LENNOX. If I could? Kind of a precursor to that, sir, is that we lost about \$2 billion in buying power from fiscal year 2012 to the PB 2013 submission. And from our plan, it was even higher than that.

So if we did not have the portfolio review process, we would have really been awash, I think, and it is that portfolio review process that helped us prioritize what inside each portfolio was more important than the others.

General Campbell's job then is to give an independent prioritization for the Army, and what he helped us do is determine where we had to take those cuts. So we ended up killing 8 programs and delaying almost 80 others not because—some of those programs were performing well. It was a function of whether or not you could afford to do it and what priorities you had to give up in order to do this.

So I think the entire process you talked about, set in stage by General Corelli, continued by General Austin in this portfolio review look, is enabling us to help prioritize.

Senator LIEBERMAN. Either want to add anything?

General CAMPBELL. Sir, I was just going to add General Lennox said at the end there that when General Austin came onboard, the first thing he did was say let us look at the CPR business and really take—

Senator LIEBERMAN. Good.

General CAMPBELL.—and work that. So we will continue with that. I think the discussions that we have as a group are very open, candid, really looking hard toward the future. What General Walker and his unit does down with ARCIC and looking out at Army of 2020 and really determining where we need to go in the future and then combining that with the CPR business, it is going to give us the best solution in the end.

Senator LIEBERMAN. Good. General Walker?

General WALKER. Sir, I talked about a few of the requirements procedures we are doing differently. But specifically, with regard to Decker-Wagner, Training and Doctrine Command was asked to look at some areas specifically with regard to staffing on ways to speed up staffing processes requirements. So we did that.

We were asked to look at key performance parameters that were mandatory versus nonmandatory and the same thing for key system attributes and provide recommendations on how to quantify those to speed the process so they didn't get out of control. And we were also asked to look at the threshold and objective key system attributes on policies we could establish about just using low-risk ones so we didn't invent things that were so risky because, I used the term before, it might defy the laws of physics and engineering.

So we worked those responses in the Decker-Wagner recommendations up with the department.

Senator LIEBERMAN. So I appreciate that response because I think you took that report seriously. I know it is never possible to guarantee anything, but is it fair to say that you present this budget this year, for fiscal year 2013, with a sense of confidence that we are not going to be spending a lot of money on programs that are going to be canceled? I guess I would put it that directly.

General LENNOX. Senator, I think so. We have really only two transformative programs, I think, in our entire portfolio. And one is the network.

Senator LIEBERMAN. Right.

General LENNOX. And we have network evaluations designed to help us learn and iterate through that process. So it is not as—we are relying more on commercial off-the-shelf capabilities than leap-ahead technologies.

And the other one is a Ground Combat Vehicle. And because we have put in a 7-year requirement there, we are not looking at miracles in terms of armoring and armoring capability. We are looking at what industry can do for us today.

So those are really our two big leap-ahead programs. Most of the rest of the Army's modernization portfolio involves incremental improvements. And I do think we come with much more confidence this year to you, that I think our proposals are well-grounded, and there has been a lot of work done.

I don't want to tell you that we haven't made a mistake, but—

Senator LIEBERMAN. Sure.

General LENNOX.—I think we are in better shape this year than we have been.

Senator LIEBERMAN. Well, I must say in my 24 years here, no one has ever told me they haven't made a mistake. So, don't—you are not—well, keep trying.

Let me ask some general questions about the defense industrial bases. You know the defense strategic guidance set it as a major tenet to protect the Nation's defense industrial base, which can be problematic at a time of diminishing budgets.

And specifically, the DOD funding reductions for fiscal year 2013 have reduced, as we have said, Army's modernization investment accounts and acquisition strategy. I wanted to ask you, given that and the fact that we are going to continue to operate for some period of time in this resource-constrained environment, what, in your view, are the major risks, if any, to the defense industrial base?

General PHILLIPS. Senator Lieberman, I will start off and then turn it over to my colleagues.

But as we look across all the portfolios, I think the one that we have to look hard at, and we are looking hard at, is the combat vehicle portfolio. When you look at the way the Army has made some great progress in the past of upgrading Bradleys and upgrading Abrams tanks and what that means in terms of not just the prime contractors, but also the sub-tier contractors.

But we are worried about all portfolios. We are looking across all of them, whether it is thermal weapons sites, soldier systems, tactical wheeled vehicles. But the one that rises to the top for me is combat vehicle portfolios.

I would add that we are a team with OSD as we look at a sector by sector, tier by tier, and sub-tier contractors to figure out where the great risks are so we can work on the single points of failure to make sure that we sustain the important sub-tier vendors not only for combat vehicle portfolios, but for other systems as well.

General LENNOX. I think General Phillips has hit on it, Senator. These are tough choices for us, and if you cover down on something you don't need, are you then exposing another industry?

Senator LIEBERMAN. Yes. No, I agree. You can't—can't do it all. So the challenge, of course, is to minimize risk. You can't eliminate it here.

Let me ask you, in that regard, to talk about what the logic is behind the Army's plans for 3- to 4-year production gaps for M1 Abrams tanks and the M2 Bradley fighting vehicles.

General LENNOX. Sir, the big one is that both the Abrams fleet, about 3.5 years in average age, because we have been able to reset the fleet as it has come out of Iraq, because we have produced and have been producing new vehicles, the Abrams fleet is very, very new, very young. And we have a very good strategy accepted by both the Guard and the active force to field with a two variant fleet, and we have reached that objective.

And buying additional tanks is something that we deemed less important than investments in aviation, investments in some of the other areas for the future. It is—as you mentioned, it is question of where do you want to take your risk? Because it is all risky.

In the case of the Bradley vehicle line, York, Pennsylvania, and the Bradley plant there, we have tried to mitigate that in our fiscal year 2013 budget proposal by proposing to upgrade the M8A1 Hercules to an A2 variant. We think we may need that in the future not only for carrying tanks, but for Ground Combat Vehicle. So we have attempted to mitigate that in 2013.

Senator LIEBERMAN. You answered the next question, which is how do you deal with the potential loss of industrial capability or capacity associated with those two production gaps? Do you want to add anything to that, General Phillips?

General PHILLIPS. Sir, I would add one—just a couple of comments to the Joint Services Manufacturing Center, JSJC, better known as Lima.

Senator LIEBERMAN. Right.

General PHILLIPS. Some of the things that we are working with GD is to better understand the sub-tier contractors that support the production at that facility. We know that there is about 790 or so workers that are there. And working with GD, we know that about 49 of those are very critical workers that are engineers that

are involved in tooling and design and other aspects of engineering tasks.

And there is another about 439 or so that are manufacturing workers that are involved in welding of ballistic holes, understanding how to put classified armor on the Abrams, and being authorized to execute those tasks. There is a host of those as well.

So working with our international partners and working with GD, one thing that we want to do is leverage foreign military sales as much as possible. There is no guarantee, but it looks more promising today than it did just several months ago in terms of countries like Egypt, Saudi Arabia, and others who have shown an interest in upgrading Abrams tanks or buying new Abrams tanks.

So, sir, we are working hard to make sure that we can do everything possible to sustain the critical skills.

Senator LIEBERMAN. That is a great point and, obviously, very helpful, I mean using the FMS.

Let me ask you a last series of questions about reversibility because in the full committee's hearings on the budget for next year, in posture hearings, a number of the witnesses have described the concept of reversibility as enunciated in the defense strategic guidance.

I wanted to ask you what are the Army's specific objectives with regard to reversibility? How much of the force would the Army be able to reconstitute and in what amount of time if you were called upon to do that?

General Campbell, maybe that is a good place to start? And then General Walker as well.

General CAMPBELL. Yes, sir. Great question. The reversibility issue is key for us as we take down to 490, not knowing what we will face in the future, how do we raise that force back or grow the Army. So we are looking at in reversibility having policies and procedures in effect that we can put into place things now that will enable us to move forward that way.

And then expansibility would be actually growing the Army to meet that demand. I don't think we know exactly the number that we need to grow to, to be able to work that piece. We will continue to work that hard.

I think there are ways that we can enable ourselves to be in position to do that better, whether it is through having more officers in position. So cadre-type led organizations that can bring in new recruits because, as you know, a lot easier to bring in a new recruit, to train him, as opposed to having a senior noncommissioned officer or an officer. It takes more time to grow that.

So we will be a little bit more officer or senior NCO heavy in some organizations. So we have to continue to take a look at those types of policies and put those in place, make sure that we can look for the future.

Senator LIEBERMAN. Thank you.

General Walker?

General WALKER. Sir, what I would like to add is that reversibility goes with expansibility. The idea being should the Nation need the Army to grow again, will we have the capacity to do that? So, in that context, reversibility for us becomes everything we in-

vest in the Army now so that should the Nation call upon us, we can do that.

And a couple of points I would like to highlight in that regard. One is the type of investment we need to do, it is all about readiness and investment in our people, and that is more than just equipment modernization, which we have talked about now, particularly in this environment.

So we are taking a very broad look across doctrine, organization, training. Yes, we still look at materiel, but aspects of leader development are huge, and our personnel policies and facilities that would help us do that. Perhaps most importantly we think is the investment in our mid-grade leaders so that should we have to expand, we can do that.

When we grew the Army a few years ago, we had the ability to recruit about—showed the ability to recruit about 15,000 soldiers a year. So, should we have to do that in the future.

But of course, if there are no captains and majors and sergeants with which those new recruits can form units around, we won't be able to expand. So a real holistic approach is critical, and investment in our mid-grade leaders is critical.

Senator LIEBERMAN. That is a really important point and one I have worried about. So how do we sustain—not only invest in the mid-grade leaders, but how do we sustain their involvement in the Army, their reenlistment in the kind of context we are going into?

General WALKER. You know, sir, I think one of the things Army leaders have really asked themselves is with our young leaders right now, who have had a lot of freedom of action, independence in combat, how are we going to keep them interested when we get them back from combat and put them in Fort Hood or Fort Benning or what have you?

Senator LIEBERMAN. Right. That is exactly my question.

General WALKER. And maybe I have got the benefit of I have got kids who are serving. And when I talk to them about it, the blinding flash to the obvious becomes that, "Dad, we didn't join the Army for a new piece of equipment, or we didn't join the Army for some newfangled technology or software. We joined it for the opportunity to lead soldiers." And those opportunities exist here.

Now our challenges in leader development, though, sir, is we talk about a leader development triad of training, education, and experience. We are real high on the experience right now. We have to rebalance as part of our investment strategy to pull up the education and training piece to balance that experience so we can take the Army forward.

Senator LIEBERMAN. You obviously did a good job at raising your children.

General WALKER. Their mother did well, sir.

Senator LIEBERMAN. I think you both did, I am sure.

Notwithstanding what your children said, and of course, I admire it, I want to now turn just briefly to those gadgets and to ask General Lennox and General Phillips how the Army is going to seek to incorporate the concept of reversibility into your modernization strategy?

General LENNOX. Senator, I have been thinking while my folks here at the table have been discussing leader development fashion.

What we have tried to lay out for senior leaders in the Army is where is the best places to take risk? Where can you best take risk? And if you guess wrong, then how challenging is it to recover?

So, for example, we have sustained our investment in things like attack helicopters. If you stop the line, it is incredibly challenging to build a new attack helicopter from scratch. We build the best ones in the world. We don't want to do that.

We did take risk on things like our tactical wheeled vehicles. We are going to ramp down the number of medium trucks, for example, that we are buying. We are going to reset our heavy fleet rather than buying new.

The Nation does this very well, and if we guess wrong, that is an area that we can ramp back up in. So it is that kind of calculus that we tried to set out for senior leaders, and I think we have been able to accomplish in the 2013 proposal that we have taken risk in areas that we can recover from if we guess wrong.

General PHILLIPS. Sir, I would just add that the key for us is the industrial base, which is what General Lennox is discussing. If we want to double the production of any given system, whether it is a weapon or a vehicle or a tank or whatever it might be, do we have the capacity to actually expand and to meet those requirements?

So the industrial base becomes critical for us, sir.

Senator LIEBERMAN. I appreciate the answer. I appreciate your testimony. You have been very responsive. You are really an impressive group of leaders. We are lucky to have you serving our country, serving the Army.

So I thank you for both your testimony and for what you have had to say today and what you have done over the years.

The record of the hearing will be held open until this Friday, March 30th at 5:00 p.m. to allow Senators to submit additional statements or questions for our witnesses.

Gentlemen, we would be grateful if you would respond to any of those that the subcommittee members might submit as soon as possible.

The date for the markup has not been set yet, but it is probably sooner than later. So the sooner you can respond, the better.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator LIEBERMAN. Do you want to add anything, any of you, to the record?

General LENNOX. One more shot, if we could, just to thank you, Senator, for your patience, your support of Army modernization, and your service to the Nation.

Senator LIEBERMAN. That is not why I gave you one more opportunity to speak. [Laughter.]

But nonetheless, I appreciate it very much.

With that, the hearing is adjourned.

Thank you.

[Whereupon, at 5:09 p.m., the subcommittee adjourned.]