

**HEARING TO RECEIVE TESTIMONY ON STRATEGIC FORCES PROGRAMS IN REVIEW OF THE DEFENSE AUTHORIZATION REQUEST FOR FISCAL YEAR 2010 AND THE FUTURE YEARS DEFENSE PROGRAM**

**WEDNESDAY, JUNE 3, 2009**

U.S. SENATE,  
SUBCOMMITTEE ON STRATEGIC FORCES,  
COMMITTEE ON ARMED SERVICES,  
*Washington, DC.*

The subcommittee met, pursuant to notice, at 2:37 p.m. in room SR-232A, Russell Senate Office Building, Senator Bill Nelson (chairman of the subcommittee) presiding.

Committee members present: Senators Bill Nelson, Sessions, and Vitter.

Majority staff member present: Madelyn R. Creedon, counsel.

Minority staff member present: Daniel A. Lerner, professional staff member.

Staff assistants present: Kevin A. Cronin and Breon N. Wells.

Committee members' assistants present: Ryan Ferris, assistant to Senator Bill Nelson; Rob Soofer, assistant to Senator Inhofe; Lenwood Landrum, assistant to Senator Sessions; Matthew R. Rimkunas, assistant to Senator Graham; and Michael T. Wong, assistant to Senator Vitter.

**OPENING STATEMENT OF SENATOR BILL NELSON, CHAIRMAN**

Senator BILL NELSON. Good afternoon. We're going to welcome Tom D'Agostino, the Administrator of the National Nuclear Security Administration, and General Donald Alston, Air Force Chief of Staff for Strategic Deterrence and Nuclear Integration, General Floyd Carpenter, Commander of the 8th Air Force, and Rear Admiral Stephen Johnson, Director of the Navy Strategic Systems Program. It's a pleasure to have you.

My opening statement will be put in the record, and when Senator Vitter arrives, his will, as well, and we'll ask him if he would like to make any comments.

[The prepared statement of Senator Bill Nelson follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. Gentlemen, we will put all of your opening statements in the record, so the record will be complete, and we'll get right into it.

STATEMENTS OF HON. THOMAS P. D'AGOSTINO, ADMINISTRATOR, NATIONAL NUCLEAR SECURITY ADMINISTRATION,

DEPARTMENT OF ENERGY; MAJOR GENERAL C. DONALD ALSTON, USAF, ASSISTANT CHIEF OF STAFF, STRATEGIC DETERRENCE AND NUCLEAR INTEGRATION, UNITED STATES AIR FORCE; MAJOR GENERAL FLOYD L. CARPENTER, USAF, COMMANDER, 8TH AIR FORCE, AIR COMBAT COMMAND; AND REAR ADMIRAL STEPHEN E. JOHNSON, USN, DIRECTOR, STRATEGIC SYSTEMS PROGRAMS, UNITED STATES NAVY

[The prepared statements of all four witnesses follow:]

Senator BILL NELSON. Mr. D'Agostino, there's an article in the New York Times and in a bunch of other papers about the publication of the Government Printing Office Web site of a report that, according to the article, quote, "gives detailed information about hundreds of the Nation's civilian nuclear sites and programs, including maps showing the precise location of stockpiles of fuel for nuclear weapons," end of quote. And I understand that they've taken this report down from the Web site.

Tell us about this, and tell us what—your assessment of any vulnerability that was disclosed in the report.

Mr. D'AGOSTINO. Mr. Chairman, I'd be glad to.

First of all, the report that you mentioned is the United States declaration associated with the advanced protocol, which is a more rigorous inspection regime set up for—to assist in our nonproliferation efforts around the world. In fact, it's not a report about our nuclear weapons activities or sites, specific, you know, locations of nuclear weapons or nuclear security; it's civil nuclear materials that exist around the United States. It is a sensitive, but unclassified, report. Ultimately, it goes—it would have gone—after 60 days here in Congress, it would go over to the International Atomic Energy Agency. We think the report's a great demonstration of U.S. leadership and wanting to be up front, wanting to be the first one to get on to these more rigorous inspections. We're certainly dismayed that the sensitive information was displayed publicly, but I can assure you, sir, I've looked at the actual report—in fact, this morning again—to make sure that I was very clear, particularly at sites that are the responsibility of my organization, to make sure that the information there is all unclassified. It went through a detailed interagency review. And so, while I'm dismayed that it's out, I can assure you, sir, that it doesn't release weapons information.

Senator BILL NELSON. So, it is—it's just an easy locator for where nuclear weapons complexes are.

Mr. D'AGOSTINO. It's an easy locator for the civil side of what I would say the research and development that the Nuclear Energy Program does in the Department of Energy; some of that work is done at the NNSA site, some of it is done at the laboratories. There is some commercial power plant information that's out there. But, it does not reveal any classified information. It—unfortunately, it's a nice compilation of information dealing with civil nuclear, and we are always very sensitive—and the Nuclear Regulatory Commission is, as well, very sensitive—to how much information gets out there that doesn't necessarily need to be out there. And, unfortunately, this is one of those cases.

The real concern, I think, has to do with, you know, how to—how was this mixup of—how did this information get out onto the Gov-

ernment Printing Office Web site, and that's something I'm sure we'll be working very closely with Congress on, trying to figure that out.

Senator BILL NELSON. Do you have any idea how this would have appeared in the paper? Did they just cobble together a bunch of unclassified information?

Mr. D'AGOSTINO. Well, I think what probably happened is, this sensitive, but unclassified, report that was sent was inadvertently placed on the Government Printing Office Web site. Another group—I believe it was Federation of American Scientists—picked that up and placed it on their Web site, and from there it spilled into the media. And it has since, as I understand it, been taken off of the GPO Web site, Government Printing Office Web site. It's all unclassified information, but it's sensitive. It details where the country has—doing some of its civilian research in nuclear areas, so it's got information about materials and things like that. It's pretty—

Senator BILL NELSON. Do, we have to worry about any enhanced security, or do you feel like the security is adequate?

Mr. D'AGOSTINO. I'm comfortable with the security at—I'm very comfortable with the security at our NNSA sites. Those are the ones I know about the most. We design our security posture fairly rigorously against—well, the details, of course, are classified, but we—against an imagined—a pretty broad set of threats. And it would certainly cover the potential threats that, you know, might be here.

What—we don't want to make things easier for people. And I think, unfortunately, something like this does make something easier. It just means that we have to maintain our security posture and keep it strong and continue to check on how we're doing, per our own standards.

So, I'm very comfortable with the security of our NNSA sites, even with this report out, because I've looked at the, quote/unquote, "maps," if you will, and there's—on all of our sites—and there's really nothing there, quite frankly. It just shows a corridor, for example, in a building, nothing else around it, so you have no idea of those kind of details.

Senator BILL NELSON. The Nuclear Posture Review is underway, and each of you have a role in the process. So, why don't we start with you, Admiral, and you all just go right down the line and tell us about your role in the process.

Admiral JOHNSON. Yes, sir. I—the Navy assigns a flag officer to each of the working groups for the Nuclear Posture Review. I am assigned, appropriately, to the Stockpile and Infrastructure Working Group, and I support Mr. Henry and Mr. Harvey, who are the chairmen of that group. And then, the Strategic Systems Program has key individuals supporting all parts of the NPR. We meet weekly. In my opinion, it's good communication, it's a good, healthy process, and I expect a good outcome.

Senator BILL NELSON. Okay. Now, you said you're assigned and that you meet weekly. What's your role in the process?

Admiral JOHNSON. I provide the answers to postulated scenarios provided by the other groups primarily who work—the force structure groups. So, in the case of change in weapons loading, we

would analyze, Could we—where would we store weapons? Where—how many would have to be moved?

How long would it take? What would it cost? Those sort of practical answers. Or, also, in my case, in the group that I'm in, we also help illuminate the investments necessary within the infrastructure for the Stockpile Stewardship Program and for it to carry on into the future.

General Carpenter: Well, sir, I—like the Admiral, I have no real direct role, other than as a technical advisor, if you will, or a subject-matter expert on the bomber side, since 8th Air Force is the nuclear bomber leg, which we consider a critical part of the triad. I act as an advisor when there are questions about that particular part of the triad, and how many weapons would be appropriate for that part of the triad. So, I'm removed, at Barksdale Air Force Base, from the NPR process itself, but very much engaged, through STRATCOM and through the air staff, with General Alston.

Senator BILL NELSON. Do you get involved in the design of the bomber? Do you get involved in the—

General CARPENTER. I have not, sir.

Senator BILL NELSON.—design of the new bomber?

General CARPENTER. No, sir, I have not.

Senator BILL NELSON. How about you, Admiral?

Admiral JOHNSON. No, sir.

Senator BILL NELSON. With regard to the new submarine?

Admiral JOHNSON. Yes, sir.

Senator BILL NELSON. You get involved—

Admiral JOHNSON. Yes, sir.

Senator BILL NELSON.—in the design.

Admiral JOHNSON. I have been responsible, on the Navy side, for all the pre-milestone work, the system-engineering work that preceded the start of the analysis of alternatives, and I will be responsible for the design of the—and the operation of the missile compartment.

Senator BILL NELSON. General?

General ALSTON. Mr. Chairman, I am responsible for the Air Force support to the Nuclear Posture Review process, so I ensure that we have proper representation on all of the working groups that are working the Nuclear Posture Review. Admiral Johnson and I have found ourselves, in my 21 months, together very often, because of our somewhat common responsibilities, and we also share seats in some of the Nuclear Posture Review forums. But, my responsibility would be not only to ensure that we've got active engagement at every level within the Nuclear Posture Review, but that I ensure that, as discussions and propositions and excursions would develop, that whatever would be asked of the Air Force, in terms of replies, that I would help manage those replies to that process.

I, too, agree that this has been a very collaborative process. I think it's been a very transparent process. It is bona fide that the services have been invited to participate fully. And I'm very encouraged that, with this level of collaboration and a focus on strategy and policy leading force structure, that I, too, am confident that we will get a very competent outcome for the Nation.

Senator BILL NELSON. Mr. D'Agostino?

Mr. D'AGOSTINO. Yes, Mr. Chairman. I'm a member of the Senior Integration Steering Group—it's called—also known as the SISG. We meet weekly. We will—we go over—essentially, there are a series of working groups—the Stockpile and Infrastructure Working Group, as you heard Admiral Johnson describe, Policy Working Group, Force Structure Working Group, an International Working Group. And we have this organization above that worries about the interagency coordination between these detailed working groups. So, I sit on that group. We do tradeoffs. We make sure that the strategy force structure feeds the number of warheads, types of warheads, and then do kind of the iteration back and forth and make sure all these pieces tie together. And then, occasionally I've sat in as—acting for the Deputy Secretary in deputies' committee meetings at the National Security Council to receive—to be on the receiving side of some of this, which is starting to discuss—I would agree with General Alston, I've seen a tremendous level of collaboration, not only between services and OSD policy, acquisition technology and logistics, but State Departments and international partners, as well. So, it's been a great process.

Senator BILL NELSON. Jeff, do you want to ask any questions at this point?

Senator SESSIONS. You can go ahead.

Senator BILL NELSON. All right. Mr. D'Agostino, you know that there is a reasonable chance that we're going to reduce the nuclear stockpile. And that's going to increase the size of the backlog of the nuclear weapons waiting to be dismantled. How would NNSA handle that increased number of dismantlements?

Mr. D'AGOSTINO. Absolutely right, sir, we do expect a bit of—some increase in our dismantlement queue. As I've mentioned publicly before, we have a pretty sizable dismantlement queue. The actual number is classified, but at the pace that we're on, we'll take apart our last warhead in that dismantlement queue in the year 2022. That actually is a fairly accelerated rate from where we were about 4 years ago, on the pace that we were on. And our plan—what—we submitted a report last year with the classified details to Congress, and every 2 years we'll re-up that report. The way we would handle the increased rate is to continue to use what we call a special tool set. It's what we call Seamless Safety for the 21st Century. It's a series of special tools that assist us in working on our warheads, where we don't have to move the warhead around so much, but it sits in a special toolcase where it allows us to take it apart fairly rapidly. But, most importantly, more important than speed, is the safety piece of this. Many of these warheads, particularly these old warheads, have been together—been—were built 40-plus years ago of fairly exotic materials, and have been in very hot silos and up in cold airplanes and back and forth. And they're—it's a very complicated job. So, my primary concern is not if I can take them apart faster every single year, but can I continue on the safety record that we've held essentially for since the program started, because it's—we're dealing with conventional high explosives that don't have the safety—on old systems that don't have the safety features of our more modern systems.

So, I can assure you, safety is number one, not how fast I can do 'em. And clearly it's going to require us to maintain kind of a

good set of production technicians who are trained in this area. And I think we've got that crew in place right now.

What I don't want to do is hire up essentially 300 people, because it's going to take me a few years to get 'em trained up—have 'em work really hard for 6 years to take everything apart, and then have to lay them off, because I don't necessarily think that's an economical—it doesn't make sense economically.

Senator BILL NELSON. Do you have enough pit storage at Pantex?

Mr. D'AGOSTINO. Yes, sir, for—right now, our expectations is that we will be able to handle our expected future pit capacity on—not only today on our current plans, but the expectations of the Nuclear Posture Review. I don't want to pre—be predisposed that I know the answer before the review is done. And I don't. But, we're going to re-evaluate all of these questions on storage facility locations as soon as we get the exact numbers. So, I'm anxiously waiting, frankly, to get this review done, get the details out, because that assists me greatly in my planning, 5-year planning.

Senator BILL NELSON. Why did you move the responsibility for the construction of the pit disassembly from one office to another?

Mr. D'AGOSTINO. The—well, we—in many cases, the PD—Pit Disassembly and Conversion Facility move was directed by Congress, so we had a shift. I don't—I'm never a big fan of moving large projects from one to the other, because it—what you do is, you disrupt teams. These are very complicated facilities. And they require a certain set of consistency over years of time. So, what we're—what we work very closely—both of those organizations are in the NNSA, so I am ultimately responsible for it and ultimately that's going to be my objective.

Senator BILL NELSON. In disassembling the nuclear weapons, do you want to do that in Nevada or do you want to do that at Pantex?

Mr. D'AGOSTINO. I want to do that at Pantex, because I have—first of all, my production technicians are at Pantex. Next, the facilities that I have at Pantex are actually certified by ourselves and checked by the Defense Nuclear Facility Safety Board to be able to do what I would call the highest level of nuclear safety work, because safety is primarily number one. If we're ever in a situation where we have, I would say, a problem disassembling a particular warhead, for example, because it's just been together for so long and we are in a situation where we need to get it out of the system because it's stopping a lot of other disassembly work from happening, we do have the option, and it will be on a case-by-case basis, to say, "Let's use our device assembly facility at the Nevada Test site, fly some technicians out there, do this specialty work on this particular warhead while we continue to work away this larger bucket of dismantlement work."

So, Nevada is always a nice contingency plan for us. I don't see anything in the near future that would cause us to use it right now.

Senator BILL NELSON. Senator Sessions?

Senator SESSIONS. Thank you.

Mr. D'Agostino, on the—when we talk about nuclear stockpile reductions, which will be part of the President's talks with the Rus-

sians, I guess—have they already begun, or will they—not—they haven't begun yet, but—

Mr. D'AGOSTINO. The assistant Secretary, Rose Gottemoeller, from the State Department, has started working with Russians. Yes, sir, she has.

Senator SESSIONS. It's on a fast track. I would just note that there's no reason that that has to be done this year. It's a self-imposed goal. We can extend the START treaty for up to 5 years with little problem. But, at any rate, the President seemed to be determined to move forward with that, and announced some reductions. But, the question I think we're hearing from various experts in the field, that this—any reduction done by current stockpile should be tied to some sort of modernization plan of our existing nuclear weapons. Do you share that view?

Mr. D'AGOSTINO. Well, I think that's a discussion that I'm currently having right now. I think the one—one statement I would make is, I feel very strongly that we are in a position—kind of a fragile position, if you will, from an infrastructure and people standpoint. The—there are a number of reports—well, there's a Perry-Schlesinger report that has come out recently that has got a fairly accurate portrayal of the infrastructure and people concerns that they have. One thing to do is make—we have great people in our outfit. The people want to know that they're doing work that the country cares about and that they—that they're doing work that exercises their skills. So, an element of that is extending the life of the warhead. And the way that Perry-Schlesinger Commission report describes life extension is a continuum of activities, from refurbishment to replacement. I think working—working in that continuum is where we're going to end up and what the Nuclear Posture Review is going to end up showing us.

So, I—and all of these pieces are tied together. There's no—you can't—in my view, you can't just talk about one piece, just talk about size only, and not address, frankly, the whole integrated situation, not only on the NNSA side, but my colleagues in the Defense Department who also have concerns with critical skills.

Senator SESSIONS. Secretary—former Secretary Perry, on May 28th—who's been, frankly, very aggressive, more than I would suggest, is required to draw our weapons systems down—said this in his article, quote, “The U.S. should maintain a safe, secure, and reliable nuclear deterrent for itself and its allies, and that this deterrent should be adequately funded and staffed with topnotch managers, scientists, and engineers.” I know that you are challenged with making sure that there's no waste, every dollar is spent wisely. But, is the budget before us today, that's been proposed, is that sufficient to meet the standards that Secretary Perry made?

Mr. D'AGOSTINO. I—the budget we have before us today meets the standard for today, for 2000—for the year that we're talking about, 2010. I would like to note, though, that I'm—this is a—particularly when you—when one looks at the out-year plan—typically we submit a 5-year series of numbers to show direction, if you will, on our programs. This program, you'll note that our out-year numbers are exactly the—in some cases, in the science and technology, are fairly identical with the 2010 number. That is done because we recognize—I recognize that changes are going to have to be made

in the out years in order to make Mr. Perry's statement a sustainable and true statement out in the out years.

So, the way I would describe this is as a—this is a 1-year budget submittal to Congress, that once the NPR comes out, my plan, Tom D'Agostino's plan, is to make sure that the challenges of securing nuclear materials in 4 years, the challenges associated, as Perry-Schlesinger report puts out, on doing life extensions on our warhead and exercising our people, are duly reflected in the science element of my program, the infrastructure element of my program—not “my program,” but the program that the country has entrusted me with for now, as well as the direct stockpile work piece, the life-extension piece.

Senator SESSIONS. Well, do you—is there money in it sufficient to do those things in the out years?

Mr. D'AGOSTINO. Not in the out years, but in 2010, yes, sir.

Senator SESSIONS. Well, Secretary of Defense Gates, just last October, said, quote, “The U.S. is experiencing serious brain drain in the loss of veteran nuclear weapons designers and technicians.” And, he went on to say, quote, “To be blunt, there is absolutely no way we can maintain a credible deterrent and reduce the number of weapons in our stockpile without either resorting to testing our stockpile or pursuing a modernization program.” Do you agree with that?

Mr. D'AGOSTINO. I largely agree with that statement. There's details below some of those statements. A modernization effort, in my view, encompasses a wide variety of activities, from reuse of components that we've previously made, exercising our scientists, to making sure that when we do a life extension on our program, we modernize the safety and security elements of our warheads.

That's absolutely important. The last thing I think is—we want to do is make sure we put—as we maintain our deterrent, put warheads into our stockpile that are based on 1970s- or 1980s-era safety and security efforts, because we know that things have changed in the last 30 years.

Senator SESSIONS. Well, a modernization program should result into weapons being more reliable and significantly more safe, should they not?

Mr. D'AGOSTINO. Absolutely, Senator. I 100-percent agree with that statement.

Senator SESSIONS. What objections are you getting to modernizing, even as we draw down some of the numbers?

Mr. D'AGOSTINO. I think making sure that it's put in the context of the President's, you know, overall strategic direction, making sure that it fits in. We have an integrated framework to talk about—

Senator SESSIONS. But—

Mr. D'AGOSTINO.—nuclear security.

Senator SESSIONS. But—

Mr. D'AGOSTINO. That would—

Senator SESSIONS.—yet, you don't have a commitment for funding that would allow you to do that. Is that what you're saying?

Mr. D'AGOSTINO. The program I have right now puts us in a position to be able to respond to the Nuclear Posture Review. I'm very confident—and that's why I'm very excited about being able to get

a Nuclear Posture Review out, because we want that detail and that information in there. That's why Mr. Harvey, who is heading up the stockpile and infrastructure—co-leading the stockpile and infrastructure group, who understands this program, has my views—is working that in the Nuclear Posture Review process, because I have these views that I want to be reflected in, ultimately, the administration's position for the future.

So, I have no objection to modernization. I think it's important. We need to put safety and security into our stockpile. We have some in already. We want to make sure that, if we're going to extend the lives and maintain our deterrent, that continues out into the future.

Senator SESSIONS. Well, you also would acknowledge that we're the only nuclear weapons country in the world that doesn't have a modernization ongoing program. Is that right?

Mr. D'AGOSTINO. That's correct, if—but a life extension—we do have a life-extension program. I want to make sure that that's clear. There's—some of this is not semantics—there are some details behind the difference between a pure refurbishment life extension and a reuse life extension or a replacement life extension activity. So, it's absolutely correct, if we're talking about what I would call advancing the ball dramatically on safety, security, and reliability. But, we do have a life extension program underway; in fact, we're supporting the Navy, Admiral Johnson's requirements, for the W-76 warhead, in that respect.

Senator SESSIONS. Well, we need—we just—we need to do what is necessary to move forward with these programs. And I just am not seeing a firm commitment from the administration that that's what's going to happen. We hear some positive talk. I think you guys hope that the Nuclear Posture Review will help move us in that direction, but I haven't seen it yet, and it makes me somewhat nervous.

Admiral Johnson, tell us briefly about the missile defense, about your requirements to test submarine-launched missiles, how often do you launch those, how many you do, and why you think that's necessary to guarantee the reliability of those systems.

Admiral JOHNSON. Yes, sir. The Navy tests for missiles per year in a program we call a Fleet Commander's Evaluation Test. The submarines are on patrol. They are notified. They're selected at random. They're notified by message. They return to port. Two missiles are selected—again, randomly. And those missiles are then—the warheads are removed, and the appropriate test instrumentation, telemetry, and destruct capability is installed. It takes a couple of days, a matter of days. And the ship proceeds to the range area and conducts normally two missiles from that submarine. We do that twice a year, a total of four.

Senator BILL NELSON. Tell us where that range is, Admiral.

Admiral JOHNSON. There are two ranges. The one we used yesterday is off the coast of Florida. It's the same operation center the Air Force runs for a variety of tests. They share that facility with us at the 45th Space Wing, and it's the eastern range. We fired, in this case, from Her Majesty's ship, Victorious, a Royal Navy submarine fired off the coast of Florida for a 5,000-mile test splashing down off the coast of Africa.

Senator SESSIONS. Well, Mr. Chairman, I think, one thing we will need to look at is that the National missile defense—they reduced the number to 30. If that goes forward, which I'm not comfortable with, I think it puts an even greater requirement that we have enough missiles that we have tested over the years, because all of our other areas test. And you've been a critic, I know, for some time. And then—that we haven't probably tested that system enough. So, however we come out with national missile defense, I think we're going to have to produce those things while the assembly line is hot so they can be used for testing.

Thank you. I appreciate your leadership. You are exceedingly knowledgeable on all these issues, and I'm pleased that you're chairing our committee.

Senator BILL NELSON. Just for you students, here, this is the famous Senator whose picture is on the front page of the Washington Post this morning.

[Laughter.]

Senator BILL NELSON. Mr. D'Agostino, we're not only reducing the number, but we're going to reduce the actual types. And so, how do you go about reducing the weapons types and reducing redundant warheads?

Mr. D'AGOSTINO. What I would say now is, there is discussion about reducing types, but that will be left for the Nuclear Posture Review ultimately to come out. But, I would offer the following, if I could. Ultimately, we would respond—ultimately, it gets driven by the Defense Department's requirements, the types of targets that are part of the algorithm that determines the size of the stockpile, whether or not certain targets can be covered by multiple warheads, are there backups needed. From my standpoint, reducing the numbers of types makes the maintenance element a lot easier. I don't have to make X number of different types of neutron generators or thermal batteries or other particular components that we have to replace on a periodic basis. So, the maintenance piece becomes easier. There's a downside, of course, to reducing the types, and that is, you become more and more dependent on the types you have remaining. And therefore, that drives you to want to make doubly sure or triply sure that you know exactly what's going on with those particular warheads you've decided you're going to retain in your arsenal, both in numbers and types. And so, I've always emphasized the point that as—if our stockpile gets smaller, and if the type—numbers of types goes down, that more and more reinforces the need to have this discussion on having a very sustainable workforce and infrastructure that does that. Right now, we don't have that in the out years, in my opinion, but that's what we have to get to.

General Chilton ultimately can provide a more wholesome answer, sir, to your question on reducing the types.

Senator BILL NELSON. Okay. We'll take up with him.

Historically, each lab has been responsible for the weapons that it designed. What do you think of the idea of having all the data on all of the weapons available to each of the laboratories and having each lab do an independent review of each weapon?

Mr. D'AGOSTINO. I like that idea, sir. I think it's a great idea. We discussed, last year, on how we make our annual assessment proc-

ess stronger as our stockpile size changes. We believe we've reached that point where our stockpile size is small enough that we need two independent checks, full sets of experiments run independently by both labs, keeping the responsibility, of course, for the design with one laboratory, because we always want one organization responsible. But, having another institution do that—Secretary Chu has looked at this idea. In his first month or so as the Secretary, I talked to him about that. He was convinced enough that he signed out, essentially, a piece of paper that directed us to go off and establish the system where we work that in. It means a little bit more science work, it means a few more experiments, it means a bit more analysis, and it means a bit more back and forth between our two laboratories, but that's a good thing. I think the country will be better off because of that.

Senator BILL NELSON. Senator Sessions?

Senator SESSIONS. Just briefly. The Wall Street Journal, June 2nd, has an article that the U.S. and Russia talks appear headed for a framework agreement by July 6th, and a final treaty by December. That's moving right along.

Mr. D'AGOSTINO. I would agree with that, sir.

Senator SESSIONS. Have you been involved in that?

Mr. D'AGOSTINO. Yes, sir, at what we call the interagency meetings we have at the National Security Council and advising the assistant Secretary of State—that is the prime negotiator for the administration.

Senator SESSIONS. Well, Mr. Darrell G. Kimball, executive director of the Arms Control Association here in Washington, which is a private group, I think, that apparently knows a lot about it, described the atmosphere at these meetings, usually tedious, as "electric," close quote. White House officials wouldn't say what their targets are on a treaty with Russia, but Arms Control Association, Mr. Kimball, said the deployed nuclear weapons in each country could be reduced by 30 percent to 40 percent from their current limit of 2200 warhead delivery systems, Mr. Johnson, would be cut by half. General Alston and team, let me ask the military witnesses whether they've conducted any analysis on the implications of these reductions for their leg of the triad.

Who wants to start?

General ALSTON. Senator, I'd be happy to start.

The process so far with regard to the Nuclear Posture Review has been looking at the existing treaty limits with regard to Moscow and the combatant commander has been involved in his assessment as to force levels, but the talks—the discussions have not gotten so specific yet as to identify specific force levels. It has been a priority, certainly of the Air Force, and I will let Admiral Johnson speak for his service, but that we are ensuring that our responsibilities to maintain nuclear surety at lower levels is a very important matter to us. You would have, in your workforce, the amount of—their ability to perform their roles and responsibilities. It's a sensitivity that we have. And as we get deeper into this discussion and deeper into the Nuclear Posture Review, I know we're going to reach a point where we're going to have to be able to make the assessments that you indicate we will need to make.

Senator SESSIONS. But, you haven't been asked to, and have not completed an assessment to reduce your delivery systems by one-half?

General ALSTON. No, sir, we have not. There have been some excursions to see what would be the art of the possible, but I really would not qualify those as reaching the point where they would be sufficiently mature for force-structure recommendations. But, for half of the force, no, sir, there hasn't been that level of detailed discussion involved in the Air Force.

Senator SESSIONS. General Carpenter?

General CARPENTER. I agree with everything General Alston said. Our position basically has been that we have been promoting a balanced triad, whatever the numbers are, that the end result should end with a triad, as we have today, that is a balanced triad, so that every leg has a sufficient number of weapons to make it sustainable.

Senator SESSIONS. Admiral Johnson?

Admiral JOHNSON. Yes, sir, I agree with the same position. I do make the observation that, in the case of the missile tube numbers, the current numbers are set higher than the number of missile tubes that we have today, and that may provide some insight into the way—I haven't read the article, so I can't exactly respond to it.

Senator SESSIONS. Well, they just speculated. They talked about delivery systems being reduced by half. Let me ask you—you're aware—and I know when you've been promoted and had hearings, you've been asked whether or not you would give your honest assessment, regardless of what the politicians tell you, so I'm going to ask each one of you three uniformed personnel, Will you, if asked about whether or not you can accept a 50-percent reduction in the delivery systems of our triad, will you give your best military judgment?

General ALSTON. Yes, sir.

General CARPENTER. Yes, sir.

Admiral JOHNSON. Yes, sir.

Senator SESSIONS. All three of you said "Yes." I appreciate that.

Also, Secretary D'Agostino, on the question of nuclear weapons, the numbers slip my mind right now; perhaps you can recall how many tactical nuclear weapons the Russians have and how many we have.

Mr. D'AGOSTINO. The actual numbers are classified, but I will say there's a 10-to-1 ratio, roughly, give or take. It's a big difference between the two.

Senator SESSIONS. And if the START goes forward, we're talking about the strategic nuclear weapons primarily being reduced, and there's no plan to narrow the gap in the tactical nuclear weapons, is there?

Mr. D'AGOSTINO. Well, the administration is focused—you described the timeframe earlier, which is correct, sir.

Addressing the tacticals would be very difficult to do in the time period. There's other implications. Russia's been very coy about the role of their tactical nuclear weapons, vis-a-vis their overall national defense. It's a different approach than what we have.

Senator SESSIONS. Oh, I see. The Russians don't want to talk about it? That's right, the Russians don't want to talk about tactical nuclear weapons. That's off the table. They're willing to talk about strategic nuclear weapons, and that's the fact of the matter. And the administration is determined to reach this treaty, for reasons that baffle me. I mean, hopefully we can go in that direction and move forward in that direction. Okay? I'm supportive of that. But, we're not in under any pressure to do this. This is a self-imposed pressure that worries me. So, these are important issues. I know you will work on them, give your best judgment.

Mr. Chairman, thank you.

Senator BILL NELSON. Thank you, Senator Sessions.

And originally, under START II, there was a general understanding that once we got to START III, they would take up the tactical nuclear weapons, but we never got around to ratifying START II. So, this is something you have brought up in a most timely fashion, and I thank you for bringing it up. We need to keep it out there on the table and ultimately get to that issue.

The idea was to address the strategic weapons first and then get to the tactical. Well, we never got there. So, thank you, Senator Sessions.

Senator SESSIONS. Thank you.

Senator BILL NELSON. Senator Vitter?

Senator VITTER. Thank you, Mr. Chairman.

Welcome, to all of you. And, in particular, General Carpenter, welcome to you, and thanks for your new leadership of the Mighty 8th in Louisiana. We're very proud of that.

My first question goes to something focused there, which is of the Air Force's movement on global strike, which is slated for Barksdale and obviously we hope that moves along and continues, in terms of the new major command that is clearly a significant high national priority, and it's a national priority to stand it up in a timely way. Can you give us a view—and/or, General Alston—an update on how that's progressing?

General CARPENTER. I can give you a timeline, and General Alston can fill in any gaps I missed.

But, June 27th is the end of the environmental assessment period. And assuming that all comes out as we hope, then it will be announced as the final location. Once that happens, then you will start seeing people and resources being moved there. General Kowalski, who's the vice commander now of Global Strike Command, I believe is scheduled to arrive the first week and a half of July, followed by General Klotz, the commander, the new commander, and he is to arrive on early August. And we're going to have a standup of the command, an activation of the command, and I believe the 7th of August is the planned date right now, tentatively at least. And I think everyone—or, I think you know that the initial operating capability is scheduled for September. Come December of this year, the ICBM wings move over to Global Strike Command out of Space Command, and then followed, in February of 2010, by—the bomber units will be moved from Air Combat Command into Global Strike Command, with, finally, full operating capability in September of 2010. So, that's the schedule as I know it today.

Senator VITTER. Thank you very much. And thanks for your leadership in that important transition. And again, thanks for your leadership of the Mighty 8th and your being part of our military community in Louisiana. We're very proud to have you.

General CARPENTER. Thank you.

Senator VITTER. Gentlemen, I share many of Senator Sessions' concerns about some of this work toward treaties with regard to START. I can support the concept, and I can support the goal, I just want to make sure we do it right and don't set deadlines or timetables or goals with PR in mind, versus substance, and basically put politics and PR ahead of substance.

With respect to that, I'm concerned about this schedule of trying to get to a new START in December, when the current Nuclear Posture Review isn't slated to be done yet. It isn't slated to be completed until early next year. Isn't that potentially putting the cart before the horse? Shouldn't we have the new NPR finalized to understand the landscape with regard to what we should agree to, in terms of a new START?

General ALSTON. Senator, I'll be glad to take a first answer there. Sir, I think the process that we have, that we are participating in with the Nuclear Posture Review, has been a very collaborative process. It has been a very transparent process. Personally, I see very talented people that are trying to work these issues very much in earnest, very much in the open, and the services have been a part of this process from the beginning. So, the dynamic that is helping work through these issues, I think, is a very positive dynamic, so I can't comment on assessing the pace. But, for the efforts that are underway, there's been very good, deliberate effort, and I see—I think the work is moving towards a productive outcome from the Department of Defense for the participation that the Air Force is having in this process right now.

Senator VITTER. I appreciate that. My question is about timing. Is it correct that that process is slated to be finalized early next year?

General ALSTON. Sir, I think the NPR is supposed to be complete by the end of this year, but clearly there's a relationship between the analysis that is underway with the Nuclear Posture Review and the START activities. I mean, it's just the way the process is working right now.

Senator VITTER. I'm not sure I understand what that means. Let me ask it a different way. Does it make any sense to agree to a new START product before the NPR is completed and digested and understood, including by the START negotiators?

General ALSTON. Sir, I can't speak to that, I can only speak to the Air Force role contributing to that process. The Department would be ultimately responsible for the quality of the Nuclear Posture Review product.

Senator VITTER. Mr. D'Agostino, maybe that's sort of more appropriate for you to comment on that. I mean, it seems pretty logical that you want to complete and digest and understand the NPR before you agree to a new START. What's the matter with that assumption?

Mr. D'AGOSTINO. I think there clearly are two activities happening. And, in fact, one does inform the other activity. But, there's

overlap. And I think it is not unreasonable to say—I mean, there’s a lot of detail that would have to happen in the NPR that doesn’t have anything necessarily to do with START. If I can give an example or two, it might help, examples associated with maintenance of how we recapitalize our infrastructure, on what pace we would recapitalize our infrastructure, the actual different types of warheads themselves, where it depends on if the focus on the START number—the situation is a number and an agreement in a general direction. We can get the President, who’s already said publicly that he is looking at a lower number than what the Moscow Treaty was and that he’s interested in certain verification measures, as well. That framework, that broad framework, is already established, in essence, and that provides a framework, so you don’t have to wait til the NPR is exactly done, until the books are closed on it, because my expectation, frankly, what we want to do in the NPR process is, in fact, fairly accelerated. We need—we, the Department of Energy, the National Nuclear Security Administration, need elements of that NPR understood before we develop our budget for fiscal year—11 through —15, our 5-year budget. And that is a program and budget that we’re working on to get done by September of this year, so it’s an element of the NPR process that’s accelerated to get to that answer sooner so we can develop an actual program. And, in fact, that’s exactly where we’re going to do, and that’s why General Alston described the NPR largely being completed by the beginning of the fiscal year later on this fall, if you will, because that’s going to inform us as we develop, with the Defense Department, our joint programs.

So, there’s certainly some parallelism going on. I can’t deny that, and I don’t want to deny that. I don’t want to send that signal. But, at the same time, because we have such very good collaborative process, frankly, and we’ve gone through, already, a couple of iterations of how policy drives the force structure and how the force structure drives the warheads, numbers and types, we’ve gone through an iteration that way. We have some sense of where things may end up. We don’t want to give an answer right now.

I mean, ultimately there’s a negotiation piece with Russia; that’s important. So, I’m very confident, because of the transparency and because of our desire to get that NPR largely done later on this year, so we can finish our budget preparations, because we submit that to you, sir, in January, that we are on a very tight path, but doable, is how I would describe it. It’s not just one finishes and then the other starts, sir.

Senator VITTER. Well, I’m not suggesting it should be one finishes and then the other starts. I’m suggesting it should not be that the treaty finishes before the NPR finishes.

Mr. D’AGOSTINO. Yes, sir, I understand.

Senator VITTER. Do you understand the difference? I’m not saying the NPR has to finish before treaty discussions start, but it does seem a little odd for potentially—the detailed treaty negotiations potentially to finish before the NPR is finished. What am I missing?

Senator BILL NELSON. Well, let me interject, here. I think there’s an element of this that the NPR discussions will inform the START negotiations, and the box that they find themselves in, that neither

the Russians nor the Americans want this START treaty extended. And under the terms of the treaty, it can only be extended for 5 years. Five years only. It can't be extended 1 year, it can't be extended 10 years. It can only be extended 5 years. So, the expectation may well be, according to the implication of your question, which I think is right on the money, is that these negotiations own what may end up being several treaties will be informed by the Nuclear Posture Review discussions. Is that in the ballpark, Mr. D'Agostino?

Mr. D'AGOSTINO. That's my understanding, sir. I'm not an expert on the extension parts of the treaties, frankly, but that is, in essence—we can be informed enough by the work we've actually done to date on the Nuclear Posture Review to start on the treaty discussions. Details do matter.

Senator VITTER. Start. But my question is about the finishing of the treaty discussions before you finish the NPR. And, Mr. Chairman, I appreciate your comment, and you make some very good points. But, forgive me, as a recovering lawyer, the first thing I would say is, I don't care what the current START says. You can sign a new treaty that's the same as the old one, with one comma missing, and it can last 6 months if you want to, if that's the smart thing to do, and it can be a new treaty that can just bridge to the next treaty, if that is the right thing to do, substantively. My only suggestion is, let's put substance first, whatever that is.

Mr. D'AGOSTINO. Yes, sir, absolutely.

Senator VITTER. I have a similar question about the Comprehensive Test Ban Treaty. Now, I have to say, right off, my impulse about that is a lot different from START, which is—I questioned the whole premise of the soundness of the Comprehensive Test Ban Treaty. But, Secretary Gates has said that, without testing, it will, quote, "become impossible to keep extending the life of our arsenal," close quote. Given that, do you think any consideration—ratification of a Comprehensive Test Ban Treaty should be preceded by plans for a new redesigned and more reliable warhead?

Mr. D'AGOSTINO. Sir, I would look at the question. I'm going to answer your question, but I would say, for the last 13-plus years—or longer than that, frankly, 16 years—we have been operating, in effect, without underground testing, as a matter of policy. So, we have a program, a Stockpile Stewardship Program, designed to take a deep look inside our warheads, do an annual assessment.

In an earlier question, Chairman Nelson asked about beefing up our peer-review process to make sure that we can do that. I am comfortable that, with what I could call a sustainable effort on science, a sustainable effort on the facilities that are required that the country is going to need, and a sustainable effort on modernization activity for our stockpile, that we can maintain the stockpile well out into the future, on out into the future, without underground testing. I would add that the Comprehensive Test Ban—that's one element of the Comprehensive Test Ban Treaty discussion, sir, that you will be—the Senate will be looking at, I'm sure. Another element, of course, is the verification questions, which are fairly complicated, deal with seismic issues and being able to find out what the rest of the world is doing.

The one comment I would like to make on that is, the same people that maintain our stockpile, our current stockpile and that we need to beef up, if you will, over the next few years, are the exact same people that do the intelligence analysis, the seismic analysis, as well. So, having a National Nuclear Security Administration infrastructure that is taken care of out into the future is going to be an important part of a Comprehensive Test Ban Treaty. That's the piece I'm going to make sure I communicate very clearly in this administration. That is my job, sir.

Senator VITTER. Okay. I take it from what you said that you just disagree with Secretary Gates that it will, quote, "become impossible to keep extending the life of our arsenal," close quote, without testing.

Mr. D'AGOSTINO. Well, that's if—if we just leave the arsenal the way it is—in other words, just kind of do the day-to-day maintenance, I would agree with the Secretary, if we do what I would call the life-extension approach, which is a reuse or replacement approach—and I think this is where Secretary Gates was going, in effect, was modernizing, driving a—more reliable performance margins in there so we're sure we don't have to test—then my view is that we can do that in a nontesting future.

Senator VITTER. Well, I just want to make clear, his comment was not about that, it was about testing. He said, "Without testing, we won't have this." You're disagreeing with that, correct?

Mr. D'AGOSTINO. I don't know the context of Mr. Gates's statement, so I think we are actually agreeing that if I can't modernize the stockpile, we're going to find ourselves where every year we're getting closer and closer to the point where the scientists and engineers in my organization—they're going to get to a point that say, "Mr. President" or Mr. Secretary, first, and then we tell the President, "We're facing a moment of truth, here, with respect to testing, but we believe, in the Department of Energy or in the National Nuclear Security Administration, that an integrated program of fixing the infrastructure, of working on the stockpile, and modernizing pieces of it, together with a science program to back it up, can take care of our nuclear deterrent out into the future indefinitely without testing.

Senator VITTER. I will try to get that full context to you. But, my understanding is, he wasn't talking about this, he was talking about testing. Without testing, we can't do this. But, I will get that.

Mr. D'AGOSTINO. I would love to come back on that.

Senator BILL NELSON. I would be surprised, Senator Vitter, if it were said in that isolated context, because I've had lengthy discussions with General Cartwright, the Vice Chairman of the Joint Chiefs, on this very issue, and I think he has every confidence to feel that, with the appropriate modernization program, that we can have the reliability we have to have. That's my impression.

Senator VITTER. I will get that context to you—

Mr. D'AGOSTINO. I would love to do that.

Senator VITTER.—and follow up on the discussion.

Mr. D'AGOSTINO. Senator, I'd appreciate that.

Senator VITTER. And, Admiral, if I can ask you—and thank you for your visit yesterday; I enjoyed that very much—the fiscal year-10 budget continues funding for the next-generation follow-on to

the Ohio-class SSBN. Can you discuss the Navy's current plans for that next generation, and steps, in particular, that have been taken early on to try to ensure we've got an—we don't experience cost overruns or scheduling delays?

Admiral JOHNSON. Yes, sir. This budget includes a request for \$495 million to begin the work for the replacement of the Ohio class. The Ohio class is tremendously capable submarine today. It has no particular shortcomings. And this request is based on the end of service life of that ship, which has been extended to 40 operational years. This is an on-time—it's not early, it's not late—it's an on-time start for the engineering and the research and development work to support and start construction in 2019. It's also on time with respect to the industrial base, and it's timed well to support our ally the United Kingdom. The work that we're doing early is concept work and missile launcher development prototype work, and it can be guided by the decisions of the NPR and the other events we talk about. And I think it is well timed to accommodate all the work that is going forward. It includes the propulsion—early propulsion work for a ship of that size, as well.

Senator VITTER. Great.

Thank you, Mr. Chairman, that's all I have.

Senator BILL NELSON. Now, I want to take your previous question and now ask that of the Admiral. How can you start the design of the new submarine if you don't know the outcome of the Nuclear Posture Review?

Admiral JOHNSON. Yes, sir. The very early work is concept work, layout, and qualification of vendors. In the case of the Ohio class, the youngest of the Ohio class is the Louisiana, delivered in 1996, so we have been out of production of large, heavy missile tubes and the launching equipment for—it will be about 25 years. And so, this early work is a combination of laying out how we will make that part of the submarine acoustically quiet, and it's other stuff—characteristics—because, of course, we have very quiet attack submarines, but they do not have a missile compartment. It will be assessing how to do design and build that part of the ship, the missile compartment, with the same labor-saving techniques that we used on the attack submarines. It's just in that section of the ship that we have not looked at in our Navy for almost 40 years.

So, the exact number of tubes, the exact number or dimensions of those tubes, the exact speeds, none of those things need to be known in the first year of concept and research and development. Instead, we do things like we find a vendor capable of doing a missile hatch of that size out of the type of materials that we need to do—a core test article, which is representative, but not identical—and then destructively test it to make sure that vendor can give us a device or a hatch without flaw.

Senator BILL NELSON. General Alston, the same question. How can you design a future airplane without knowing the results of the Nuclear Posture Review?

General ALSTON. Sir, we won't do that. The follow-on bomber requirements—we heard the Secretary of Defense loud and clear, in terms of our requirement to improve and take a harder look at the requirements that we had already posited, as well as the technology that would be available at the time that we need this pene-

trating platform to be available. This platform would be informed by the QDR, probably even more so than the Nuclear Posture Review, but we do see linkages between both of those examinations, and we think that we will be better informed as the QDR and the NPR analysis continues. So, we think there's a strong relationship between the two studies, and the outcome of that, with a better set of requirements for that platform in the future.

Senator BILL NELSON. Is the B-1 bomber going to be part of the Global Strike Command?

General ALSTON. No, sir, it's not. It's a conventional-only platform, and that will remain in the Air Combat Command.

Senator BILL NELSON. So, you're separating out, there.

Did you have a question?

Senator VITTER. I just have one followup.

Senator BILL NELSON. Go ahead.

Senator VITTER. I just wanted to follow up on the Senator's line.

Admiral, I take it from what you're saying, you would never, for instance, finish design of a submarine before the NPR was finished.

Admiral JOHNSON. Yes, sir.

Senator VITTER. And, General, similarly, you would never finish design of a new aircraft before this NPR is finished.

General ALSTON. No, sir.

Senator VITTER. I was just suggesting, earlier, that logically it seems pretty clear to me we shouldn't finish a new START before the NPR is finished. That was my earlier point.

Senator BILL NELSON. General Carpenter, from an operational perspective of the 8th Air Force, what are your plans to balance the conventional and nuclear excellence of the bomber force?

General CARPENTER. Sir, we've been doing that for a long time, ever since we took on the conventional mission in full force, starting around the Desert Storm timeframe, but with the recent issues with the nuclear mission, obviously we've put a lot more focus on the nuclear side, and we designed the global deterrent force to address that issue. But, we've put a wing in the bucket, if you will, for the nuclear mission, and they stayed there for a whole year. And so, while Minot Air Force Base is in Guam, the 2nd Bomber Wing at Barksdale is focused on the nuclear mission. So, we have that balance now.

And the 4th Squadron becomes a big issue now. When we stand up the 4th Squadron at Minot, it fills out that force, so we have enough force structure to separate that mission as we can.

So, while neither are always exclusively focused, we always have to keep the nuclear certification, the crews ready to go, and the nuclear and on the conventional side, both, but the focus shifts from day to day, or from year to year, if you will. So, while the Global Deterrent Force, 2nd Bomber Wing right now—or, I'm sorry—and I got that backwards—2nd Bomber Wing is in Guam today, and Minot is in the Global Deterrent Force, kind of really focused on the nuclear mission, and that swaps back and forth. The B-2s don't have the luxury of having two separate wings, but they have two separate squadrons. So, those two squadrons rotate back and forth, as well, where one is always assigned the Global Deterrent Force mission, and they focus, primarily at least, on the nuclear mission. When they do the training, they really go out and focus on the nu-

clear side. And then, the other squadron is kind of the conventional role. So, we're able to do that with the force structure we have today.

General ALSTON. Sir, I just might add that, to the credit of 8th Air Force and General Elder and now General Carpenter, all three of our bomb wings have undergone no-notice nuclear surety inspections and have all passed those inspections. As you know, those are exceptionally rigorous tests of nuclear requirements. And so, we are showing some positive results in that regard.

Senator BILL NELSON. All right. Now, we're expecting B-52s and B-2s to take us all the way through 2030. Are we going to be able to sustain their viability?

General ALSTON. Yes, sir, we will. And I would ask General Carpenter to comment on this, as well, but first let me just say that the B-52 has a lot of life left in it, and we have plans in place to ensure its vitality in both the nuclear and conventional roles into the out years. The B-2 ultimately will be facing threats that will exceed its capability as a penetrating platform; hence, the reason that we believe we need a penetrating platform to take on that responsibility when the B-2 may no longer be as effective at that role as we believe it is today.

General CARPENTER. I would agree, sir. The great programs we have in place now, with the radar programs and all three bomber platforms—the B-2 specifically, and the B-52 on the books, and the B-1, as well, and the communications upgrades we have planned for all those platforms—it will take them well into the—out into the 2040 timeframe. So, yes, sir, we can sustain those weapon systems.

Senator BILL NELSON. General Alston, you've had to work overtime to straighten out the loose nukes and all of that. Have you got it under control?

General ALSTON. Sir, we absolutely have it under control. I—as you may know, I came into my Pentagon tour about 21 months ago, which happened to coincide within days of the challenge that we had with the unauthorized munitions transfer. And so, I've been personally focused on this through this entire assignment.

My responsibilities have shifted, and right now, as a consequence of Secretary Donnelly and the Chief of Staff, General Schwartz, decision last fall, I work directly for the chief of staff now in my responsibilities, on their behalf. Their personal leadership drove us to prepare a roadmap that we published last fall to set the course, with six principal strategic objectives to help the institution focus better and achieve the outcomes that we are starting to achieve at this time.

General Carpenter's folks and our other deployed commanders, with a lot of very aggressive personal leadership, are ensuring the success that we have today. But, we need to move forward with the personnel development changes that we have underway. We're bringing an additional 2500 people into the nuclear mission over the course of this next year.

There is a—as General Chile's has pointed out in previous Defense Science Board studies, there has been an erosion of nuclear deterrence skills. So, it—the people component of our effort will continue to require the kind of vigilance and focus that we have in

motion right now, and I believe it will take a couple of—several more years before we feel that we have completely overcome the—some of the skill challenges we have.

But, we have aggressive inspection programs, we have 100-percent oversight of all of our inspections. We've changed the Air Force corporate structure to have a dedicated nuclear operations panel. This is going to ensure a very thorough vetting of nuclear-related requirements so that they compete well for Air Force resources. Air Force leadership intervention has ensured very good resourcing of the nuclear mission at this time. And so, there are—that's a thumbnail of the number of programs that we have underway that is fulfilling the Chief and Secretary's establishment of reinvigorating the nuclear enterprise as the Air Force's number-one priority in the strategic plan.

Senator BILL NELSON. Part of our labs need to help out the intelligence community to support the analysis of foreign nuclear capabilities. There's no funding in your budget for 2010 in the NNSA fiscal year 2010 budget request. Are you going to be needing funding for this, coming up in the future?

Mr. D'AGOSTINO. For intelligence analysis, sir?

Senator BILL NELSON. For analysis of foreign nuclear capabilities and the proliferation challenges.

Mr. D'AGOSTINO. Well, in a way, the intelligence funding request comes through another part of the Department, not through the NNSA. But, what I would say, with respect to your question, the funding that we do—the same people that do this intelligence analysis are the same people that are either experienced weapons designers, people that understand the physics behind how to understand timers, special detonator devices—these are the same people that we start off with in the NNSA. And ultimately, they—as they go through our program, they can shift to other divisions in the laboratory. So, Z Division, for example, at Lawrence Livermore National Laboratory, funded through the intelligence program, essentially contained people that started off in my program in the National Nuclear Security Administration.

So, the funding that I have ultimately supports intelligence, but in an indirect way, by exercising the capabilities, by getting these folks exercised, not only experiments, but having this design experiment.

And that essentially goes to the previous questions we talked about, is, you know, Are we sustainable, kind of, in the long term? And that is why I want to get the science and the infrastructure pieces essentially on the right track.

We've turned it around in this budget. We've shifted \$130 million back into the science area, for this very reason. But, I—my view is, in the out years we'll ultimately—we'll need more, and that will be, ultimately, my job within the administration, to carry—you know, to work this problem in the out years.

Senator BILL NELSON. You're going out to outside financing for a number of the buildings that you need. Why wouldn't you ask for a government line item?

Mr. D'AGOSTINO. I'll go. For an example, one of the facilities you probably allude to, sir, is our Kansas City project. That is a GSA project. General Services Administration project. There are a cou-

ple of reasons, but let me focus on one that is particularly attractive to me as we look at transforming ourselves from a kind of a cold-war nuclear-weapons complex into a 21st-century nuclear-security enterprise, and that is, I don't know what the future brings with respect to unclassified parts that the Kansas City plan may need to make. We may find, as a result of our modernization efforts, that we can reduce the number or the complexity of these non-nuclear parts and find ourselves much more efficient, 20 years from now, if you will, from being able to make those parts at our laboratories.

And such—there's a certain attractiveness that I find in driving efficiency in the program if I have a 20-year lease that is approved, of course, appropriately—there's a financial payback, in this case, of \$100 million a year that has been audited, we believe—but being able to say, 20 years from now, I'm not building a facility that the Nation does not need way out into the future. So, from my standpoint, there's a certain attractiveness in being able to say, 20 years from now, turning that manufacturing facility back over to the developer, and not having to worry about the DND or maintaining the structure out on the taxpayers' burdens.

Senator BILL NELSON. Well, let's talk about Los Alamos and Y-12. That's where the problems are. Tell us about that.

Mr. D'AGOSTINO. Los Alamos has a proposal that I have not approved yet. And it's a proposal, right now, for a science complex, if you will. I mean, it's a proposal that we agree that the laboratory—we need to get people out of trailers. I mean, these are our world-class scientists, and yet, we have them in facilities, frankly, that I'd be embarrassed to have any of these folks go into. And so, there are different—the laboratory is looking at—and we agree that there's a need, but now we're in the process of examining—should it be a third-party-financed facility, should it be a line-item facility, do the numbers work, does the analysis come through? General Harencak, who's with me, who's running defense programs—I talked to him this morning, frankly, about, Where are we on our third-party-financed projects? And he's looking at this—the Defense Department calls it an alternative analysis, if you will. What are our options with respect to acquisition? Doing what we need for our scientists.

One thing that's clear to me, though, is, for facilities that are, you know—we have to be very careful about employing this technique. For one thing, it has to be done judiciously. Obviously, it has to make a lot of sense, financially, for the taxpayers. And obviously, it can't put us in the position where we have to be moving large fences around and having, you know, pockets, if you will, of uncleared spaces, because, ultimately, if we—if the country decides it doesn't need it anymore, then we turn it back over to the developer, and then we have an issue of fences and the like.

Senator BILL NELSON. And the lease would probably provide that, if you can't fill it up with the government activities, that they could lease it on their own.

Mr. D'AGOSTINO. If the government walks away from the lease, then the—and each arrangement is, in effect, different. You know, certainly—

Senator BILL NELSON. But, theoretically—let me just cut to the chase.

Mr. D'AGOSTINO. Yes.

Senator BILL NELSON. Theoretically—

Mr. D'AGOSTINO. Theoretically, an arrangement—

Senator BILL NELSON.—you wouldn't have the space leased; they could lease the space. You'd be inside the fence.

Mr. D'AGOSTINO. If we had—if we ended up that way, yes, sir. Theoretically, yes, sir.

Senator BILL NELSON. Okay. You've got to watch that.

Mr. D'AGOSTINO. Yes, sir, absolutely.

Senator BILL NELSON. We had some very serious problems at air force bases, on air force housing, with the result that, inside the fence, at the air force base, you could have private housing, because the housing could be rented to non-Air-Force personnel. Now, there's a pecking order that they would have to go through, but, theoretically, at the bottom of the pecking order, you could have somebody just off the street renting a house inside an air force base. That's what our present condition is. So, we don't want that, especially when you start fooling around with facilities in your line of work.

Mr. D'AGOSTINO. Yes, sir.

Senator BILL NELSON. The Los Alamos Neutron Science Center, an accelerator facility that produces protons for a variety of scientific and weapons research, was supposed to have an upgrade beginning in fiscal year 2010, but the upgrade was not funded. Is this upgrade necessary to maintain nuclear weapons?

Mr. D'AGOSTINO. Sir, the facility is definitely necessary to maintain our stockpile. The upgrade reduces the risk that the facility will not—reduces the risk. We want the facility, of course, online to support our deterrent out into the future. So, the upgrades approach was to take away a fair amount of risk associated with the facility going down. You're right, sir, the facility—well, first of all, we continue to operate that facility. Second of all, you're absolutely right, we need it for neutron cross-section measurement for doing material science, nuclear science.

Senator BILL NELSON. Okay. So, you're saying you need it. So, what happens to the facility without the upgrade?

Mr. D'AGOSTINO. What happens without the upgrade is increased risk associated with operations. It's a fairly old facility. It's something that I believe is an important part of maintaining a deterrent and maintaining a laboratory, quite frankly, that can attract scientists that want to work in material science and in nuclear science. So—

Senator BILL NELSON. All right. How much will the full upgrade cost, and how long will it take?

Mr. D'AGOSTINO. I'll give you a sense, sir, but I would like to take that for the record, if I could.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Mr. D'AGOSTINO. There's rough numbers of \$150- to \$200 million or so, as preconceptual design activities, but I don't have the particulars. If I could take that for the record, I will provide the answer.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. Do you have a guess on how long?

Mr. D'AGOSTINO. Multiple years. It's not a 2-year activity. It's probably 3 to 5 years, sir.

Senator BILL NELSON. Let me ask each of you, were your top five unfunded priorities—if funds were available, what would your top five be?

Admiral JOHNSON. Sir, I would like to take that question for the record, if I may.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. Okay. So, you have to—you have to counsel up the chain of command?

Admiral JOHNSON. Yes, sir.

Senator BILL NELSON. Okay.

General ALSTON. Sir, the Air Force would have to do the same. We would like to take that for the record.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. Do you want to take a stab at it?

[Laughter.]

Mr. D'AGOSTINO. Well, I'd like to provide the details for the record, but what I would like to iterate—and I can give you my—three broad priorities, if you will, are—

Senator BILL NELSON. Modernization?

Mr. D'AGOSTINO. Yes, sir. It—modernization. It's the science and the infrastructure that it—need to do that. But, we'll take the question for the record, sir.

[The information referred to follows:]

[SUBCOMMITTEE INSERT]

Senator BILL NELSON. Okay.

Thank you all very much. The record will be kept open for 3 days.

The meeting is adjourned.

[Whereupon, at 3:57 p.m., the subcommittee adjourned.]