EFFICACY OF THE DOD'S 30-YEAR SHIPBUILDING AND AVIATION PLANS

HEARING

BEFORE THE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

OF THE

COMMITTEE ON ARMED SERVICES HOUSE OF REPRESENTATIVES

ONE HUNDRED TWELFTH CONGRESS

FIRST SESSION

HEARING HELD JUNE 1, 2011



U.S. GOVERNMENT PRINTING OFFICE

67-394

WASHINGTON: 2011

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

ROB WITTMAN, Virginia, Chairman

K. MICHAEL CONAWAY, Texas MO BROOKS, Alabama TODD YOUNG, Indiana TOM ROONEY, Florida MIKE COFFMAN, Colorado JIM COOPER, Tennessee ROBERT ANDREWS, New Jersey LORETTA SANCHEZ, California COLLEEN HANABUSA, Hawaii

MICHELE PEARCE, Professional Staff Member PAUL LEWIS, Professional Staff Member FAMID SINHA, Staff Assistant

CONTENTS

CHRONOLOGICAL LIST OF HEARINGS

2011

III	Page	
HEARING: Wednesday, June 1, 2011, Efficacy of the DOD's 30-Year Shipbuilding and Aviation Plans	1	
Appendix:		
Wednesday, June 1, 2011	41	
WEDNESDAY, JUNE 1, 2011		
EFFICACY OF THE DOD'S 30-YEAR SHIPBUILDING AND AVIATION PLANS		
STATEMENTS PRESENTED BY MEMBERS OF CONGRESS		
Cooper, Hon. Jim, a Representative from Tennessee, Ranking Member, Sub-		
committee on Oversight and Investigations	2	
on Oversight and Investigations	1	
WITNESSES		
Blake, VADM John T. "Terry," USN, Deputy Chief of Naval Operations, Integration of Capabilities and Resources (N8)	3	
Eaglen, Mackenzie, Research Fellow for National Security Studies, The Herit-	J	
age Foundation	26	
Flynn, Lt. Gen. George, USMC, Deputy Commandant for Combat Development and Integration	3	
ment and Integration	_	
Plans and Programs, U.S. Air Force	$\begin{array}{c} 5 \\ 24 \end{array}$	
Labs, Dr. Eric, National Security Division, Congressional Budget Office O'Rourke, Ronald, Defense Policy and Arms Control Section, Congressional	24	
Research Service	22	
Stanley, VADM P. Stephen, USN, Principal Deputy Director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense	4	
ment and I logiam Evaluation, Office of the Secretary of Defense	4	
APPENDIX		
Prepared Statements:		
Eaglen, Mackenzie	77	
Labs, Dr. Eric O'Rourke, Ronald	68 58	
Stanley, VADM P. Stephen, joint with Maj. Gen. Richard C. Johnston:	90	
VADM John T. "Terry" Blake; and Lt. Gen. George Flynn	47	
Wittman, Hon. Rob	45	
[There were no Documents submitted.]		
WITNESS RESPONSES TO QUESTIONS ASKED DURING THE HEARING:		
Mr. Wittman	95	
(III)		
(111)		

- · · · · · · · · · · · · · · · · · · ·	D
	Page
QUESTIONS SUBMITTED BY MEMBERS POST HEARING:	
Ms. Hanabusa	101
Mr. Wittman	99

EFFICACY OF THE DOD'S 30-YEAR SHIPBUILDING AND AVIATION PLANS

House of Representatives, Committee on Armed Services, Subcommittee on Oversight and Investigations, Washington, DC, Wednesday, June 1, 2011.

The subcommittee met, pursuant to call, at 11:00 a.m. in room 2212, Rayburn House Office Building, Hon. Rob Wittman (chairman of the subcommittee) presiding.

OPENING STATEMENT OF HON. ROB WITTMAN, A REPRESENT-ATIVE FROM VIRGINIA, CHAIRMAN, SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

Mr. WITTMAN. Good morning. I want to call to order the Subcommittee on Oversight and Investigations of the House Armed Services Committee. I want to welcome you folks to the hearing this morning. I appreciate your taking your time to join us. I think today's efforts will be worth your time and worth all of our attention.

I want to welcome everybody to the Oversight Investigations Subcommittee's hearing on the efficacy of DOD's [the Department of Defense's] shipbuilding and aviation plans. The main purpose supporting the 30-year shipbuilding and aviation plans requirement is to ensure effective congressional oversight of DOD plans by giving Congress the information we need to make decisions on issues that are not consistently available in the 5-year data of the Future Years Defense Plan better known as the FYDP.

In my view, we tend to spend too much time arguing about tactics when we are discussing these plans and not enough time focused on long-term strategy. We are constantly reacting to events rather than planning for them, resulting in a system that is burdened with waste and inefficiency.

We cannot afford to do this any longer. The stakes are too high, and we owe it to the American taxpayer to insist on well thought-out, fiscally sound, long-term policy decisions that shape our national defense strategy, and emphasize long-term objectives.

It is critical for us to make sure we have that long-term perspective to understand where we need to go and the best way to get there. The central question put in simple terms is, are we doing the best job we can when we develop and implement our 30-year plans to meet or Nation's current and future threats?

To illustrate this point, I want to highlight just a few examples of what I am talking about. And these are general examples: The decision not to build submarines in the 1990s, which has created a shortfall in the attack submarine force structure that we won't

be able to fix in the foreseeable future; decisions to cut or efforts to kill a number of programs, including the F-22 fifth-generation fighter, the C-17 cargo aircraft and the Air Force's combat searchand-rescue helicopter, all of which arguably place American air supremacy at risk or at least at question; and ending purchases of the next generation of DDG-1000 destroyers and killing the MPF-A large-deck aviation ship, reducing our Navy to the smallest it has been since 1916.

While arguments can be made to support the reasoning behind these decisions, no on can argue about the number of growing threats we face from both state and non-state actors, each with

ever expending capabilities, ready to challenge their own.

Between force reductions, a dramatic slowing of new starts and closures of production lines, America's domestic industrial strategy is slowly being whittled away, emphasizing the need for smart long-term strategic planning.

I look forward to hearing your views on this important subject and discussing how we can ensure that as we make difficult policy decisions on long-term procurement, we don't inadvertently place

our national security at risk.

Before introducing our witnesses, I want to turn to our ranking member, Mr. Cooper, for opening remarks.

Mr. Cooper.

[The prepared statement of Mr. Wittman can be found in the Appendix on page 45.]

STATEMENT OF HON. JIM COOPER. A REPRESENTATIVE FROM TENNESSEE, RANKING MEMBER, SUBCOMMITTEE ON OVER-SIGHT AND INVESTIGATIONS

Mr. Cooper. Thank you, Mr. Chairman, I appreciate your calling this hearing.

I know that there are a lot of issues involved in the 30-year shipbuilding plans. I hope that we can keep this hearing away from personal and the parochial and focus on the strength of America.

Some issues that I am interested in are industrial agility. On a recent visit to China, we were able to visit a shipbuilding yard there in which they said they can build any super tanker in the world in 6 months, a feat that would be apparently impossible in this country.

Also developments in technology, things such as supercavitation, have changed the nature of surface warfare. And that was a largely unanticipated development in the science, that has changed things probably beyond ability of any 30-year plan to foresee. So thank you for calling this hearing. I will look forward to hearing from our expert witnesses.

Mr. WITTMAN. Very good. Thank you, Mr. Cooper. As we get started, I would like to ask unanimous consent that nonsubcommittee members, if any, be allowed to participate in today's hearing after all subcommittee members have had an opportunity to ask questions. Is there any objection?

Without objection, nonsubcommittee members will be recognized

at the appropriate time for 5 minutes.

And we will hear from two panels today, witnesses from our first panel are Major General Richard Johnston, Deputy Chief of Strategic Plans and Programs, U.S. Air Force; Vice Admiral P. Stephen Stanley, Principal Deputy Director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense; Vice Admiral John Terry Blake, Deputy Chief of Naval Operations, Integration of Capabilities and Resources; and Lieutenant General George Flynn, Deputy Commandant of Combat Development and Integration.

Gentlemen, thank you so much for joining us today, and we will begin with General Flynn.

STATEMENT OF LT. GEN. GEORGE FLYNN, USMC, DEPUTY COMMANDANT FOR COMBAT DEVELOPMENT AND INTEGRATION

General FLYNN. Chairman Wittman, Representative Cooper and members of the subcommittee, it is good to be here with you today. The Marine Corps' ability to serve as our Nation's principal crisis response force is due in large part to your continued strong support. Our Marines thank you very much for that support.

I am here today to address your questions regarding the Marine Corps' role in defining the operational needs and identifying the required enabling capabilities necessary to support the Nation's expeditionary force and readiness, a force that must be able today to

respond to today's crisis.

The Marine Corps is partnered with the United States Navy in defining requirements and advocating for the necessary resources to meet our operational needs. Our goals are to have stability in amphibious maritime prepositioning and support base capabilities vessel development, as well as associated ship funding production and delivery schedules supported in the program and budgeting process, so we can achieve the fleet inventory necessary to support our forward presence engagement and crisis response capability.

Clearly there are challenges in meeting operational requirements in today's highly dynamic security environment. Finite resources, ship supply, and maintenance requirements, and the resulting ship operational availability for predeployment operations and training can collectively impact our ability to accomplish our assigned mis-

sions.

In partnership with the Navy, the Marine Corps looks forward to working with you to address these issues so that we are best postured to continue serving our Nation as its force in readiness. Again, thank you for the opportunity to be here and I look forward to answering your questions.

Mr. WITTMAN. Thank you, General Flynn. Admiral Blake.

STATEMENT OF VADM JOHN T. "TERRY" BLAKE, USN, DEPUTY CHIEF OF NAVAL OPERATIONS, INTEGRATION OF CAPABILI-TIES AND RESOURCES (N8)

Admiral Blake. Chairman Wittman, Ranking Member Cooper and distinguished members of the subcommittee.

Thank you for the opportunity to appear before you today to address the efficacy of the Department of Defense's 30-year shipbuilding and aviation plans.

The Department of the Navy is committed to building an affordable ship and aircraft fleet that supports the National Defense

Strategy, the Maritime Strategy and the 2010 Quadrennial Defense Review.

The development of the 30-year shipbuilding and aviation plans enable this effort, providing valuable insight into future investments and challenges. In addition, these long-range plans promote stability in the defense industry and support decisions, making for

long-term capital investment and workforce planning.

The Department of the Navy's 30-year shipbuilding plan is built around three basic precepts. First, the plan projects what platforms the Navy will need to accomplish its assigned missions over the three decades. Second, the plan balances needs against expected resources and assesses the risk associated with the Department's balancing efforts. Finally, the plan aims to maintain the shipbuilding design and industrial base necessary to build and maintain tomorrow's Navy.

To accurately support these precepts, the general context of the plan is spelled out in three distinct 10-year periods. In the first 10-year period, cost estimates are judged to be most accurate due to the known ship capability and quantity requirements. In the second 10-year period, cost estimates for the force structure are less accurate as the threat becomes less clear, industrial base issues become more uncertain and technologies continue to evolve and change requirements.

Finally, in the last 10-year period, cost estimates are the most notional, since these estimates are largely based on the recapitalization of today's legacy ships and ships procured at the beginning

of the near term of reporting.

The Navy also provides input to the Department of Defense's 30-year aviation plan. These shipbuilding and aviation plans provide our best efforts to address a very difficult planning challenge. The Navy supports the requirement for the submission of the long-range shipbuilding aviation plans, as they provide important for Congress, the Department of Defense, and industry to make critical investment decisions.

Thank you all for all you do to support the United States Navy and for all you do for the men and women in uniform serving around the globe.

Mr. WITTMAN. Thank you, Admiral Blake. Admiral Stanley.

STATEMENT OF VADM P. STEPHEN STANLEY, USN, PRINCIPAL DEPUTY DIRECTOR OF COST ASSESSMENT AND PROGRAM EVALUATION, OFFICE OF THE SECRETARY OF DEFENSE

Admiral Stanley. Chairman Wittman, Ranking Member Cooper and members of the Committee, thank you for the opportunity to appear before you to discuss the Department's 30-year aviation and shipbuilding plans.

While the Department has always done long-range planning, we understand that the value of these plans lie more in what we learn through the planning process than in the content of the plans themselves. This is especially true for planning beyond 5 years.

The planning process provides a useful opportunity to consider and confront out-year implications of our near-term decisions. However, developing this plan requires speculation about the future security environment, technology, development, operational concept and fiscal constraints.

The speculative nature of projecting beyond the 5-year window of the Future Years Defense Plan does not stem from any process and organizational failures. It is caused by the inherent uncertainty of the future.

The history of these submissions is relatively short. The first submission of the shipbuilding plan was in 2000. And the first

aviation plan followed 10 years later in 2010.

The 2011 National Defense Authorization Act changed the reporting requirement for the shipbuilding plan from an annual report to a quadrennial report, while the aviation plan remained an annual report. Plans were not submitted with the President's fiscal year 2010 budget, due to uncertainty regarding our defense strategy. During this period, in 2009, a new national security strategy and associated defense budget projection were being developed.

This year, the Department submitted the aviation plan on the 12th of April, the plan was delayed because internal budget decisions were concluded a month later than usual. Also, this year there was more debate than last year on out-year aviation plans. Resolving these issues and coordinating the results delayed sub-

mission of the plan.

Both long-range aviation and shipbuilding plans follow a similar development process. Individual Services maintain long-range plans for these weapon systems as part of their Title X responsibilities.

However, these plans are based on fiscal, operational and technical assumptions. Once the current year planning and budgeting process concludes, the Department has considerable work to do. The Services have to develop and refine their projections, reconcile these projections with the Selected Acquisition Report, SAR, data and ensure the estimates adhere to fiscal constraints.

For the aviation plan CAPE [the Director of Cost Assessment and Program Evaluation] develops the report based on the inputs from the Services. Navy drafts shipbuilding plans based on the shipbuilding stakeholders' inputs. CAPE and the Navy develop tables and charts, refine themes, apply quality control to the data, and combine inputs to form an integrated view. These plans are the Department's best efforts to address the challenge of the developing highly complex projections over a 30-year period.

oping highly complex projections over a 30-year period.

The development of these plans involves a great deal of collaborative analysis throughout the Department in order to work through fiscal technical and operational assumptions. These plans are not precise procurement blueprints; rather they represent the Department's forecast of what tomorrow's forces may look like

given today's outlook.

Mr. WITTMAN. Very good. Thank you, Admiral Stanley. General Johnston.

STATEMENT OF MAJ. GEN. RICHARD C. JOHNSTON, USAF, DEP-UTY CHIEF OF STAFF FOR STRATEGIC PLANS AND PRO-GRAMS, U.S. AIR FORCE

General JOHNSTON. Sure. Chairman Wittman, Ranking Member Cooper and distinguished members of the subcommittee, it is a

privilege to have this opportunity to discuss the Air Force contribution to the Department of Defense's 30-year aircraft procurement plan. The United States Air Force remains committed to drafting of the aircraft procurement plan and to the development of necessary aviation platforms that provide the Joint Force with global vigilance, global reach and global power. In support of the National Security Strategy, National Defense Strategy, National Military Strategy and 2010 Quadrennial Defense Review.

The following statement is a brief summary of how the Air Force's strategic planning process operates to serve the interest of national defense and how it informs the 30-year aircraft procure-

ment plan.

The Air Force benefits from a disciplined strategic planning approach to establish a long-term aviation investment plan. Specifically, future force structure projections are developed and refined after each programming milestone. These force projections align with the aforementioned national strategy documents. Major milestones include submission of the Air Force program objective memorandum and the delivery of the Presidential budget. Informing both planning and programming efforts is the use of periodic systematic assessments of the future operating environment.

The United States Air Force performs a strategic environmental assessment biannually to anticipate potential implications of critical trends to operations in air, space and cyberspace domains 20 years into the future. The Future Force Projection serves as a basis for the annual Service Secretary approved 20-year planning and programming guidance, the intent of this process is to shape the future force by linking programmatic decisions to strategic planning. The sufficiency of the plans for achieving and maintaining aircraft force-structured goals are then reported within the annual 30-year aircraft procurement plan.

The Air Force strategic planning process directs future force programming through informed strategic planning. Within the Air Force, the lead organization responsible for the plan is the Office of the Deputy Chief of Staff for Strategic Plans and Programs. It is also reviewed by several offices to include acquisitions, legislative liaisons; intelligence, surveillance, and reconnaisance; the operations plans and requirements; the studies and analysis assessments and lessons learned; and of course, the Chief of Staff and the

Secretary of the Air Force.

The United States Air Force regularly and systematically develops and refines its long-term aircraft investment plan. The Air Force's deliberate process drives the Service to make fiscally responsible choices that are grounded in strategy. Furthermore, the Air Force remains committed to the collaborative approach with the Office of the Secretary of Defense and the Department of Navy in building a sound 30-year aircraft procurement plan for the Department of Defense and Congress that is both useful and timely.

Thank you for the opportunity to discuss the Air Force contribution to the Department of Defense long-range aviation plan and your support to the men and women of all the Services. I look for-

ward to your questions.

[The joint prepared statement of General Flynn, Admiral Blake, Admiral Stanley, and General Johnston can be found in the Appen-

dix on page 47.]

Mr. WITTMAN. Thank you, General Johnston. And panel members, thank you so much for joining us today and for your thoughtful, insightful opening remarks. And we will proceed now into ques-

tioning.

Admiral Stanley, I will begin with you. The observations that you made about the process being important, I think is spot-on. The process I think for developing good information and for decision-making is absolutely critical. And we do know that these plans are speculative in nature. I think you pointed that out, and certainly there is some uncertainly with that. Obviously, the longer we go out in the future, the less certainty there is. But I think they play a very, very important role in providing timely information to the House Armed Services Committee and, in a larger sense, to Members of the Congress in understanding the challenges that we face as decisionmakers.

And some of the frustration I think that has been borne in the House Armed Services Committee is getting that information in the strategic plans in a timely manner in a way that we can use it in our decisionmaking. As you know, that frustration has been compounded over the last several years because of that lack of coordination in getting information in time for us to have it reflected in the decisions that we make. And you spoke of some of the hic-

cups in this year's process.

Let me ask you, rather than retreading how the process took place, which I think you did an admirable job of laying out. Let me ask you this, how do you believe the process can be changed, fixed to make sure the information that comes out of the 30-year shipbuilding plan, the 30-year aviation plans, makes it to the House Armed Services Committee members and the committee staff itself in a timely way to make sure that we get it so that those pieces of information, which I think are very valuable, make their way into the planning process?

Admiral STANLEY. It is a good question. How do you improve it? We often struggle with the complexity of the plans, trying to do something as complicated as this in projecting it as far into the future as the current legislation requires. It is a very complicated task. So I think the simple answer to your question is let's try to focus on the things that you and we value and need most. Okay?

Now what would that be? I think it is important—a piece of this we need to work at together. I think we need to work to answer—it is not clear to me exactly what you need, maybe, right? So we have to meet that. We are not—we are—we want to meet the needs

of Congress. So how do we move forward?

My instinct is, again, the near-years provide the most significant input; the longer your projections become less important. Having a plan that is tied to the Administration's current view of strategic risk that is reflected in the Quadrennial Defense Report seems to make sense to me. Were I to try to shape it, I would say that a reasonable balance is to have a plan that is less, maybe less long in duration, maybe I will suggest 20 years just to throw an idea out. Maybe it is less duration. It is less frequent. Right? Maybe the

QDR [Quadrennial Defense Review] is enough. But in the annual submission that is currently required with the shipbuilding plan, or the 10-year data table, that is where we focus. So we focus more on the things that you need, which is easier for us to provide timely information on, than the complexity of things that are maybe of less value.

So I would propose really three things. I believe the long report tied to the Quadrennial Defense, and tying to the Quadrennial Defense Review makes sense. I think limiting the scope of the report, potentially to 20 years. I will say, it is not clear to me that the last

10 years does neither you nor I much good.

And then the last thing I would suggest is potentially that we look at how do we time it? Think about when this Administration last changed. The new Administration comes in. It has to develop a National Security Strategy. It has to develop its fiscal constraints, how it is going to view the requirements of the Department. That takes time.

So over the last couple of administrations that changed, then that budget and the associated Quadrennial Defense Review has come in later. To try to then get a 30-year plan to reflect that new direction of new administrations, master security strategy in QDR, is very difficult. Potentially, the 30-year plan should be delayed until the next budget. So I would suggest maybe we work on those types of areas. Again, a quadrennial, lesser scope and potentially

a year delay after the QDR.

Mr. WITTMAN. Very good. Thank you, Admiral Stanley. And that leads me to the next question, when we talk about the current process in terms of planning, is it normal, even under the auspices of doing an evaluation leading up to the QDR with a 30-year shipbuilding or 30-year aviation plan, is it normal then for there to be an annual evaluation, or is there still an annual update that leads up to the QDR with this long-range planning process? And how rigorous is that outside the window of the FYDP? And I think that alludes to some of the specifics of what you had talked about regarding reforms.

Admiral STANLEY. Yes. We update our proposals every year. Normally that is focused on the near-years, the FYDP type of proposals, but things change. You alluded to the idea of who could have forecasted what is happening in the Middle East today. Ten years ago, we couldn't have projected the demand for the unmanned air vehicles that we require today on a day-to-day basis and saving lives in the theater right now, so things change. Our plans need to be flexible enough that we can respond to the needs

of the warfighter.

Certainly how you authorize and Congress appropriates also is a change that we need to consider every year as we come up with the next year's plan. So, yes, they change. Normally those changes on

a non-QDR year are more near-term than long-term.

Mr. WITTMAN. Thank, you Admiral Stanley. General Flynn, I wanted to ask you a question, if you look now at the 30-year procurement plans, the Marine Corps and the Army aren't specifically required to go into those areas, but there have been the questions that come up about where the Marine Corps' needs might be, especially for both the Marine Corps and the Army as it relates to ro-

tary-winged aircraft. And I wanted to get your thoughts and ideas about specifically, do you think that should be part of this 30-year planning process? And if so, what specifics do you think should be incorporated into the aviation plan as it relates to potentially in-

cluding rotary-winged aircraft?

The reason I bring that up is more and more discussion is taking place about the high ops tempo that we are experiencing now. The high usage of rotary-winged aircraft, especially in some pretty taxing environmental conditions and then, where do we go down the road with planning for the replacement of that fleet. And then how do we make sure we are addressing that in a timely way, especially as we ramp down. We all know the questions about reset. If there is nothing out there in the plan, the question then becomes how do we integrate that in with all the other needs that are being identified in both the 30-year shipbuilding and 30-year aviation plans?

General FLYNN. First of all, in our Department of Aviation, we have an aviation campaign plan that lays out our way ahead for all our type model series aircraft to include both fixed-wing and also rotary-wing. So General Robling, he develops that plan. So there is a plan to, for example, how we are going to replace our heavy lift helicopters in the future? As to whether that needs to be part of a 30-year program, I think in general it does make sense in some ways just because of the expensive aircraft in the future. But I would like to give you a more detailed response for the record if I could.

[The information referred to can be found in the Appendix on

page 95.]

Mr. WITTMAN. Absolutely, absolutely. And General Johnston, I wanted to just touch base with you in looking at the paralleling of the planning processes. As you know, in the 30-year shipbuilding plan, the Navy projects both ship deliveries and ship retirements, which keeps that at least within some frame of number of ships. And I was going ask for your thoughts about the aviation plan in looking not just at deliveries but also looking at how retirements would occur. It doesn't seem in the aviation plan that the retirement schedule is quite as definitive as far as what we expect with our aircraft.

And I know that we continue to push the life of our aircraft sometimes to the point of where it really creates bigger issues for us down the road. It seems like to me maybe in the planning process if we could look at further defining or more clearly defining the retirement phase for aircraft and not kind of pushing air frames to their max, we might be able to be a little more robust in our decisionmaking. I just want to get your reflections on the aviation plan and how it reflects aircraft retirements.

General Johnston. Sir, I think you kind of hit on the challenge, trying to anticipate when an aircraft will "time out" if you will. Recently our Chief of Staff of the Air Force approved the extended service life profile on trying to figure out how long an aircraft will sustain and continue to be part of our Department of Defense and part of our Air Force. And we are using that obviously to project out, we are looking at "SLEPing" [implementing a Service Life Extension Program], you know our Block 40, Block 52, F-16s [General Dynamics Fighting Falcon fighter jets] based on that, but trying to

figure out exactly when those airplanes will time out, knowing that we are trying to get the best value we can out of them for the American taxpayer, extend them as far as we can based on the mission requirements of that platform. And also tying them into new procurements as they come on board, such as obviously the F-35 [Lockheed Martin Lightning II fifth-generation fighter jet]. So trying to bring that all together, we probably have—I know we have a good handle on that, as far as within the 10-year period, although those will change. So, year to year, if you were to ask us to include retirement of platforms, you would see changes, because as you fly the aircraft, it is based on total number of hours when you decide to retire them.

I remember landing a 30,000-hour C-130 [Lockheed Hercules transport aircraft] in Kandahar with NVG [night vision] goggles, and that was about it, that airplane was going to leave from there and go to the boneyard. So when do you anticipate it? It all depends on the operational tempo, if that airplane is involved in Southwest Asia—we are in the Middle East. Are you flying it more often? Is it back home doing steady state operations where it isn't flying as much? It is very difficult to project that. But I can assure you that the Air Force projects that, plans for that and anticipates that in how we develop our aviation plans.

Mr. WITTMAN. Okay. Very good. Thank you, General Johnston.

Mr. Cooper.

Mr. COOPER. Thank you, Mr. Chairman. There is a common phrase: The difficult we do immediately; the impossible takes a lit-

tle longer.

I am a little worried that we have asked you gentlemen to do the impossible. Any 30-year crystal ball is going to be cloudy. And Lord knows we ask plenty of reports from the Pentagon already. There hasn't been a Secretary of Defense in either party that hasn't complained loudly about the paperwork requirements.

Now if it enables us to do our constitutional oversight responsibilities, that is one in thing. On the other hand, in context—and I appreciate Admiral Stanley putting it in context for us—this is

a relatively new and unproven method of oversight.

Meanwhile, some other obvious features of the Pentagon are not being tended to: The GAO [Government Accountability Office] has complained for many years that the Pentagon is the least auditable of all government agencies, and relatively little headway has been made to find out where taxpayer dollars go within the puzzle pal-

So to ask anyone to come up with a 30-year window in the future is really a recipe for embarrassment, because no one can anticipate the changes on the horizon. As one of the witnesses pointed out, just in land warfare alone and the current conflicts we are engaged in, requirements for MRAPs [Mine Resistant Ambush Protected vehicles and other things have changed remarkably quickly.

So, as I said in my opening comments, I am a little more interested in agility and the ability to respond to future threats than in locking in programs that may or may not be useful 10, 20, 30

years hence.

In the worst-case scenario, I am worried that a 30-year oversight plan like this could just be a new type of pork preservative as people seek to lock in constituent facilities that may be popular back home but may not strengthen America.

So I think we have to guard against that danger. It is always good to have plenty of cushion and reserve, but given the uncertain nature of warfare and the constantly changing nature of warfare, a 30-year time horizon, which is longer than most careers in military itself, is going to be a difficult task to achieve.

So I appreciate you gentlemen's patience in putting up with requirements like this. I personally am doubtful of their usefulness, but I appreciate the good humor in which you try to comply with

the request.

Thank you, Mr. Chairman.

Mr. WITTMAN. Thank you, Mr. Cooper. Mr. Forbes.

Mr. FORBES. Thank you, Mr. Chairman. And first of all, I want to thank you and the ranking member for holding this hearing and want to thank all the witnesses and tell you at the outset that you are all good men. I know that you have served your country well, that you love your country. And I am not going ask you any tough questions today.

And the reason I am not going to ask you those tough questions is because you can't answer me. And that is what concerns me the

most.

As the ranking member stated, it is sometimes difficult when we look at 30-year plans because we know we won't hit them, but that doesn't mean we shouldn't look at them. Because the importance of the 30-year plan, if we don't graph it out, we don't know whether our short-term actions are going to get us down the road or not.

The second thing is it is not just agility that we need to look at; it is honesty, because the Congress either needs to play a role in this or we need to get out and just say we don't have a part in it.

this or we need to get out and just say we don't have a part in it. And I think that the thing that concerns us, Admiral Stanley, you made a good comment when you said that it is not so much the substance of the plan, but it is what you learn in that planning process. And yet we, in doing oversight, we have got to pass a National Defense Authorization bill at some point in time that authorizes what you are doing. We never get access to the most important part of the planning process, which is what you learn during that process.

This is what bothers me, not from the four of you, but when the Secretary of Defense can come out and he can say, as the ranking member mentioned, he didn't want to give us all the information because he is concerned that if he does, he may not get what he wants. Whether it is parochial reasons or maybe it is not parochial reasons at all. Maybe it is because some of us just believe we have got to have a strong Navy to defend the United States of America, and we want to ask some tough questions about how to get there.

But when the Secretary of the Navy comes out and issues gag orders and says the Pentagon can't even answer questions for us, we question how in the world can we get those core questions that

you say were part of the process.

And the Secretary of the Navy just refuses to give us a shipbuilding plan when the statute requires it. It may not be easy. It may not be convenient. But the statute says how to do it. We question how do we get at that process. When we hear comments like anything outside of 5 years are just fantasy worlds in terms of projections, that concerns us.

But then when we see numbers like what we see in the reports, where we see the shipbuilding plan presented to us, and let's don't take 30 years out, let's take the short-term, and we see the projections that are in that shipbuilding plan for the number of ships we are going to have and the cost of that. And you have a \$15.9 billion per year requirement. The CBO [Congressional Budget Office] says it would take \$19 billion a year to get what you say. That is a huge difference for us. And how we cross that divide and get those answers, we really don't know, especially given the fact that for the last 30 years we only had \$15 billion put in shipbuilding, and we know the Secretary said he is going to come up with \$400 billion worth of cuts down the road.

So this is what I don't understand, and I don't expect you to answer me today, maybe some time in the hall, you can answer me, or maybe some time you can give us the information or maybe the next panel can do it. But how do we get at a process where we can get closer to the truth, because it is true that things change in administration. Let me tell you what doesn't change, our risks don't change. The number of ships the Chinese have don't change. The number of ships we are building don't change. There are some core principles that we ought to get at.

And I will just conclude with this: One of the things that frightens me the most is whether, like the independent panel looking at the QDR says, we have gotten a process where we are just kind of validating what we are already doing, instead of stepping back and looking at the risk that the Nation is facing and saying, how

are we going to create true plans that get us there?

Because if we need more ships in our Navy, like the independent panel said, like the Navy says that we have, we are just confusing the American people and deceiving them when we put out a plan that says that we are going have to ramp that up in the next few years to get where our goals are, but we know there is no way we are going to get at those dollars. And so, at some point in time, I

hope we can get at this process.

I hope we can get a process where, Admiral, we can get at the things you learn during that analysis and then putting that plan together. But also a situation where we can have some forum with you guys where you are not in a career ender if you come in here and tell us something that is not a part of that plan, where we can sit down and say, what do we really need to defend the United States of America? And I am afraid we are not there yet, but I thank the chairman and ranking member for holding hearings like this that maybe will help get us there because our country is depending on it.

As the ranking member said, the Chinese can build those tankers in 6 months, but Jim, as you know, it didn't start in the last couple of years. They have been able to do that for the last 5 years.

They are the kinds of things we need to be addressing.

And gentlemen, thanks for all you have done in your career, and if you have any insight on that you can get back to us off the record some time, we would love to hear it. Mr. Chairman, thank you.

Mr. WITTMAN. Thank you, Mr. Forbes. Mr. Courtney.

Mr. Courtney. Thank you, Mr. Chairman, thank you for holding this hearing. Last April I was over in the U.K. with a briefing with ministry of defense officials there. And although I share a lot of the ranking member's questions about the value of some of these reports, it was interesting getting their perspective because when the new government, conservative government, came into power, because they don't have any kind of regular statutory-driven review process—it really is almost at the whim of the government that happens to be there at the day in question—they engaged in the context of, obviously, a huge fiscal crisis of the equivalent of a defense review. And what they found was that the projected acquisition programs that they had along with sort of budget projections, there was probably close to a 20-percent shortfall in terms of whether or not the British government was going to be capable of funding those needs. And that drove a lot of the budget design of the first budget that was passed.

So, obviously, that has value in terms of just sort of having at some point a planning process where you can sort of see where you are flying here, as opposed to flying in the dark. Of course, the irony of it was that one of the reductions that they proposed was in fixed-wing aircraft and shipbuilding. And within months, they were engaged in Libya requiring the use of those very platforms that really were going to be subject to some of the budget constraints, which shows, again, the ranking member's point that trying to evaluate risk, even in the matter of the short-term, let alone

the long-term, is just really hard to do.

I guess maybe coming from Connecticut, where we are the land of actuaries, where people sit around and project 50-year storms, 100-year storms, 500-year storms, to some degree, it is an equivalent sort of challenge. I don't envy you in terms of doing that.

lent sort of challenge. I don't envy you in terms of doing that.

One question I guess I would ask, Admiral Stanley, is just in terms of evaluating risk, you know, as you said, it is very complex, there are a lot of factors that you have to build into it. One of them is whether or not we will have an industrial base which will be capable of dealing with sudden change in challenges that our country faces. Is that one of the priorities in terms of, again, trying to structure out a plan either short-term or long-term?

Admiral STANLEY. The simple answer is, yes, we do consider the industrial base. I like your parallel to what the British review did. And I think a lot of those strategic issues about what does the Nation need for defense, how do we look at the risk against our Nation in the future, sorts out and we have that discussion as part of putting together the National Security Strategy and the National Defense Strategy and Condensated Defense Review

tional Defense Strategy and Quadrennial Defense Review.

So that is the place where I think that strategic debate should be. And whatever shipbuilding or aviation plans that we have that look forward—and it does look forward into a dimly lit future those plans as they come together reflect that risk in that direction.

In these plans is not where we should be debating, do we need 400-ship Navy or 300-ship Navy; what is the size of the F-22 [Lockheed Martin/Boeing Raptor fifth-generation stealth fighter aircraft] force that is required. That should come out of the strategic reviews would be my input.

Considering the industrial base and the importance of the industrial base is a part of these plans. I have established some sort of strategy for the Nation. I am now implementing that in the procurement profiles of the ships and aircraft that the Nation needs. And as part of that, we make sure it is executable by getting our people from acquisition technology and logistics, industrial base, to come in and evaluate to make sure that we can actually sustain that. So, yes, I think it plays, but I think it plays there. And I think there is a division between a strategic review and what the Nation needs for the long-term and the number of platforms that is required to execute.

Mr. WITTMAN. Thank you, Mr. Courtney. Mr. Palazzo.

Mr. PALAZZO. Thank you, Mr. Chairman. Gentlemen, thank you all for being here and thank you to for your service to our country. I appreciate that. Some of my questions may have already been asked and answered, so if it is duplicative, I apologize.

In this time of high government spending and debt, many in Congress are looking at ways to rein in our out-of-control spending, and they are starting to look at big-ticket items from the DOD

budget.

Just last week, a colleague of mine introduced an amendment aimed at cutting \$150 million from the LHA-7 [large-deck amphibious assault ship] program. Cuts like the one suggested last week strengthen to me the possibility of further delays in the ship's construction, which I feel like will also push back other ship construction as well.

Given that so many shipbuilding programs are connected both financially and in terms of planning, how do you think cuts or delays in the current shipbuilding plan affect the overall capabilities of the force in the future and our ability to meet or force-level requirements?

Admiral Blake. I think you bring up an excellent point. I think one of the key ingredients, if you will, that we have to apply when

we are going through this process is flexibility.

You bring up the case of delay in a shipbuilding contract. I will tell you, when we have delays in deliveries of hulls, we have to then go back in and evaluate, can we accept that risk or not?

If we determine that we cannot accept that risk, then we have to look at things to do extensions on the service lives of other ships in order to be able to fill that COCOM [combatant command] requirement. So I would tell you that basic approach would be as you got these perturbations within the industrial base. I think the Navy has to go back, look at what they have done and then see if they have to modify their plans.

I will tell you, the Department is very supportive of the planning process that goes on. We also recognize that this is an open and collaborative process, and it must be flexible. And so when an issue like that comes up, the first thing we would do is, we would sit down and say, all right, what are the risks involved, where do we

need to go, and how do we get there?

Mr. PALAZZO. So it does delay our shipbuilding plans for our force

have to look at the tradeoffs. For example, if a ship is being de-

for the future; it just keeps pushing things out to the right.

Admiral BLAKE. Well, I think what you have to look at is you

layed in its delivery, then you have to determine, all right, then I am going to have to keep another asset around, but if I keep that other asset around that was originally going to go out of service, there is, if you will, a bill to be paid. You have to keep those personnel available. You have to look at what maintenance has to be done on that ship in order to extend its service life. And then you have to factor all of those in, in order to ascertain, where am I going to take the money from in order to put it toward this particular issue?

So I would tell you, one of the examples I could give you is we have a large-deck amphib which is currently going to be about 16 months behind on schedule. We are going have to extend one of other large-deck amphibs in order to meet that gap. So we have to lay the decommissioning from a vessel from 1 year to another. And the associated costs go with that, because we have the personnel cost; we have the maintenance cost; we have the operations cost. It is one of the ways we handle the risk.

Mr. PALAZZO. With China's military build-up expected to continue, particularly that of the Chinese navy, do you feel that these delays and shortfalls in our own shipbuilding programs put us at risk?

Admiral Blake. I think you have to look across the entire portfolio. You can't just look at a single issue in isolation. You must, if you will, look across the entire shipbuilding plan and the aviation plan in order to determine where you can afford to take risk, and then you have to apply it across the entire portfolio. You can't take a single item, go to a single data point and come up with a single solution.

If you go down that path, what you end up with is, in isolation, any single issue is solvable, but when taken across the entire portfolio, what you have to do then is you have to balance your risk

and recognize you have fiscal limitations.

Mr. PALAZZO. Thank you. Thank you, Mr. Chairman. Mr. WITTMAN. Thank you, Mr. Palazzo. Ms. Hanabusa.

Ms. Hanabusa. Thank you, Mr. Chairman. General Flynn, Admiral Blake, and Admiral Stanley, in reading your resumes, I notice you all graduated the same year from the Naval Academy. So, given that, and I don't mean to embarrass you, it is about—what is it—36 years ago, it sort of falls within this 30-year plan that we are talking about. So give me a very practical approach, and my practical question to the three of you—and I haven't forgotten you; you kind of don't fit—the rest of you, we are talking about a 30year plan. You have been around 36 years. Would you be able toof course, you wouldn't have the positions you have, but given that, you can answer in terms of what major changes you have seen that you would have been able to predict and not predict in that 36-year period? And given that, I am just trying to get a good feel for sort of what Ranking Member Cooper was saying. How impossible is this? Would you back then have been able to look forward and predict where we are today? And what would you say about-we are looking at shipbuilding, so would you be able to say in that period of time that we are where we should be in terms of ships today? And would you have had the magic wand and would you have been able to do that?

I think it is just interesting that you all graduated the same year, so there is nobody that can say, well, 10 years ago, it wouldn't have been the same. So given all your experiences and your common background, can you answer my question? I don't care what order you do it.

General FLYNN. As the one who had their first choice of service selection—and for the record, I am the youngest of the three.

Ms. HANABUSA. I am not asking what rank you graduated, okay,

General FLYNN. Ma'am, I think the first part is, I have been listening today, and I do agree with Admiral Stanley. I think the key part of this is you have to have a strategic basis for what your plan is. And there was an Army general who once said, we are never going to get the future 100-percent right; but we can't afford to be 100-percent wrong.

So there is a value to doing a long-range plan, as to whether that is 20 or 30 years, I tend to agree with Admiral Stanley that 20

years is about right.

But then what you also have to be able to do is when you build the execution plan to get there in 20 years, you are searching for consistency and stability. And I think that means on a yearly basis, then, you need to take a look at what assumptions you have based

your plan on and whether they are going to play out.

For example, if you have a ship delay in construction, what does that do to the rest of the plan? And you need to take a look at that every year. If there is a maintenance issue, are you right? I think that if you focus on the 5 years of the program, when we do a defense program, that is really where the focus is, but that should underpin, I think, a 20-year effort that is based on some strategic context.

Admiral BLAKE. Ma'am, for the record, as the best-looking of the three, as you go back and you look, I think you have significant events that take place almost on a 10-year basis. I will give you the best example, no one I think could have predicted the Vietnam drawdown. We were all midshipmen at the Naval Academy when that started. No one could have predicted the Reagan buildup when it started in the 1980s. No one could have predicted the peace dividend with the Cold War coming to an end in the 1990s. No one, I think, would have predicted in 2000 that we were only a short time away from an event such as 9/11 and that we would be involved in two wars today.

So I think your point is absolutely accurate in that no one of us can predict, if you will, what the future will hold. I do however believe that planning is indispensable. And I think you have to have a corroborative process that gets you there. You have to have—and I look at the current shipbuilding plan. I think if we hadn't had a look at the long range, whether it is 10 years or 20 years, we wouldn't necessarily have focused on the fact that we have a significant challenge with the SSBN(X) [next-generation ballistic missile submarine] program. We wouldn't necessarily see that our surface force combatants, our cruisers and destroyers, are going to go away in large numbers in the 20s. We wouldn't necessarily have been able to project the fact that our submarine numbers are going to go down and that we have to address that.

You know, one of our goals, which we have accomplished in recent times, is we are now able to build two submarines a year, which is no small accomplishment given the fiscal constraints we operate under. So I would say, as you look across that, there is significant value in the planning process. I would go to the point, as I mentioned in my opening remarks, when you go out to 30 years, that last 10 years is notional; it is a one-for-one replacement.

If you were to ask me what would I look at, I think we do need to focus on that 20-year period, because we cannot project those events like the peace dividend or Reagan buildup or whatever event it happens to be, so it is important that we have that. I guarantee you, in 2000, none of us were looking at the use of the UAVs [unmanned aerial vehicles] that we currently have in inventory back in 2000. No one, I don't think, projected that by 2011, we would have the number of assets available for the purposes they are now being used. I definitely agree with you that you have to do that from that perspective.

Ms. HANABUSA. Thank you. Mr. Chair, can I ask that the remaining admiral and general respond in writing?

Mr. WITTMAN. Yes.

Ms. HANABUSA. Thank you very much.

Mr. WITTMAN. Thank you so much. We appreciate that. Ms. Pingree.

Ms. PINGREE. Thank you, Mr. Chair, and thank you for allowing me to sit in on your committee. It is an interesting conversation, and I don't have a lot of questions to ask. I really was looking forward to hearing a little bit of your projections out into the future. And I think this is useful, particularly a useful hearing in some of the challenges that come up when you try to project 30 years out, which my colleagues have been discussing. And you all have mentioned that it is very hard to tell what technology will be available to us, where we will be at risk. And I applaud you for attempting to do that.

I will just add, from my perspective, and I do have a similar parochial lens for this because I do have a shipyard in my district, so we think a lot about our relationship with building ships, with what our industrial capacity is, with our inability sometimes to negotiate contracts. And from our perspective, the lack of sufficient ships projected out into the future. So if you want to make any comments on that. I see from a very short-term lens that we are not meeting the need of building sufficient ships to power our Navy.

And that I see every day the diminishment of the industrial base, particularly of an aging workforce. We, of course, believe that we build the best ships in the world in the State of Maine. And we worry about what happens when we don't have future generations that are trained to do that.

As some of my colleagues have mentioned, all you have to do is take one look at China and think, what are we letting go of in this country when we may easily find ourselves in the short run and certainly in the long run facing a much more powerful Navy without the capacity to deal with it?

So, to a certain extent, I look at it and say, it is good we are thinking 30 years out, but I am really worried about the next 10

years. It doesn't seem that we're on track to do what we need to do in the short term. So if you want to make a comment on that, that would be useful to me.

Admiral BLAKE. Ma'am, I will tell you, in our deliberations, as we are building plans, one of the key considerations is the fragility of the industrial base, the fact that the industrial base over the past several years has shrunk in size and the fact that we recognize that that database is a national asset and that it is not easily recoverable.

And so when we put plans together, one of the key factors is the health of continuing to support the database, and that is no small

issue when we are doing that as we build the plan.

I can tell you when we look at, whether it is your yard up in Bath or the yards down in the Gulf or it is the yards on the West Coast or the ones in Virginia, we absolutely look at every one of those. We also look at, not only the tier-1 yards but the tier-2 yards, because we recognize that whatever decision is made, it is going to have an affect on both of those, on the work at those yards and how we are going to be able to maintain that industrial base into the future.

Ms. PINGREE. Thanks. I would just comment, it doesn't seem from my perspective, and I know many of my colleagues have high-performance yards in their district as well, but it doesn't seem like at this rate we are keeping up with maintaining the industrial base, training the individuals that we need in the future, and we are certainly not building ships fast enough to meet our capacity or our need.

Thanks.

Mr. WITTMAN. Thank you, Ms. Pingree. Mr. Conaway.

Mr. CONAWAY. I will pass. Mr. WITTMAN. Mr. Langevin.

Mr. Langevin. Thank you, Mr. Chairman. Gentlemen, thank you for your testimony today and your service to our country. My question, I appreciate the discussion here today about the challenges we face in the shipbuilding budgets. I wanted to focus, if I could, on the submarines, which I think I have worked on for maybe 11 years now on the committee. Now the Navy projects the attack boats and the shortfalls are going to bottom out at about 39 boats in 2030 versus a requirement for having a total of 48 submarines. That is a peak shortfall of nine attack boats or 19 percent of the requirement.

More to the point, the Navy is going to be at least 10 percent short in attack submarines for an 8-year period of time in 2027 and remain low through 2055 and to the end of the 30-year period. Can you tell me, how is the Navy going to be able to perform its mission adequately with that kind of a shortfall, particularly the Naval modernization effort and demands on our attack boats performing

missions of various other types?

Admiral Blake. Sir, let me begin by saying, first of all, I think one of the key factors that occurred is that we were able to get to building two boats a year. As you know, there have been several years where we were only able to build one. So that was the first start of the process we were able to get to build a second SSN [attack submarine].

As to the long-term effect and how we are going to deal with that, I think there are several approaches we need to look at and consider, and those deliberations will be going on over a period of time. As you know, we currently have 55 boats in the inventory. You are absolutely correct. We are going to go down to a low of 39 boats in the inventory. And I think we are going to have to look at such things as looking at the current inventory and seeing, if you will, what the best of breed is and then seeing if we can do service life extensions on some of those boats that are currently in the inventory.

Another way we can look at fulfilling COCOM demand is to look at deployment extensions, if in fact that—and those are just two options out there.

I think, as I mentioned earlier, I agree, when you look at any single issue in isolation, I think—and I view it as—or we are talking about the attack issue right here, I would agree with you that we should be able to address that in some way. But then when you have to look across the entire portfolio and balance all the requirements that we have across the entire portfolio, that is where it gets to be a real challenge, because it is not just a submarine issue; there is an amphibious issue. As I mentioned earlier, there is a surface combatant issue. So as we look at each one of those, we can't take each one of those in isolation. We have to delve into each one of those across the entire portfolio.

Mr. Langevin. How does the shortfall—clearly, the requirement says we need to have 48 boats, and I know that we are only meeting about 60 percent of the request of the combatant commanders right now with respect to the mission submarines to fulfill. How does that compromise us? How do we close that gap?

Admiral Blake. Well, that one is not in my lane, per se, but I would tell you in general what you have is you have the combatant commanders and the fleet commanders get together, and if you will, they do a risk assessment to see what they have in their inventories, and then they fill their global requirements based on what they have in the inventory. And you can't address the issue overnight. But I think for any deeper than that, sir, I would have to take it for the record.

Mr. Langevin. Well, let me try a different but related question. Admiral, I understand that the Navy is trying to find a way to put an additional attack boat into the shipbuilding plan for fiscal year 2018 column to bring the fiscal year 2018 figure to two boats, and that is fine. But it is only one additional ship. You are still going to need to put another five to six boats into the plan to avoid dropping below the 90 percent, 95 percent of your requirement. If the Navy isn't planning to refuel older boats, attack boats, and it is not planning to put an additional six or seven new attack boats into the shipbuilding plan, then can you please tell me what the Navy does plan to do to substantially mitigate the projected shortfalls in attack submarines?

Admiral Blake. Thank you, sir. First, you are absolutely correct. In the current mix, there is a single boat to be delivered in 2018. That will be at the earliest a POM-14 [Program Objective Memorandum for Fiscal Year 2014] issue because that would be at the

end of the FYDP. And I am sure there will be significant deliberations between now and then just to address that single issue.

With respect to how we would address the overall shortfall as you go to the out-years, I would go back to, I think we are going to have to look at the viability of looking at service life extensions if in fact that is viable whether, and then we will have to determine if it is, or if we have to go to deployment extensions.

Mr. LANGEVIN. Thank you.

Mr. WITTMAN. Thank you, Mr. Langevin. Mr. Coffman.

Mr. COFFMAN. Thank you, Mr. Chairman. And Vice Admiral Stanley, it seems like we've become fixated rightfully, so, on the number of ships in the United States Navy. And so, I think the current projection is we are trying to get to a 313-ship Navy. But I think my concern is, in getting there, are we, and focusing on the number, are we too focused on building the least costly ships versus the more capital, the larger capital ships. So we seem to be focused on the littoral combat ship and the joint high-speed vessel in terms of getting those numbers. But my concern is that there doesn't seem to be the focus on the next-generation ballistic missile submarine. And I wonder if you can comment on that from a long-term budget point of view.

Admiral STANLEY. So, first, on the SSBN(X), it is funded. It is being developed in consonance with our British counterparts. We are doing what we need to do to deliver that capability now. It remains funded. I don't think that the requirements at all are in jeopardy. But your larger question is the number of ships. Is that an appropriate focus? Quantity has a capability importance all its own. So it is important. But to say that 313 is precisely the right number is, I think, shortsighted. The number of ships varies.

In this plan, this 30-year plan, it varies significantly from the 280 some that we are at today. I think it pegs out around 225 or 325, something in that ball park, comes back down. So you have got a bunch of sine curves in this plan that all gets added up, and you know, we say that the requirement is about 300, is what the Department said. You quoted the CNO [Chief of Naval Operations], who says that 313, you know, is his floor. It is important. I don't want to take away from that. But I also recognize that it is not a single point. It is not, a precise number is not always right, okay? So it is much more important to get at what capability that force has. The way Secretary Gates thinks about it is we have got to focus on the flexibility of our force, make sure that we have a force available that is adaptable to this future, which is hard to foresee. We want to make sure that the ships that we are buying—use LCS [littoral combat ship] as the example, quite honestly, it is basically a new concept. That mission module and the ability to change that mission module will allow the Navy to send the right capability forward that they need. So that is important. And having that in some quantities I think makes some sense. How many of the more expensive types of ships do we need? It gets at sort of what we are talking about over here, where, what is China going to do? And what kind of capabilities do we need to provide the right opposing force to the Chinese capabilities?

And that is a discussion that we have. I think the plan that we have right now is a good balance of capability and capacity that the Nation needs.

Mr. Coffman. Anybody can answer this, probably certainly General Flynn. The needs of the United States Marine Corps in terms of the amphibious capability and shipping, I think it is a minimum, I understand there are 33 ships in order to deploy two marine expeditionary brigades, and I think the commandant and the prior commandant have stated that that is a minimum, that they need that as a—force projection capability is a minimum. General Flynn, I wonder if you can comment on that and where we are in this whole process of reaching. Are we at 28 right now and reaching the 33?

General FLYNN. Sir, first of all, it is not just the two brigade requirement. And it is not just focusing on the large threat. It is how many ships do you need to do what we are actually doing today around the world, and we believe that the requirement was 38. Accept risk down to 33 because of fiscal reality, and you can do both. You can do your two brigade requirement and you can meet the demands that we are seeing today. Right now, we have an inventory of about 30 amphibious ships. We will go to 29 this year. So you have assumed additional risk, not only in your larger requirement but also in your day-to-day operations. And where you see that manifest itself is not meeting the deployment because we always figure out a way how to meet the deployment and the commitment.

Where you see it is in the ability to do maintenance and the ability to train the force. This summer, we are likely to deploy a marine expeditionary unit and amphibious ready group that for the first time that all three ships will be together is when they deploy. And that just shows you that that is when you accept risk in the inventory. It is not just the large enemy out there or potential enemy; it is also the day-to-day demands on the thing where you see the stressing and manifestation comes first in maintenance and in training at the same time.

Mr. COFFMAN. Thank you, Mr. Chairman. I yield back.

Mr. WITTMAN. Thank you, Mr. Coffman. Panel members, thank you so much for joining us today. We appreciate your insights. I would ask this.

Ms. Hanabusa had a request for some written responses. If you will provide that to her.

And if you will do this as a formal request from the committee, and that is, we would like to have your written reflections on what we can do to improve the planning process. And I know that you all had stated some of your thoughts today, but we want to make sure that we give you the opportunity to give us a more detailed list of things that you think can be done to improve this particular planning process. And again, with the focus of making sure that we get as highly robust information as possible in a timely manner back to the House Armed Services Committee. And we appreciate your reflections and thoughts on that and thank you so much for joining us today.

We are going to break for about 3 minutes and let the next panel be seated, and then we will begin questioning them. We will now begin with our next group of panelists, and they include Mr. Ron O'Rourke, Defense Policy and Arms Control Section, Congressional Research Service; Mr. Eric Labs, from the National Security Division, Congressional Budget Office; and Ms. Mackenzie Eaglen, Research Fellow for the National Security Studies, the Heritage Foundation.

I want to thank you all so much for joining us today and appreciate you taking the time to provide your insights on this, what I believe is a critical planning process, in understanding what we can do to push the issue forward. And I want to welcome all of you and again, thank you for your participation.

As we previously arranged, opening statements will be limited to 5 minutes due to time constraints. I am going to allow one exception, and that is Mr. O'Rourke. He has asked to provide some addi-

tional comments, so we will allow that particular time.

Additionally, written testimony, absent objection, will be made part of the record, and we look forward to hearing from all of you in discussing the oversight issues we have been concerned about here in Congress. And I also remind my colleagues that we will use our customary 5-minute rule today for questioning, proceeding by seniority and arrival time.

So, with that, we will begin our testimony with Mr. O'Rourke.

STATEMENT OF RONALD O'ROURKE, DEFENSE POLICY AND ARMS CONTROL SECTION, CONGRESSIONAL RESEARCH SERVICE

Mr. O'ROURKE. Chairman Wittman, Ranking Member Cooper, distinguished members of the subcommittee, thanks for the chance

to speak today on the 30-year shipbuilding plan.

The main purpose of the 30-year plan is to support effective congressional oversight of Navy shipbuilding by giving Congress information that is important to performing this oversight function but not available in the 5-year data of the FYDP. The plan enables Congress to assess whether the Navy intends to procure enough ships to achieve and maintain its stated force level goals.

In particular, it makes visible to Congress projected ship inventory shortfalls that are either not visible or not fully visible in the 5-year data of the FYDP. Given the long construction time of ships, as well as financial and industrial-based limits on ship procurement rates, mitigating shortfalls that appear to be far in the future can sometimes involve making adjustments to ship procurement

rates beginning in the near term within the FYDP.

The Navy's addition of a second DDG-51 [Arleigh Burke-class guided missile destroyer] to the fiscal year 2014 column can be viewed as a possible case in point. By providing Congress advance warning of projected inventory shortfalls, the 30-year plan gives Congress an opportunity to consider whether to address these shortfalls before it might become too late to do much about them.

The value of the 30-year plan might be likened to the value of headlights for a truck driver traveling on a country road at night. The driver can't make abrupt changes in the truck's speed and direction, and consequently gets a critical benefit from the advanced warning the headlights provide of approaching curves or obstructions in the road.

The 30-year plan can help Congress assess whether there is a fundamental imbalance between Navy program goals and resources, whether ship procurement plans are likely to be affordable within future Defense budgets, whether Navy planning is reasonable in terms of assumed service lines for existing ships and estimated procurement costs for new ships, and what the potential industrial and base implications of the Navy's intentions for ship procurement might be, as well as whether the Navy's planning is reasonable in terms of assumed service lives for existing ships and, as I said, estimated procurement costs for new ships.

Right now, the 30-year plan is helping inform Congress on how addressing the projected shortfalls in cruisers and destroyers and in attack submarines might need to take into account the funding demands of the *Ohio* replacement program. For example, Congress might decide that it would be easier to put additional destroyers and attack submarines into the shipbuilding plan before procurement of *Ohio* replacement boats begins, meaning between now and

fiscal year 2019.

I understand there are uncertainties associated with assembling the last 10 years of a 30-year plan. But the Navy isn't exactly helpless in this regard. For one thing, the Navy can project which ships are scheduled for retirement in those years. And since the average life of a ship looking across the fleet is about 35 years, those last 10 years will capture most of the retirements that aren't projected for the first 10 or 20. Seeing the retirements projected for those final 10 years can help Congress assess whether those retirement dates are consistent with real world ship operating tempos and maintenance practices.

Even though there will be ships in the strategic environment between now and the final 10 years of the plan, Navy planners can nevertheless project that the Navy will likely need to have certain capabilities associated with the broad and enduring roles of the Navy. Indeed, one of the strengths of our multimission Naval forces is that, although they are designed and built in a certain strategic environment with certain specifics missions in mind, they usually wind up being used many years later very successfully in different strategic environments for different missions. The Navy's aircraft carriers, cruisers and destroyers and attack submarines are all

cases in point.

Although there are uncertainties concerning the last 10 years of the 30-year plan, that doesn't mean those last 10 years aren't of value for Congress to see. They can help show, for example, whether a projected shortfall is temporary in nature or more open-ended and long-lasting. That is important because mitigating a temporary shortfall might only require SLEPing some existing ships, while mitigating a more open-ended shortfall, like the cruiser destroyer shortfall, might need to involve putting additional ships into the shipbuilding plan.

The last 10 years of the 30-year plan provide Congress with a baseline against which to examine the possible implications of potential longer-term changes in technology, budgets, or the strategic environment. The final 10 years currently show that the Navy has not yet identified a strategy for fully closing the cruiser destroyer

and attack submarine shortfalls, even after procurement of the *Ohio* replacements boats is finished.

That is potentially important for Congress to see because it can inform congressional consideration of options for procuring additional destroyers and attack submarines between now and then, or for funding research and development work on new ship technologies or new shipbuilding methods that might alter the shipbuilding affordability equation for those final 10 years.

In summary, the Navy is a long-run proposition because of the timelines involved, building, maintaining, reshaping and ultimately replacing a fleet isn't done over a period of 10 or 20 years but over a period of 30 years or more. The 30-year shipbuilding plan responds to this fundamental aspect of the responsibility for pro-

viding and maintaining a Navy.

As the CRS [Congressional Research Service] Specialist for Naval Affairs, a key part of my job is to support congressional oversight of DOD activities by identifying potential oversight issues for Congress relating to the Navy, and except for the annual DOD budget submission itself, no document is more useful to me in performing this role for Congress than the 30-year shipbuilding plan.

Mr. Chairman, this concludes my testimony. Thank you again for the chance to speak on this issue, and I will be pleased to respond

to any questions you might have.

[The prepared statement of Mr. O'Rourke can be found in the Appendix on page 58.]

Mr. WITTMAN. Thank you, Mr. O'Rourke.

Dr. Labs.

STATEMENT OF DR. ERIC LABS, NATIONAL SECURITY DIVISION, CONGRESSIONAL BUDGET OFFICE

Dr. Labs. Mr. Chairman, Ranking Member Cooper, members of the subcommittee, I want to thank you for giving me the opportunity to discuss with you the value of the Department of Defense's annual 30-year shipbuilding and aviation plan for the Congress' oversight responsibility.

Every year Congress is asked to approve the procurement of a year's worth of expensive items, such as ships and aircraft. Well-constructed 30-year acquisition plans for major weapons system can provide information about the long-term implications of those decisions.

The 30-year ship and aircraft plans benefit Congressional oversight in at least three different ways: First, DOD's 30-year ship-building and aviation plans enable the Congress to assess the long-term effects of the incremental decisions that are made each year in the annual authorization and appropriation process. Ships and aircraft take decades to develop and procure, and often remain in the inventory for decades more. In the absence of a 30-year plan, the cumulative effects of those annual decisions may not be well understood. With the previous panel, you discussed the issue of the submarines in the 1990s versus the effect of having a long-term shortfall. That would be an example I would cite here as well.

Second, the 30-year plans may reveal whether an imbalance exists between the inventory goals for ships or aircraft and the resources the military Services are projected to receive. If such an

imbalance was indicated, the Congress might want to more closely review the defense strategy that was the basis for the DOD's inventory goals, the amount of money the Department would receive, or how those resources would be spent. For example, the Navy's 2011 shipbuilding plan revealed definitively that the Service would face a substantial budgetary challenge in the 2020s and the early 2030s when it expects to purchase 12 replacements for the *Ohio*-class SSBNs and still pay for other ship programs. That in turn over the past year has led the Congress and the Navy to focus more early attention on reducing the costs of those ships.

Indeed, the very process of the Navy's efforts to put out its 30-year shipbuilding plans over the past 5 years showed many year-to-year changes. Those individual changes were not so important in themselves but as a whole, greatly illuminated for Congress the Navy's challenge of developing a program that meets inventory

goals and is affordable.

I agree with Mr. O'Rourke. In fact, aside from the budget and accompanying justification materials, the Navy's 30-year ship procurement plan is the most important document I use in the work

I perform in support of the Congress.

Third, the 30-year plans also provide Congress with information about the relationship between DOD's long-term inventory objectives and its assumptions about service lives of ships and aircraft. The 30-year plans make those assumptions more transparent so that Congress has the opportunity to examine the realism of those assumptions and to judge whether it is investing enough resources to maintain the fleet.

For example, the Navy's plan assumes 40 years for new destroyers, but the Navy has virtually no experience in keeping surface combatants longer than 30 years. There is, of course, as was mentioned earlier, considerable uncertainty in any 30-year ship or aircraft procurement plan. The Navy's 2011 plan highlighted some of the difficulties in both developing such a plan and in estimating its

costs, particularly for ships to be purchased in the 2030s.

Although such uncertainties limit the utility of 30-year plans as predictive tools, the documents can nevertheless help inform the Congress of changes in plans and circumstances that are likely to arise. For example, the Congress is frequently faced with events and decisions about military aircraft inventories and acquisition budgets that have long-term implications. Recent events include the structural failure of an F-15 Eagle that could have portended the need to retire those fighters many years earlier than expected, delays in the development of the F-35 Joint Strike Fighter that will probably compel the Services to retain older aircraft longer than planned, and the decision to begin developing a new longrange bomber that will require substantial funding in the years well beyond DOD's FYDP.

In much the same way, the CBO's budget baseline provides a reference trajectory for Federal spending under current law, a well documented 30-year aviation or shipbuilding plan can provide a picture of how forces may evolve over time and what investments will be needed if current plans and assumptions remain unchanged. The value of that picture lies not in its accuracy as a blueprint of the future, but serves as a basis for Congress to evalu-

ate the long-term implications of changes to today's plans and circumstances

The Congress' oversight of Navy shipbuilding programs could be improved if the Navy included in its report the accompanying tables, listing by class and types of ship that would be procured, delivered, retired and serving in the fleet each year over the 30-year period. Similarly, long-term aircraft acquisition plans would be more informative if they displayed respective inventories of each type of aircraft over the span covered to include the schedule over which consisting aircraft are phased in and phased out as well as the underlying assumptions.

Although DOD has not produced 30-year plans for ground combat vehicles, rotary- and fixed-wing aircraft and trucks, such plans would be useful for oversight of the Army's and Marine Corps' acquisition plans, particularly if they provided information about the size and age of current inventory, inventory goals and plans to replace or modernize vehicle and aircraft fleets, and the projected cost of doing so. Thank you, Mr. Chairman, and I would be happy

to answer any questions that you may have.

[The prepared statement of Dr. Labs can be found in the Appendix on page 68.]

Mr. WITTMAN. Thank you, Dr. Labs.

Mrs. Eaglen.

STATEMENT OF MACKENZIE EAGLEN, RESEARCH FELLOW FOR NATIONAL SECURITY STUDIES, THE HERITAGE FOUNDATION

Ms. EAGLEN. Thank you, Chairman Wittman, Ranking Member Cooper. It is a pleasure to be here. It is also good to see Chairman Forbes as well earlier.

I agree with my colleagues that the purpose of the 30-year plans is critical, not as a document to predict the future with precision; it is really about forcing an examination on the back-end to offer clarity on the front-end. And I know that the DOD witnesses testified to the clarity within the FYDP, but it is the 5- to the 20-year period that I think that really matters. And I don't think you can get that 20-year clarity unless you go even slightly beyond that into the 30-year.

Ron highlighted a point I would like to make. Identifying broad trends and shortfalls is really where the pressure points are in terms of fleet size and composition. Cost goals and planning shortfalls is really where the utility of these plans come in for Congress. So, for example, Admiral Blake referenced the SSBN(X) as something, and Eric just did as well, as a program and a pressure point in terms of budgetary resources available and a potential plan resource mismatch, something that Congress needs to begin to start working on right now with the Department to help alleviate that strain, coming up with creative solutions.

The two aviation plans that have been submitted so far to Congress have highlighted the exact same thing for the U.S. Air Force and this "bow wave" of spending that is going to be required, beginning right in 2020 and throughout that decade, as the Joint Strike Fighter enters full-rate production at 70 to 80 per year, as well as the tanker, which will be fully on line, and then, of course, the

bomber will be just entering or hopefully near full-rate production. This is in addition to all of the other things the Air Force will be doing during that decade. And so that is the equivalent to me of the SSBN(X) and the elephant in the room in terms of budgetary resources in terms of aviation. And that being just roughly 7 fiscal years from now; 2020 sounds far away, but the building is already working on POM 13, and you can see how quickly this arrives.

Something my colleagues have referenced and I agree with is that this, and the previous panel said, the process was important. It may not necessarily be what is on the document, but the learning curving of the process. Part of what I believe this means is culling and highlighting the various assumptions. In fact, the witnesses previously said, those may often change. And they change annually, if not more so. And when assumptions change, what we found is build rates and new procurement and the service life extension and retirement plans of ships and aircraft are not mutually exclusive. Tinkering with one, even if it is a brand new program ripples through the entire fleet, the legacy fleet and the new one coming on line.

So, for example, the previous panel said that retirement of ships and aircraft changes vary, based on war-time usage rates, base on op tempo and a variety of other things. That then affects the service life extension needs of other programs, but you can't look at service life extension needs without looking at the new procurement and build schedules of what is coming on line. But that is also linked to the maintenance plans or delays of everything. So

you see that we have a circular argument here.

So I don't want to just talk about the value of the plans. I actually want to offer some new ideas and solutions to you as well, particularly as the DOD faces the deficit reduction efforts. The Navy, for example, has correctly concluded the U.S. needs a larger fleet, not just ships and aircraft but network capability, longer-range and increased persistence. We are losing our monopolies on guided

weapons and the ability to project power.

Precision munitions and battle networks are proliferating, while advances in radar and electro-optical technology are increasingly rendering stealth ineffective. I think Congress should look at the possibility of a long-range technology road map, which would include a science and technology plan and an R&D, a research and development, plan for the Department of the Navy and the Air Force. This would call for greater clarity to the need for next-generation surface combatant for the Navy, a new air superiority fighter jet for the Navy and the Air Force, and what low observable capabilities beyond stealth may be required.

This would also highlight some of the things Ms. Pingree talked about as well in the need in the technology space for more capable anti-ship, land attack and air-to-air missiles, next-generation rotary-winged aircraft, satellite recapitalization, directed energy and electromagnetic weapons, nanotechnology, solid state and fiber la-

sers, and biotechnology as well.

This road map would look at what our global allies and partners are doing and the potential emergence of new players. It would also consider capabilities and domains, including undersea, cyber and space.

And lastly, I would conclude with something that I would like Dr. Labs to weigh in on. Congress may want to consider universal cost estimates among the Office of the Secretary of Defense, the Department of the Navy, and the Congressional Budget Office, to use a set of consistent costs and methods to reduce the wide variances among new shipbuilding plans, the defense budgets, the CBO estimates and external analyses. Thank you very much.

[The prepared statement of Ms. Eaglen can be found in the Ap-

pendix on page 77.]

Mr. WITTMAN. Thank you, Mrs. Eaglen. We will now begin with our round of questions. I understand we might have some votes coming up, so we will try to integrate our questioning amongst the vote schedules.

Mr. O'Rourke and Dr. Labs, I appreciate your insight into the process, and you both indicated how valuable this document is to you in decisionmaking and the efforts that you have to put forward. Let me ask this: You had heard in the previous testimony about some suggestions about the length of the entire scope of the planning process, 20 years versus 30 years. I want to get your perspective, a little more specificity on your perspective on 20 versus 30 years and what that 10-year period of time creates as far as value in the planning process.

And then give me a perspective, too, on the current regime, which is, we are providing a 30-year aviation and shipbuilding plan in relation to the QDR, which is on a 3-year cycle, versus the proposal, which is to go to a 1-year cycle. Can you—I want you to speak a little bit to the utility of doing an update on an annual basis versus in concert with the QDR, and then 20 years versus 30

years as far as the scope of the plan. Mr. O'Rourke.

Mr. O'ROURKE. In terms of 20 versus 30, I think it is very important to note that the two major shortfalls that I have highlighted in my testimony, the one for cruisers, destroyers and the one for attack submarines, the majority of the years of those shortfalls are revealed in the final 10 years of the 30-year plan. If you didn't see those final 10 years, you might assume that those shortfalls might be closed up on their own over time through natural build rates. It is only because we saw the final 10 years in that 30-year plan that we see that in fact those shortfalls are open-ended.

And as I mentioned in my opening statement, that can have a big difference in terms of the kinds of options you might want to entertain for how to address those shortfalls. If you thought this was just going to be a dip that was going to close up on its own accord over the long run, you might then simply look at SLEPing some of your existing ships to fill in that valley. But if you see that it is more of an open-ended shortfall, then you might want to give more consideration to actually putting extra ships into the shipbuilding budgets. That is the signal you get from seeing the final 10 years of the 30-year plan. You wouldn't get that signal if the final 10 years weren't there.

And because the middle years of that 30-year plan have the *Ohio* replacement program in it, that might give rise to consideration for putting any extra ships in the shipbuilding plan into the first 10 years of the 30-year plan, the period we are looking at right now.

That is how the significance of the final 10 years can actually re-

verberate into the present time.

Moreover, as I mentioned in my opening statement, those final 10 years show you the projected retirement dates of the ships whose projected retirement dates do not show in the first 10 or 20 years, and because the average life of a Navy ship, when you look across all the classes on a weighted basis, is about 35 years, it completes your understanding of the assumptions that the Navy is making about expected service lives for its ships because the vast majority of those expected retirements will now be within that 30year period. They would not be in there on an only 20-year basis.

In terms of once every 4 years versus once a year, if you do it once every 4 years, but then the FYDP comes up every year and puts differences into that, you then have to start running two sets of books on the issue. And, in fact, I was in that situation earlier this year before the Navy submitted their new 30-year shipbuilding plan, which they did in late May. Prior to that, I had to try and reconcile the FYDP data from this year's budget with the 30-year plan from a year ago, and there were differences between the two, and I had to start running two sets of tables to present every situation, which were loaded with a lot of footnotes to explain the discrepancies. And my sense was that this made the situation a lot harder for Members and staff to understand.

And so, when you get a situation where you submit a 30-year plan once every 4 years, but the FYDPs nevertheless change every year, you run into this complication that I think makes it harder for people to understand what they are looking at, and that can hinder effective oversight.

Dr. LABS. Mr. Chairman, I can't really improve upon what Mr. O'Rourke just said, and I would echo each of his points identically.

I would add just a couple of things to that.

One is that you see, his first point about sort of the importance of it, you see the shortfalls are unveiled in the last 10 years of the plan. If you could actually compare the shipbuilding plans, as I sort of do on a routine basis as a part of the oversight work that I do, the original 313-ship plan that the Navy put out back in the fiscal year 2007 plan, around the 2006 time period, showed at that time at the end of the planning period a 15-ship shortfall in large surface combatants. You might think that that might have been all it was. But as the planning period got extended even under that plan, that shortfall was going to grow to 20-plus ships as well, and we are still seeing the same thing today. So the value of that longterm perspective, whether the Congress chooses to take that information and act upon it or not seems to me is highly valuable.

I would also add in terms of there was some discussion in the previous panel about sort of the difficulties and complexities of projecting out that last 10-year period. And I guess I would disagree that I don't think it actually is all that difficult or all that complex to do, depending on what the Department is trying to achieve with that 10-year window. If you are trying to simply give a picture of that 10-year window as to what are the numbers of ships that might be required based on current requirements and assumptions, then it is really not hard to put the ships you need into the plan and come up with a notional cost based on historical cost relationships and give that information, give that information to the Congress. And if, as the some members of the previous panel stated, that not much changes in that 10-year window, then it is really not

that difficult then to produce a bill on an annual basis.

If, on the other hand, as was also indicated in discussion of the service lives issue, if op tempo is changing the service lives of ships or aircraft on a year-to-year basis because we are using them a lot and therefore maybe they don't serve in the fleet as long as we would have expected, we very much would want to see on a year-to-year basis how those changes, how that op tempo is affecting the

long-term projections of the fleet.

Mr. O'ROURKE. Just one additional point to add to that on the 4-year versus the 1-year issue. If you run into—if you run a process where you submit the 30-year plan once every 4 years and that 30-year plan reveals shortfalls or other issues that someone might find inconvenient in the executive branch, then that would give them the opportunity when that 30-year plan becomes 1 year old or 2 years old or 3 years old to begin to discount the importance of those oversight issues for Congress on the grounds that they are based on a plan that might no longer be accurate. And I don't know if Eric wants to add anything to that.

Dr. Labs. We have actually had that experience in various meetings and briefings over the last 5 years, where certain plans would be out of date of certain types, and they would say, well, that is old, and things have changed since then. But they were not then willing to offer up well what exactly has changed that we would have to wait until whenever the next budget submission would be.

Mr. WITTMAN. Okay. Mrs. Eaglen, I want to the pursue a line of questioning with a comment that you made concerning a peak in Air Force resource needs, especially when we have a tanker program coming to maturation, the F-35 program coming to maturation at the same time we have the strategic bomber program that reaches its height, and the costs that are reflected in that. Do you believe that under the current planning process, that that difficulty is accurately reflected? And again, I want to look at, are we really able to properly project that to make sure that at that time, we are now aware of the stresses that that will put on resources in a fairly challenging time of resources? I want you to comment on that.

And then I think you also brought up an interesting perspective on one element of this strategic planning process that does seem to be lacking, and that is, on the Army side of things, with rotary-winged aircraft and other assets there that should be part of a planning process that we put in place that is similar for ships and other aircraft, that element of the planning process does seem to be lacking, so I want to get your perspective on the scope of what we may want to consider as far as the Army's involvement in the process, what they ought to possibly bring to the table as far as planning to make sure that we have a proper representation in evaluation of what the needs are from top to bottom within DOD.

Ms. Eaglen. Absolutely. Thank you. Regarding, you know, do we have a good sense of this bow wave, this pressure, particularly on Air Force aviation plans in the early 2020s, I would argue, no. And the plan lacks the detail that Dr. Labs just identified that is re-

quired. But at least it gives you an avenue to ask these questions. You would not be able to ask them without this.

So, for example, the fiscal year 2011 aviation plan and then you compare it with the 2012, the year-over-year assumptions changed pretty dramatically in terms of available resources to the Department of Defense. Basically, the 2011 plan called for a 3-percent real growth in aviation funding as if there was an aviation pot of money, but similar to the SCN [Shipbuilding and Conversion, Navy] account. And the 2012 plan just 1 year later suggests zero real growth after 2017 and didn't even address the years between now and then. Not sure where specifically that came from, if this was just a prediction by the Secretary made 1 year or not or President Obama's deficit reduction goals. But these are important because what the plan said year over year, it reduced plan spending from \$268 billion to \$259 billion in just this 1-year change. And it is unclear where that was effected in the plan. But if you look at the total fleet size of the aviation force, while the number stayed relatively healthy, even though the costs had decreased—available—the assumption of the costs of the resources available, it was at the high-end where we are seeing those shortfalls that manifest themselves, so the unmanned systems, for example, stayed very healthy in terms of numbers available under the new cost assessment, but the fighter attack fleet, the strategic lift and bomber aircraft all fell year over year. And I believe that is a direct result of reduced money available to the Department, but they don't make that connection. This is something that Members are certainly interested in.

I do believe that, in going to Mr. Cooper's point earlier, I don't think that these plans need to have every single piece of data in them. And we could certainly get into trainer aircraft, for example, and other types of unmanned systems that are already alone pretty significant. But I think rotary-winged in particular is important because of a couple of reasons. We know that the multiple Services need to develop a next-generation rotary-winged aircraft or whatever it is, an attack helicopter or something else. And those plans are actually, if the Department had been serious about this, should have begun about 5 years ago. So that the R&D would be coming online just about now. Heavy lift aircraft and rotary-winged are something the last panel brought up as well, and I believe that is true in particular for the Navy. Their MH-53E Dragon helicopters are the only heavy lift planes that they have in the fleet, and they are not going to last forever. And there is no discussion or at least clarity in terms of the R&D planning that is required today. If we want to put this in the fleet by 2019, we are looking at basically 2013, next year's budget, or 2014 at the latest to do that.

Mr. WITTMAN. Very good. Thank you, Ms. Eaglen. Mr. Cooper. Mr. Cooper. Thank you, Mr. Chairman. All the witnesses on this panel seem to like the requirement that the Pentagon do the 30year shipbuilding report. In fact, for some of you, it is your favorite report it seems like. Two of you work for a government agency. Does either the Library of Congress or CBO have a 30-year plan?

Mr. O'ROURKE. I am not aware that the Library of Congress has a 30-year plan, no.

Dr. LABS. No, Mr. Cooper, I am not aware that CBO has a 30-year plan.

Mr. Cooper. Have either of you advocated for a 30-year plan for

your agency?

Mr. O'ROURKE. It is not my role to advocate policy for the Li-

brary of Congress one way or the other.

Mr. COOPER. Well, just informally, speaking as a citizen, do you think it would be a good idea for the Library of Congress or the CBO to have such a plan?

Mr. O'ROURKE. As a general management practice, if an entity is involved in the construction of capital assets that have very long lifetimes, it might then make sense for that entity to have a planning process in place that encapsulates the lifespan of those assets.

Mr. COOPER. But bottom line is, neither one of your agencies has such a plan and for various reasons, one hasn't been advocated ap-

parently.

Mr. O'ROURKE. I can't say that our agency doesn't have that

plan, but I am not aware of one.

Mr. COOPER. You seem to be a very informed person. I think you would be aware of one if they had one. Another line of questioning is this: It seems to me that core competency for military service is preserving warfighting capability, not just during their tenure as officers but in their hand-off. It also seems to me that we had quite a capable military before this 30-year requirement was put into place; 10 years ago or 1 year ago, depending on whether you are talking ships or aircraft.

But now we have layered on this new requirement that almost assumes that our general officers are incompetent or untrustworthy because otherwise, they can't be trusted to deliver

capability in the future that will sustain our great Nation.

Mr. O'Rourke. I think it is a question, as you put it, about whether the requirement implies incompetence on the part of the military. Even before the 30-year plans were submitted, the DOD was in the regular practice of looking at these years out beyond the end of the FYDP anyway in something they called the extended planning annex. They still do that today. And so what this does is not imply, in my view, incompetence on the part of the military officers. What it does instead is give visibility to Congress of this long-range planning data, which can be helpful in congressional oversight but which Congress previously did not have visibility into.

Mr. COOPER. Well, we are very good at pretending to be armchair generals and admirals. The question is whether we have a stronger nation as a result. And as you know, defense bills used to be quite short. Now they are incredibly long. They are full of red tape, and sometimes we can't even get out of our own red tape. And this, I am worried, is another one of those red-tape requirements that ensures future generations of armchair generals and is very satisfying for oversight but not necessarily helpful to warfighters.

Mr. O'ROURKE. I agree that the burden of preparing a report for Congress should be weighed against its value, and I stated that in my prepared statement for this hearing. In my view, this is a valuable report for assisting congressional oversight into issues relating to the Navy. Ships are central to the Navy. You can't have a Navy

without them. It is the thing that they spend the largest ticket items on, and so, in my view, there are grounds for people to come to that conclusion if they should so wish, that the report, in fact,

is worth the amount of time needed to put it together.

And as Eric indicated in one of his earlier responses, if the plan doesn't change very much from year to year, then the burden of preparing a new one each year is not necessarily that great. But if the plan does change a lot from year to year, then that in fact becomes a reason why Congress might in fact need to get it every year so that it can have that changed data on a timely basis and not work off of outdated information.

Mr. COOPER. If I could reclaim my time. I am limited by the

I would suggest when you say in oral testimony that the Navy is like driving a truck in the dark down a road without headlights unless we have such a report, that that is close to an allegation of

incompetence.

Mr. O'ROURKE. I didn't say that. I said that the value of it for Congress is in providing that advance warning because if Congress doesn't have this report, it is very difficult for Congress to see that far ahead, except by making a lot of assumptions which may or may not match actual DOD planning assumptions.

Mr. Cooper. Then you are accusing them of untrustworthiness

and not revealing to Congress what their true intentions are.

Mr. O'ROURKE. No, not at all. I am simply saying that Congress has visibility into this data when they have a 30-year report, and I am not aware of another mechanism by which Congress can regularly become acquainted with this data in a structured manner.

Mr. Cooper. Remember, we succeeded quite well for many decades without it, and driving in the dark without headlights is not

a pretty picture under any circumstances.

Another line of questioning. If we do care about the future, and I think we should, remember that the Federal Government is the only large entity left in America that refuses to use real accrual accounting, which takes into account future obligations. None of you have advocated for that.

And as I mentioned earlier, the Pentagon is one of the least auditable of all government agencies, even using the limited cash accounting standard. So if we do want to focus on the future, as I believe we should, we need to do this in useful, rigorous ways that do not tie us down in red tape, that allow us to focus on some of the harder issues, which are a capable industrial base, an agile

industrial base, so that we can respond to threats.

Otherwise, I am worried that we are advocating osteoporosis or something like that that just will harden an outlook so that we meet the plan. And the glory of America has been flexibility and ingenuity and genius, not 5-year plans or 30-year plans like the former Soviet Union and just wanting to stick with that new blueprint. So it is very important that we balance objectives here. And this panel at least seems to have all folks who love the idea of 30year plans, and that worries me.

Dr. LABS. Mr. Cooper, I would say that CBO routinely looks longterm over a lot of things. In fact, we have a 75-year look at such things like Social Security and Medicare because you don't get sort of the long-term effects of what it is going to mean for the Federal deficit, for the Federal budget situation.

Mr. COOPER. I am quite well aware of that.

Dr. Labs. Yes, sir. I am certain that you are. So, in that sense, certainly the organization has looked at long-term perspectives in a variety of subject areas. I don't look at sort of the requirement of a presentation of a 30-year shipbuilding or aircraft plan as a question challenging the Administration's or the Services' competence.

What it does is it provides information and visibility to sort of what the planning process for future military forces should be. And I don't see a disadvantage where more information is—I don't see a situation where more information in that respect would be a bad thing.

Mr. Cooper. I think if you look at personnel trend costs in the Pentagon, that they are liable in the out-years to crowd out all weapons systems.

Dr. LABS. Yes, sir. The CBO actually puts out publications that show that.

Mr. Cooper. I am aware of that. It is a little bit different context when you are talking about new weapons platforms to meet as yet unheralded threats. I mentioned supercavitation earlier. No one anticipated, as one of the witnesses mentioned, unmanned aircraft, drones, things like that. We have to be flexible. And I trust, at least, our admirals and generals to do their jobs and not blindside Congress, not to give them a blank check, but to have a capable handoff to the next generation of general officers. And that seems to be somewhat a question here.

Dr. LABS. I don't think the presentation of a 30-year plan is in any way limiting the flexibility of the Services in developing responses to new weapons, new capabilities, new security environments. In fact, if anything it would help illuminate sort of what is going on and what factors into the decisionmaking as they look into the future.

Mr. Cooper. But it creates an entitlement mentality in certain seaports, ship ports, you know, building yards for a certain amount of jobs going forward whether the Nation needs them or not. It creates that environment of promise, and I think it reduces agility.

I thank you, Mr. Chairman.
Mr. WITTMAN. Thank you, Mr. Cooper. Mr. Coffman.
Mr. COFFMAN. Thank you, Mr. Chairman. One question on the 30-year plan, and given, I think, on our capital ships, I think 30 years is the average life of those ships. Is it important up front to make—because don't we use the service life extension program for most of our major weapons systems, like ships? Is it feasible to incorporate that in the planning process directly, that there is going to be a SLEP of these systems? Anybody.

Mr. O'ROURKE. We are tending to run our systems longer and longer over time. We are running ships over longer lives now than we did in previous decades. And that is true for aircraft as well. If DOD or the Navy has a program for extending the official service life of a platform, it can incorporate that in a 30-year plan. What the 30-year plan can also tell you is whether there is possibly a need for doing more of that on classes of ships or aircraft for which

SLEPs have not yet been approved. SLEPs are also sometimes not technically feasible or cost effective for every kind of ship or aircraft. They could be, for example, very difficult to accomplish on at-

tack submarines, due to limits on pressure hull life.

Dr. Labs. I would agree with what Mr. O'Rourke said. And the other thing that is sort of at work here is that we have done service life extension programs on certain types of ships in the past, which has been actually an SCN, usually has been an SCN-funded activity. Where the Navy seems to be moving in the future as they recognize that certain ships are going to be in the fleet longer or longer than anticipated, they try to put a lot of that maintenance activity actually in the maintenance accounts on a more incremental basis. In other words, the Navy's planning going forward has been to do less of sort of take a ship out of service for a year and do a major overhaul, but rather try to maintain it a little bit better over the course of its service life so they can still maintain a higher state of readiness and a higher state of utility for that ship as possible. But it is certainly something that can be featured into the planning process and has occurred so in the past.

Ms. EAGLEN. I would just add that to put service life extension in context, the answer to your question is yes. But it also can help you take it one step even further into detail and highlight the costbenefit analysis of a service life extension versus of the purchase of a brand new system. So the C-130 is a good example here. The C-130 center wing box design has an inherent weakness, which means all of them will need to be replaced. This is in addition to the modernization of all of the H models. There may come a tipping point where Congress may say, forget it. We want just additional new aircraft. But also SLEPs aren't fail-safe. We have seen this with the A-10Cs [Fairchild Republic Thunderbolt II close air support jets], for example. Those aircraft were recently rewinged, and they had their avionics upgraded, and now they are showing fuselage cracks, which was not the point of the SLEP in the first place, so we may have to go back and reSLEP for example. And again, what is the cost-benefit analysis of doing this and the impact on

the ripple effect on the rest of the fleet?

Mr. Coffman. How realistic is the objective of a 313-ship Navy? Are we chasing a metric versus looking at capability? Numerical

metric in terms of focusing on capability?

Dr. Labs. Well, if you think about it in terms of the 313 is not a numerical metric but actually represents the sets of capabilities that the Department of the Navy says it needs to meet its warfighting planning scenarios, then whether it is a realistic—it is certainly realistic that the Navy could build the ships it needs to achieve that metric and particularly the components of the Navy, the different components of ships that would present the capabilities that you are referring to. But in terms of the realism, is it realism to achieve that under current funding requirements, under current funding levels? Under current funding levels of about \$15 billion to \$16 billion a year, the Navy is looking at the prospect of about a 250-ship Navy over a 30-year time period, under CBO estimates, without an increase in funding. And so, in that sense, it depends very much on what you think your future projected funding levels for shipbuilding will be.

Ms. Eaglen. I would just add the Navy would tell you that the number of ships actually includes an analysis of their unmanned aerial system capability in the BAMS [Broad Area Maritime Surveillance], for example, their maritime mobility aircraft, the P8 [Boeing Poseidon anti-submarine warfare aircraft] in particular, other unmanned systems, the battle network, the sensor grids, that all of this is part of the 313-ship fleet. So it is, I would agree with the Navy in this case that it actually is a capability assessment, although it sounds simplistic that it is just a number, but it is more than that.

Mr. O'ROURKE. Part of what the 30-year shipbuilding plan does in my view right now is illuminate the possible need for re-examining the allocation of DOD resources between, frankly, between the Navy and other parts of DOD if people in fact do want to achieve a fleet of that size and capability.

Mr. COFFMAN. Thank you. Mr. Chairman, I yield back.

Mr. WITTMAN. Mr. Young.

Mr. Young. Mrs. Eaglen, I am most intrigued by your long-range technology plan, integrating that into our overall planning process here. And so I wanted to briefly dig into that with you a moment. It seems like right now, we first have the National Security Strategy, coming from the White House and the President's advisers, driving the QDR, and then you propose adding an additional step after the QDR step, before we come up with our inventory goals for our ships and our aircraft production. Is that correct? Did I put it in the right spot there in terms of the sequencing?

Ms. EAGLEN. I am open to the timing. I am open to the sequencing. It could be off year every two, so your R&D, S&T [science and technology] could be after the QDR.

Mr. YOUNG. But the developers of the technology road map, as you have styled it, would look to the QDR for strategic guidance presumably, right?

Ms. EAGLEN. Presumably, if the QDR takes a 20-year review, which this last one did not.

Mr. YOUNG. Okay. Which leads me to my next set of questions here. You have I think correctly indicated that any such document should prioritize our needs for additional investment and different capabilities based on those perceived threats and estimated threats out there.

Right now, under the most recent QDR, it seems like the prioritization should begin there, maybe should begin with the President and the National Security Strategy. Do we have that prioritization under the current strategic thinking occurring in the Administration? Do we have enough direction to be able to develop or prioritize long-range technology or R&D plan?

Ms. EAGLEN. Unfortunately no, so it does raise a difficulty in terms of doing it, but it doesn't mean it shouldn't be done. Because, for example, the last QDR was issued in the absence of a National Security Strategy, and it was largely based on a National Defense Strategy issued under the previous administration. And I would think Congress would have some problems with the Department not meeting its statutory obligations.

It also largely renders the document ineffective or at least not tied to the current administration's foreign policy of which defense policy is a derivative. In this case, we had the cart before the horse.

The Secretary in his recent speech at the American Enterprise Institute basically alluded to shockingly some shortfalls in the QDR planning process, which I think should inform the NDAA debate this year, in fact, saying that there isn't a good link to force structure, and certainly I am paraphrasing here of course, and some other challenges therein.

The last QDR served to simply justify the 2010 defense budget. I didn't see it as much more, not to be overly simplistic. So it does pose a challenge for a long-term R&D and S&T plan, but it doesn't make that need irrelevant, because neither of those are really

being talked about now.

For example, in the aviation plan, we heard the Navy talk about the need for a next-generation air dominant fighter some time after 2019. The Air Force says they need a new cargo jet, but we are getting ready to shutting down our only wide-bodied air production line right now. So, I mean, these are, like I said, it is all about the

back end clarifying the front end investment choices.

Mr. Young. Right. So to break this down to the sort of real-world decisions that those of us in Congress and even people in the Pentagon are asked to make, career military people, I think prioritizing whether we invest in satellite recapitalization or next-generation rotary-winged aircraft and setting those priorities and determining what level we are going to fund each respective technology becomes impossible, frankly, to do in an informed fashion unless, first the Administration and then the Pentagon with their robust QDR, unless they do their homework. Am I correct in that analysis?

Ms. Eaglen. Yes, you are.

Mr. Young. Okay. Where in your estimation in this model from QDR to the technology road map and setting the inventory goals, at what point do we consider resource constraints, especially since our Chairman of the Joint Chiefs and many other observers have noted that our national debt constitutes our Nation's greatest national security threat. When do we consider those resource constraints, is it way back in the QDR process or the National Security Strategy, or is it after we have developed inventory goals for our Navy?

Ms. EAGLEN. Well, DOD currently does it as part of the QDR and the 2010 QDR said, vaguely referenced here, that it took resource constraints into account, you know. It didn't project I think a cost growth zero percent or 3 percent, but something about an inflation-adjusted flat defense budget, roughly speaking, was what it pre-

dicted. So that is one way of taking into account.

Now that doesn't take into the roles and missions review that is ongoing now that is going to need to inform the next QDR because it is going to be significantly different with up to \$400 billion in cuts.

Mr. Young. But looking to previous years or previous decades investment in say shipbuilding is probably not the best way to benchmark future investments.

Ms. Eaglen. I think that is fair.

Mr. WITTMAN. Mr. Palazzo.

Mr. PALAZZO. If we have time, I have one question.

Mr. WITTMAN. Just a minute, please, go ahead.

Mr. PALAZZO. Thank you, Mr. Chairman. Ms. Eaglen, in April, your organization put out a report on defense spending entitled "A Strong National Defense: The Armed Forces America Needs and What They Will Cost." It recommends, among other things, an attack submarine force, with 55 boats compared to the Navy's current requirement of 48. The report also calls for a force of 37 amphibious ships compared to the Navy's fiscally constrained goal of 33. Can you tell me how you came up with those figures?

Ms. EAGLEN. Sure, this was not meant to be an alternate QDR document by any means. It was really linear and it was at the re-

quest of several members of your committee.

A quick holistic look around the world at the threats today as they are, not necessarily what they are going to be in 20 years, but certainly taking that into account, saying these are the capabilities required for major contingencies or even some minor ones, and this is what it costs.

On the attack submarine front, I think the last panel basically agreed with our assessment that the current fleet is the minimum required. In fact, Admiral Blake said that they are looking to add an additional attack submarine in fiscal year 2018 and saying that decision would be made next year by the Department, because that

is how much in advance they need to plan for that.

Our "bath tub" or our shortfall in attack submarines exists not just in the future in terms of numbers but, as another member referenced, it is actually today in terms of meeting combatant commander requirements, on any given day, it can be less than half up to maybe 60, 65 percent of meeting the worldwide requirements. And so we either need to reduce our appetite for these needs, or if we are not changing the missions, then we need to fund at the

appropriate level.

On the amphibious side, the Navy has previously said that they need 38 of these ships, but they can live with 33 because simply it is unaffordable. So they certainly took resource constraints into account. What I am concerned about primarily is that the mission set has not changed, and I suppose the current roles and missions review may help alleviate this mismatch we are seeing across systems, as you have heard here this morning, the high-end requirement is 38, so basically a two-contingency scenario. So the Two Marine Expeditionary Brigade fulfillment at 33 is adequate, as General Flynn said, but it doesn't include all their support equipment. So we came out at 37—there is more detail to it, which I could certainly speak to—but to help find the right balance between what is fiscally affordable and what the Navy said is its low and high end requirement.

Mr. PALAZZO. Thank you, Mr. Chairman. I yield back the balance

of my time.

Mr. WITTMAN. Thank you, Mr. Palazzo. Folks, we are going to head on to a vote right now. I thank you so much for your testimony today. What I ask, as I did with the last group of panelists, if you would let us know again in writing your thoughts about what we could do to make the planning process as useful as pos-

sible, making it as streamlined as possible. I can assure you that this planning process is not an attempt to question the integrity of any of our military leaders, but it is incumbent upon us as Members of Congress to assert our Constitutional duties in oversight. And that is getting information from the executive branch in order to make sure that we are performing those proper duties. The way we do that is to get good, accurate and timely information from the Department of Defense, and I do think that is necessary for planning.

And I would agree that short of that, how do we make proper decisions? So I would say that we are trying to find the best balance

with the planning process and the timeliness of it.

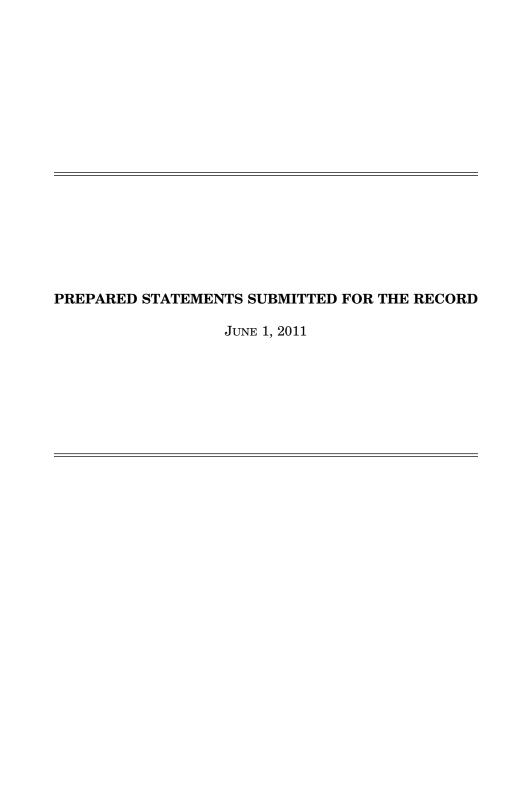
So if you could give us, again, your thoughts, and many of those you gave us here today, that would be helpful, because we do plan on pursuing how to make sure we make that planning process as functional and as useful as possible.

So thank you, again, for your testimony today. I will adjourn the committee.

[Whereupon, at 1:07 p.m., the subcommittee was adjourned.]

APPENDIX

June 1, 2011



Statement of Hon. Rob Wittman

Chairman, Subcommittee on Oversight and Investigations

Hearing on

Efficacy of the DOD's 30-Year

Shipbuilding and Aviation Plans

April 13, 2011

The main purpose supporting the 30-year shipbuilding and aviation plans requirements is to ensure effective congressional oversight of DOD plans by giving Congress the information we need to make decisions on issues that are not consistently available in the five-year data of the Future Years Defense Plan (FYDP).

In my view, we tend to spend too much time arguing about tactics when we're discussing these plans, and not enough time focused on long-term strategy. We are constantly reacting to events rather than planning for them, resulting in a system that is burdened with waste and inefficiency.

We cannot afford to do this any longer. The stakes are too high and we owe it to the American taxpayer to insist on well thoughtout, fiscally sound, long-term policy decisions that shape our national defense strategy.

The central question, put in simple terms, is: Are we doing the best job we can when we develop and implement our 30-year plans to meet our Nation's current and future threats?

To illustrate this point, I want to highlight just a few examples of what I'm talking about:

- The decision to not build submarines in the 1990s which has created a shortfall in the attack submarine force structure that we won't be able to fix in the foreseeable future;
- Decisions to cut or efforts to kill a number of programs including the F-22 fifth-generation fighter, the C-17 cargo aircraft, and the Air Force's combat search and rescue helicopter—all of which arguably place American air supremacy at risk; and
- Ending purchases of the next-generation DDG-1000 destroyers and killing the MPF-A large-deck aviation ship—reducing our Navy to the smallest it's been since 1916.

While arguments can be made to support the reasoning behind these decisions, no one can argue about the number of growing threats we face from both state and non-state actors, each with ever-expanding capabilities ready to challenge our own.

Between force reductions, a dramatic slowing of new starts, and closures of production lines, America's domestic industrial strategy

is slowly being whittled away, emphasizing the need for smart long-term strategic planning.

We will hear from two panels. Witnesses from our first panel are:

- Major General Richard C. Johnston, USAF, Deputy Chief of Staff for Strategic Plans and Programs, U.S. Air Force;
- Vice Admiral P. Stephen Stanley, USN, Principal Deputy Director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense;
- Vice Admiral John T. Blake, USN, Deputy Chief of Naval Operations, Integration of Capabilities and Resources (N8); and
- Lieutenant General George Flynn, USMC, Deputy Commandant for Combat Development and Integration.

For our second panel, we will receive testimony from:

- Mr. Ronald O'Rourke, Defense Policy and Arms Control Section, Congressional Research Service
- Mr. Eric Labs, National Security Division, Congressional Budget Office; and
- Ms. Mackenzie Eaglen, Research Fellow for National Security Studies, The Heritage Foundation

I look forward to hearing our witnesses' views on this important subject and discussing how we can ensure that as we make difficult policy decisions on long-term procurement issues we don't inadvertently place our national security at risk.

DEPARTMENT OF DEFENSE

PRESENTATION TO THE

HOUSE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

SUBJECT: 30-Year Shipbuilding and Aircraft Procurement Plans

COMBINED STATEMENT OF:

Vice Admiral P. Stephen Stanley, USN Principal Deputy Director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense

Major General Richard C. Johnston, USAF Director of Strategic Planning, Deputy Chief of Staff for Strategic Plans and Programs, Headquarters, U.S. Air Force

Vice Admiral John T. Blake Deputy Chief of Naval Operations, Integration of Capabilities and Resources (N8),

Lieutenant General George Flynn, USMC Deputy Commandant for Combat Development and Integration,

June 1, 2011

Chairman Wittman, Ranking Member Cooper, and members of the committee, thank you for the opportunity to appear before you to discuss the department's 30-year aviation procurement and shipbuilding plans. Through our combined statement and continued discussion with the committee, we hope to contribute to a productive session covering the use of these plans in supporting congressional oversight of defense-related shipbuilding and aircraft procurement activities.

While the department has always done long range planning, the value of these plans lies more in what we learn through the planning process than in the content of the plans themselves, especially for projections past five years or more. The planning process provides a useful opportunity to consider and confront outyear implications of our near-term decisions. For example, long range planning can identify times when projected needs align in unaffordable ways. By finding these problems early, we can work to plan a program that will meet the needs but spread the costs more reasonably over time.

The drawback of outyear planning is that it involves considerable speculation about the future security environment, technology development, operational concepts, and fiscal constraints. The speculative nature of projecting beyond the 5-year window of the Future Years Defense Plan (FYDP) does not stem from any process and organizational failure; it is caused by the inherent uncertainty of the future. For example, the explosive demand for, and growth in, unmanned vehicles would have been impossible to accurately predict ten years ago. Therefore, while there is value in looking ahead, especially to the near future, we should recognize that the accuracy and value of the plans diminishes the further we get into the future.

The 30-Year Shipbuilding Plan

The shipbuilding plan covers Department of the Navy investment in battle force ships. Currently the Navy invests about \$16B annually in new construction to support an inventory of approximately 300 ships. The first submission of the shipbuilding plan was in 2000. The FY 2003 NDAA made it an enduring requirement. Prior to 2009, the shipbuilding plans were submitted to Congress with the Presidential Budget materials. The department did not submit either the FY 2010 aircraft or shipbuilding plan with the President's FY 2010 budget due to

uncertainty regarding our defense strategy. During this period a new national security strategy and associated defense budget projection were being developed. The FY 2011 NDAA changed the reporting requirement for the shipbuilding plan from an annual report to a quadrennial report, revising the date for the next required submission to 2014. However, the department submitted the shipbuilding data and tables to congressional subcommittees when they were requested.

The Navy develops its shipbuilding plan in coordination with its budget submission using a collaborative process involving Navy, Marine Corps, Joint Staff, and Office of the Secretary of Defense representatives. The plan takes into account its current battle force inventory, retirement and recapitalization plans for these ships, and current acquisition plans. The coordinated Navy plan is then submitted to OSD for final review before transmission to Congress.

The 30-Year Aircraft Procurement Plan

The aircraft procurement plan covers United States Air Force and Department of the Navy procurement of fighter/attack, bomber, intelligence, surveillance, and reconnaissance (ISR), intra-theater airlift, strategic airlift, and tanker aircraft. Service investment in these categories averages about \$26B per year and supports a total inventory of 5,500 aircraft across 65 aircraft types.

The department submitted the first 30-year aircraft procurement plan with the FY 2011 Presidential Budget materials in February, 2010. This year, the department submitted the aviation plan on the 12th of April. The plan was delayed because internal budget decisions were concluded much later than usual. Also, this year there was more debate than last year on outyear aviation plans. Resolving these issues and coordinating the results further delayed submission of the plan.

Once internal budget decisions are firm, the department has considerable work to do. The services refine projections beyond the FYDP, reconcile these projections with Selected Acquisition Report (SAR) data, ensure the estimates adhere to fiscal constraints, and obtain approval from their leadership. Meantime, the Director of Cost Assessment and Program Evaluation (CAPE) drafts the narrative, developing tables and charts, refining themes, applying quality control on the data, and combining service inputs to form an integrated view.

Concluding Thoughts

These plans are the department's best effort to address the challenge of forecasting highly complex plans over a 30-year period. The development of these plans involves a great deal of collaborative analyses throughout the department in order to work through fiscal, technical, and operational assumptions. These plans are not precise procurement blueprints. Rather, they represent the department's best forecast of what tomorrow's forces may look like given the knowledge we have today.

Biography Biography

Vice Admiral P. Stephen Stanley Principal Deputy Director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense

Originally from Doylestown, Ohio, Vice Adm. Stanley graduated from the U.S. Naval Academy in 1975 with a Bachelor of Science in Ocean Engineering.

After nuclear power and submarine training, he served his junior officer tour aboard USS *Andrew Jackson* (SSBN 619G), his department head tour in Submarine NR-1 as engineer officer, and his executive officer tour aboard *USS William H. Bates* (SSN 680).

Command assignments include USS *Richard B. Russell* (SSN 687) and Commander, Submarine Development Squadron 5.

Following selection to flag rank, he has twice been assigned as commander, Submarine Group 8; commander, Submarine Force 6th Fleet (CTF 69); commander, Submarines Allied Naval Forces South; and

commander, Fleet Ballistic Missile Submarine Force (CTF 164). During the second assignment, he performed additional duties as the director, Navy Europe Plans and Operations Center for the combined staff of Navy Europe and Sixth Fleet.

Although his early shore assignments were in submarine support positions - first as the radiological controls officer for Commander, Submarine Forces Pacific Fleet in Pearl Harbor, Hawaii, and later, as the Program branch head for the Director of Naval Intelligence (OP-923) in Washington D.C. - all subsequent shore assignments have been in financial management positions. These positions include: division head for Total Force Programming/Manpower (N122); head of Program Planning and Development Branch (N801); chief of the Program and Budget Analysis Division (J8 PBAD); deputy director, Submarine Warfare Division (N77B); and U. S. Fleet Forces Command, deputy Chief of Staff for Capabilities and Resource Integration (N8). Most recently, he completed an assignment as director for Force Structure, Resources, and Assessment (J8) for the Joint Chiefs of Staff.



Stanley is currently the principal deputy director of Cost Assessment and Program Evaluation, Office of the Secretary of Defense.

He is authorized to wear the Distinguished Service Medal, Defense Superior Service Medal and the Legion of Merit in addition to several other personal and unit awards.

Electrical, J. Fishman's 2014

MAJOR GENERAL RICHARD C. JOHNSTON



BIOGRAPHY



UNITED STATES AIR FORCE

MAJOR GENERAL RICHARD C. JOHNSTON

Selected for reassignment as Assistant Deputy Under Secretary of the Air Force, International Affairs, Office of the Under Secretary of the Air Force, the Pentagon, Washington, D.C.

Maj. Gen. Richard C. Johnston is the Director, Strategic Planning, Deputy Chief of Staff for Strategic Plans and Programs, Headquarters U.S. Air Force, Washington, D.C. He is responsible for directing the development and implementation of Air Force long-range strategic planning, as well as providing associated policy guidance.

General Johnston was commissioned through Officer Training School. He has commanded the 2nd Air Refueling Squadron, McGuire Air Force Base, N.J.; two expeditionary air refueling squadrons; the 317th Airlift Group, Dyess AFB, Texas; the 320th Air Expeditionary Wing; the 86th Airlift Wing and the Kaiserslautern Military Community -- the largest community of Americans outside the United States, Ramstein Air Base, Germany. The general has deployed in support of operations Desert Shield, Desert Storm, Southern Watch, Enduring Freedom and Iraqi Freedom.



His staff assignments include Headquarters Military Airlift Command, Air Mobility Command, Headquarters U.S. Air Force, U.S. Air Forces in Europe and U.S. Transportation Command. Prior to his current assignment, he was Director, Plans, Programs and Analyses, Headquarters U.S. Air Forces in Europe, Ramstein Air Base, Germany. He also served as the Chairman, Strategic Airlift Capability C-17 Program, responsible for executive oversight to acquire, manage, support, and operate the 12-nation consortium that included the multi-national Heavy Airlift Wing in Papa, Hungary. General Johnston is a command pilot with more than 4,300 flying hours in the C-130E/H, C-21, C-40, C-37, KC-10A and WC-130E/H aircraft.

1980 Bachelor of Arts degree in criminal justice, University of Wisconsin - Eau Claire 1987 Squadron Officer School, Maxwell AFB, Ala

1989 Master of Science degree in operational research and business management, University of Arkansas

1994 Army Command and General Staff College, Fort Leavenworth, Kan.

1997 Air War College, Maxwell AFB, Ala.

2002 Master of Science degree in national security strategy, National War College, Fort Lesley J. McNair,

MAJOR GENERAL RICHARD C. JOHNSTON

Washington, D.C.

2008 Black Sea Security Program, John F. Kennedy School of Government, Harvard University, Cambridge, Mass. 2008 Program for Senior Managers in Government, John F. Kennedy School of Government, Harvard University, Cambridge, Mass.

ASSIGNMENTS

- 1. October 1981 October 1982, student, undergraduate pilot training, Vance AFB, Okla.
- 2. October 1982 February 1983, C-130 pilot training, Little Rock AFB, Ark.
- 3 February 1983 June 1985, aircraft commander, 54th Weather Reconnaissance Squadron, Andersen AFB,
- 4 June 1985 June 1991, instructor pilot and evaluator pilot, 50th Tactical Airlift Squadron; assistant chief, Standardization and Evaluation, 314th Tactical Airlift Group; and executive officer, 314th Tactical Airlift Wing, Little Rock AFB, Ark
- 5. June 1991 June 1993, Chief of Tactical Airlift Assignments and Chief of Rated Officer Assignments, Directorate of Personnel, Headquarters Military Airlift Command, Scott AFB, III.
- 6. June 1993 June 1994, student, Army Command and General Staff College, Fort Leavenworth, Kan.
 7. June 1994 June 1997, Deputy Chief, later, Chief of Mobility Forces Programming Branch, and executive officer for the Director of Joint Matters, Deputy Chief of Staff for Air and Space Operations, Headquarters U.S. Air Force,
- 8. June 1997 February 2000, operations officer then Commander, 2nd Air Refueling Squadron, McGuire AFB, N.J. Julie 1997 - February 2000, Operations officer filed Commander, 2nd All Rendering Squadron, McGr 9. February 2000 - August 2001, Chief, Senior Officer Management Division, Directorate of Personnel, Headquarters Air Mobility Command, Scott AFB, Ill.
- 10. August 2001 June 2002, student, National War College, Fort Lesley J. McNair, Washington, D.C.
- 11. July 2002 March 2004, Commander, 317th Airlift Group, Dyess AFB, Texas (November 2002 June 2003, Commander, 320th Air Expeditionary Wing, Southwest Asia)
- 12. March 2004 August 2004, Deputy Director of Operations, U.S. Transportation Command, Scott AFB, III.
- 13. August 2004 September 2005, executive officer to the Commander, U.S. Transportation Command, and to the Commander, Air Mobility Command, Scott AFB, III.
- 14. September 2005 March 2006, executive officer to the Commander, U.S. Transportation Command, Scott AFB,
- 15. April 2006 December 2007, Commander, 86th Airlift Wing, Ramstein AB, and Commander, Kaiserslautern Military Community, Germany
- 16. December 2007 September 2009, Director, Plans, Programs and Analyses, Headquarters U.S. Air Forces in Europe, Ramstein AB, Germany
- 17. September 2009 present, Director, Air Force Strategic Planning, Deputy Chief of Staff for Strategic Plans and Programs, Headquarters U.S. Air Force, Washington, D.C.

SUMMARY OF JOINT ASSIGNMENTS

- 1. March 2004 August 2004, Deputy Director of Operations, U.S. Transportation Command, Scott AFB, III., as a
- 2. August 2004 September 2005, executive officer to the Commander, USTRANSCOM, and to the Commander, Air Mobility Command, Scott AFB, III., as a colonel
- 3. September 2005 March 2006, executive officer to the Commander, USTRANSCOM, Scott AFB, Ill., as a colonel

FLIGHT INFORMATION

Rating: Command pilot Flight hours: More than 4,300 hours

Aircraft flown: C-130E/H, C-21, C-40, C-37 and KC-10A

MAJOR AWARDS AND DECORATIONS

Defense Superior Service Medal Legion of Merit with two oak leaf clusters Bronze Star Medal Meritorious Service Medal with four oak leaf clusters

MAJOR GENERAL RICHARD C. JOHNSTON

Air Medal with three oak leaf clusters
Aerial Achievement Medal
Air Force Commendation Medal
Air Force Outstanding Unit Award with "V" device and two silver oak leaf clusters
Combat Readiness Medal with four oak leaf clusters
Southwest Asia Service Medal with two bronze stars
Kosovo Campaign Medal
Humanitarian Service Medal

EFFECTIVE DATES OF PROMOTION

Second Lieutenant Oct. 16, 1981 First Lieutenant Oct. 16, 1983 Captain Oct. 16, 1985 Major Feb. 1, 1994 Lieutenant Colonel Jan. 1, 1998 Colonel July 1, 2002 Brigadier General Nov. 2, 2007 Major General Nov. 17, 2010

(Current as of December 2010)

United States Navy Biography

Vice Admiral John Terence Blake Deputy Chief of Naval Operations, Integration of Capabilities and Resources (N8)

Vice Admiral John Terence Blake was appointed to the United States Naval Academy from the state of New York, he graduated in 1975. His sea duty assignments include: USS New (DD 818), USS Sarfield (DD 837), USS Joseph Strauss (DDG 16), USS John Young (DD 973), USS Chandler (DDG 996), USS Leahy (CG 16), and USS Blue Ridge (LCC 19).

Blake commanded the destroyer USS O'Brien (DD 975), served on the 7th Fleet Staff as current operations and assistant chief of staff for Operations, commanded the guided-missile cruiser USS Normandy (CG 60) and served as commander, Carrier Strike Group 11.

His shore duty assignments include: flag lieutenant to commander, Navy Recruiting Command; Naval Post Graduate School where he earned a masters degree in Finance; Navy Staff (N80) head, Sea Control Section and program manager for the Navy Shipbuilding account; National War College where he earned a masters degree in National Security. Joint Staff (J8) division chief and head of the Combat Identification Joint Warfare Capability Assessment Team; director, Programming Division (N80); director, Operations Division, Office of Budget in the Office of the Assistant Secretary of the Navy (Financial Management/Comptroller); director, Operations Division, Fiscal Management Division in the Office of the Chief of Naval Operations; deputy director for Resources and Acquisition on the Joint Chiefs of Staff (J8) and deputy assistant secretary of the Navy for Budget

Blake is currently assigned as deputy chief of Naval Operations, Integration of Capabilities and Resources in Washington.

He is authorized to wear the Navy Distinguished Service Medal, Defense Superior Service Medal with oak leaf cluster, the Legion of Merit with four gold stars, the Meritorious Service Medal with two gold stars, the Navy and Marine Corps Commendation Medal with two gold stars and various service and campaign medals.

Updated: 2 July 2010

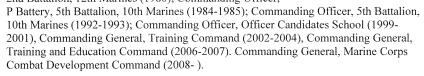


Lieutenant General George J. Flynn Deputy Commandant, Combat Development and Integration

Lieutenant General Flynn graduated from the United States Naval Academy in 1975. He holds a Master of Arts Degree in International Relations from Salve Regina College, a Master of Arts Degree in National Security and Strategic Studies from the Naval War College, and a

Master of Science Degree in National Security and Strategy from the National War College. He is a Distinguished Graduate of the College of Naval Command and Staff and the National War College.

Lieutenant General Flynn's command assignments include: Commanding Officer, HQ Battery, 2nd Battalion, 12th Marines; (1979-1980); Commanding Officer, L Battery, 2nd Battalion, 12th Marines (1980); Commanding Officer,



Lieutenant General Flynn's staff assignments include: Forward Observer, Fire Direction Officer, Battery Executive Officer and S-4 A, 2nd Battalion, 11th Marines (1976-1979); Officer Selection Officer, Manchester, New Hampshire, (1981-1984), Operations Officer, 5th Battalion, 10th Marines (1985-1986), Plans Officer, Plans Policies and Operations Department, Headquarters Marine Corps (1987-1989); Junior Aide-de-Camp to the Commandant of the Marine Corps (1989-1991); Assistant Fire Support Coordinator, 2d Marine Division (1991-1992); Future Operations Officer, III Marine Expeditionary Force (1994-1995); Military Assistant to the Executive Secretary to the Secretary of Defense (1995-1997); Military Fellow, Council on Foreign Relations (1997-1998); Head, Strategic Initiatives Group, Headquarters Marine Corps (1998-1999); Military Secretary to the Commandant of the Marine Corps (2001-2002); Deputy Commanding General, Training and Education Command (2002-2004). Chief of Staff and Director, Command Support Center, United States Special Operations Command (2004-2006). Deputy Commanding General Multi-National Corps-Iraq (2008).

NOT FOR PUBLICATION UNTIL RELEASED BY HOUSE ARMED SERVICES COMMITTEE

STATEMENT OF

RONALD O'ROURKE

SPECIALIST IN NAVAL AFFAIRS

CONGRESSIONAL RESEARCH SERVICE

BEFORE THE

HOUSE ARMED SERVICES COMMITTEE

SUBCOMMITTEE ON OVERSIGHT AND INVESTIGATIONS

HEARING ON

THE DEPARTMENT OF DEFENSE'S 30-YEAR AVIATION AND SHIPBUILDING PLANS

JUNE 1, 2011

NOT FOR PUBLICATION UNTIL RELEASED BY HOUSE ARMED SERVICES COMMITTEE Chairman Wittman, Ranking Member Cooper, distinguished members of the subcommittee, thank you for the opportunity to appear before you today to discuss the Department of Defense's (DOD's) 30-year shipbuilding plan. As requested, my testimony will focus on the following issues:

- the value of the 30-year shipbuilding plan in supporting congressional oversight of Navy shipbuilding activities;
- the sufficiency of the 30-year shipbuilding plan for achieving and maintaining Navy ship force-structure goals;
- the affordability of the 30-year shipbuilding plan; and
- potential options for altering the content of the report on the 30-year shipbuilding plan.

The testimony also includes an appendix providing a brief history of the requirement to submit a 30-year shipbuilding plan.

Value of 30-Year Shipbuilding Plan in Supporting Congressional Oversight

The main purpose of the 30-year shipbuilding plan is to support effective congressional oversight of DOD plans for Navy shipbuilding by giving Congress information that is important to performing this oversight function but not available in the five-year data of the Future Years Defense Plan (FYDP). The 30-year plan supports effective congressional oversight of DOD plans for Navy shipbuilding in at least five ways:

- The 30-year shipbuilding plan enables Congress to assess whether the Navy intends to procure enough ships to achieve and maintain its stated ship force-level goals. Determining whether procurement plans fully support stated force-level goals is a key oversight function for Congress. The 30-year plan makes visible to Congress projected ship force-level shortfalls (relative to stated goals) that are either not visible or not fully visible in the five-year data of the FYDP. Such shortfalls are likely to be fully or substantially visible over a 30-year period. Given the long construction times of ships, industrial-base limits on how quickly annual ship procurement rates can be increased (i.e., "ramped up"), and financial and industrial-base limits on maximum annual ship procurement rates, mitigating projected shortfalls that occur largely or entirely beyond the FYDP can sometimes require making adjustments to planned ship procurement rates that begin in the near term, within the FYDP. By providing Congress advance warning of projected ship force-level shortfalls, the 30-year shipbuilding plan gives Congress an opportunity to consider whether to address these shortfalls before it might become too late to do much about them. In serving this function, the value of the 30-year shipbuilding plan might be likened to the value of headlights for a driver of a large truck traveling on a country road at night: The driver cannot quickly effect substantial changes in the truck's speed and direction, and therefore obtains a critical benefit from having the advance warning that the headlights provide of approaching curves or obstructions in the
- The 30-year shipbuilding plan helps Congress determine whether there is a fundamental imbalance between Navy program goals and projected Navy

resources. Making such a determination is another key oversight function. A 30-year shipbuilding plan that shows sizeable and long-lasting shortfalls in projected ship force levels can suggest a fundamental imbalance between Navy program goals and projected Navy resources, which in turn can suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.

- The 30-year shipbuilding plan helps Congress to assess whether DOD ship procurement plans are likely to be affordable within future defense budgets. A 30-year shipbuilding plan that appears unaffordable may again suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.
- Supporting information provided in conjunction with the 30-year shipbuilding plan enables Congress to assess whether Navy ship procurement planning is reasonable in terms of assumed service lives for existing ships and estimated procurement costs for new ships. The assumptions that the Navy makes regarding ship service lives and procurement costs can change over time, and can make a significant difference in projected ship force levels. Assessing whether the Navy's current assumptions are reasonable thus becomes a key part of the oversight function.
- The 30-year shipbuilding plan enables Congress to assess the potential industrial-base implications of DOD's intentions for ship procurement. Potential oversight issues for Congress in this regard include the ability of the shipbuilding industrial base to execute the planned work, potential inefficiencies that may result from rising and falling workloads over the 30-year period, and the potential effects of DOD's shipbuilding intentions on the financial health and survival of the shipbuilding industrial base.

Experience with the 30-year shipbuilding plan suggests that it has supported congressional oversight of DOD shipbuilding in the ways outlined above. Examples of specific oversight issues that have been identified as a result of the 30-year shipbuilding plans include the following:

- changes in the Navy's ship force-level goals, and the potential implications of these changes;
- the potential affordability of the 30-year shipbuilding plan;
- · the projected shortfall in cruisers and destroyers;
- the projected shortfall in attack submarines;
- the projected shortfall in amphibious ships;
- the potential pressure that the Ohio replacement (i.e., SSBN[X]) ballistic missile submarine program may place on the Navy's ability to procure other kinds of ships during the period FY2019-FY2033;
- Navy assumptions about the potential procurement costs of certain future ships, such as the SSBN(X) submarine, the Flight III DDG-51 destroyer, and the LSD(X) amphibious ship;
- changing Navy assumptions about the service lives of certain amphibious ships and surface combatants, and whether the Navy has programmed the maintenance funding to support the service lives shown in the 30-year plan for some of these ships; and

 rising and falling shipyard workload levels that may occur over the 30-year period, particularly for building certain categories of ships, and the possible effects this could have on the shipbuilding industrial base.

These issues are central to understanding the future of the Navy, and thus can be critical to conducting effective congressional oversight of Navy programs and budgets.

Information from the 30-year shipbuilding plan is incorporated into multiple CRS reports on Navy shipbuilding programs, where it is used to identify oversight issues and options for Congress. In addition, at the request of Congress, the Congressional Budget Office (CBO) performs an independent assessment of the affordability of each 30-year shipbuilding plan. This assessment has become a touchstone document in congressional discussions of the prospective affordability of Navy shipbuilding.

Information from the 30-year shipbuilding plan was featured in CRS testimony for the Seapower and Projection Forces subcommittee's March 9 hearing on Navy shipbuilding programs, and was the basis for CBO's testimony at the hearing. In my opening remarks for the hearing, I stated:

My testimony outlines a number of potential shipbuilding execution challenges....

But right now the one point I'd like to focus on [in my opening remarks] are the shortfalls in attack submarines and in cruisers and destroyers that are projected to occur in the 2020s and beyond even if the Navy's 30-year shipbuilding plan is fully implemented.

These projected shortfalls are significant. If they occur, they could make it difficult or impossible for the Navy to fully perform its projected missions....

These projected shortfalls have been on the books since last year but they haven't received much attention in public discussions of the Navy shipbuilding plan. This might be because they look like they are far in the future. But in terms of issues they might pose for policymakers, that's not necessarily the case.

Substantially redressing these shortfalls could involve putting additional destroyers and attack boats [into] the shipbuilding plan or extending the service lives of existing cruisers, destroyers and attack boats....

¹ Information from the 30-year shipbuilding plan is featured significantly in the CRS reports on Navy force structure and shipbuilding plans (CRS Report RL32665, Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress, by Ronald O'Rourke), the DDG-51 and DDG-1000 destroyer programs (CRS Report RL32109, Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress, by Ronald O'Rourke), the Virginia-class attack submarine (CRS Report RL32418, Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress, by Ronald O'Rourke), and the Ohio-replacement (SSBN[X]) ballistic missile submarine program (CRS Report R41129, Navy SSBN(X) Ballistic Missile Submarine Program: Background and Issues for Congress, by Ronald O'Rourke).

Information from the 30-year shipbuilding plan is also included in the CRS reports on the CVN-78 class aircraft carrier program (CRS Report RS20643, Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress, by Ronald O'Rourke), the Littoral Combat Ship (LCS) program (CRS Report RL33741, Navy Littoral Combat Ship (LCS) Program: Background, Issues, and Options for Congress, by Ronald O'Rourke), the LPD-17 class amphibious ship program (CRS Report RL3476, Navy LPD-17 Amphibious Ship Procurement: Background, Issues, and Options for Congress, by Ronald O'Rourke), and the Aegis ballistic missile defense (BMD) program (CRS Report RL33745, Navy Aegis Ballistic Missile Defense (BMD) Program: Background and Issues for Congress, by Ronald O'Rourke).

² Statement of Ronald O'Rourke, Specialist in Naval Affairs, Congressional Research Service, before the House Armed Services Committee Subcommittee on Seapower and Projection Forces hearing on Navy Shipbuilding Acquisition Programs and Budget Requirements of the Navy's Shipbuilding and Construction Plan, March 9, 2011, 32 pp.

³ Statement of Eric J. Labs, Senior Analyst for Naval Forces and Weapons, An Analysis of the Navy's Shipbuilding Plans, before the Subcommittee on Seapower and Projection Forces, Committee on Armed Services, U.S. House of Representatives, March 9, 2011, 21 pp.

And because of the pressures that the Ohio replacement program could place on the shipbuilding budget, one option would be to add at least some, if not most or all, of these additional destroyers and attack boats to the shipbuilding plan in the years prior to the Ohio-replacement boats.

If so, then the question of whether to add these ships to the plan could become a nearterm issue for policy makers. The alternative of extending the lives of existing cruisers, destroyers and attack boats by 10 or 15 years beyond their currently planned lives poses a serious question of feasibility and cost effectiveness, especially for the attack boats. If this option were feasible, implementing it could require increasing, perhaps starting right away, funding levels for the maintenance of these ships to help ensure they'll remain in good enough shape to eventually have their lives extended for another 10 or 15 years.

This additional maintenance funding would be on top of the funding that the Navy has already programmed to help get these ships out to the end of their currently planned lives, and because that this additional funding might need to start soon it could again pose a near-term issue for policy makers. Implementing either these options within the Navy's currently planned top line would likely compel the Navy to reduce other critical programs below desired levels. So the question of what to do about these two projected shortfalls is not only a potentially near-term issue for policy makers, but one that could also raise fundamental for policy makers about the value of naval forces in defending the nation's interests and the priority that naval forces should receive in allocation of overall DOD funds.⁴

Since planned ship procurement quantities over the FYDP typically change each year with the submission of the budget, near-term procurement quantities in a 30-year shipbuilding plan that is one or more years old will likely not match those in the current FYDP, and the force-level projections shown in that 30-year plan consequently will no longer be accurate. A mismatch between a 30-year shipbuilding plan that is one or more years old and the current FYDP can complicate the task of understanding the implications of Navy shipbuilding plans, which in turn can make it more difficult to conduct effective congressional oversight of Navy shipbuilding. A 30-year shipbuilding plan that is one or more years old might also contain outdated and inaccurate information concerning the types of ships to be procured, estimated ship procurement costs, and assumed ship service lives. Observers seeking to discourage effective congressional oversight of DOD shipbuilding plans might seek to discount the importance of oversight issues identified in a 30-year shipbuilding plan that is one or more years old on the grounds that the plan is no longer an accurate representation of DOD intentions.

In the absence of a 30-year shipbuilding plan, CRS or CBO can generate projections of potential future force levels for certain categories of ships. I did so, for example, for the cruiser-destroyer force for CRS reports issued in 1985 and 1994, and for the attack submarine force for testimony and reports issued between 1995 and 1999. CRS and CBO force-level projections, however, might not carry as much weight as DOD force-level projections that appear in 30-year shipbuilding plans, in part because generating such projections can require CRS or CBO to make assumptions about ship service lives and outyear procurement rates that might not match current DOD thinking on these issues.

DOD cannot predict the exact designs of ships that will be procured 20 or 30 years from now. The 30-year shipbuilding plan, however, is not intended to compel DOD to make such predictions, but rather to serve the five oversight-support functions outlined above. The 30-year shipbuilding plan can serve these functions without DOD making predictions about the exact designs of ships to be procured 20 or 30 years from now.

⁴ Source: Transcript of hearing.

The requirement to prepare a report on the 30-year shipbuilding plan, like congressional requirements for DOD to prepare other reports for Congress, imposes an administrative burden on DOD. A key question is whether the report's value to Congress in supporting effective congressional oversight of Navy shipbuilding is worth the administrative burden involved in creating it.

Annual reports on 30-year shipbuilding plans have shown year-to-year instability in DOD shipbuilding planning. Another question, consequently, is whether preparing the reports causes this instability, or simply results in it being revealed to Congress. If preparing the reports causes this instability, then a potential oversight issue for Congress is why Navy shipbuilding plans are so volatile that preparing reports about them can cause this instability. If preparing annual reports does not cause this instability, but simply results in it being revealed to Congress, then in the absence of a report on a 30-year plan, the instability might still exist, but Congress would not necessarily learn of it in a timely manner, which could hamper Congress' ability to understand and conduct effective oversight of DOD shipbuilding.

Year-to-year instability in the 30-year shipbuilding plan can add to DOD's burden in preparing the report. Such instability, however, might also make it more important that the reports be submitted to Congress more frequently rather than less frequently, so that Congress can be kept aware of these changes in a timely manner and not base its oversight work on outdated and inaccurate information.

Although a principal purpose of the 30-year shipbuilding plan is to support effective congressional oversight of DOD plans for Navy shipbuilding, the 30-year shipbuilding plan may also have value for industry for business-planning purposes, and perhaps even for DOD as a tool for identifying or giving visibility to ship force-level and procurement-planning issues. If the 30-year shipbuilding plan is of value to industry or DOD, however, this is merely incidental to its value for Congress. The main purpose of the 30-year shipbuilding plan is to support effective congressional oversight, and this purpose remains even if the plan has no value for industry or DOD.

Sufficiency of 30-Year Plan for Achieving and Maintaining Ship Force-Structure Goals

As stated in the CRS report on overall Navy force structure and shipbuilding plans, the recently delivered FY2012 30-year (FY2012-FY2041) shipbuilding plan

does not include enough ships to fully support all elements of the [Navy's] 328-ship [force-level] goal⁵ over the long run;

- The Navy projects that if the 30-year shipbuilding plan were fully implemented, the
 fleet would not reach an end-of-year total of 328 ships at any point during the 30year period. The Navy projects that the fleet would grow from 290 ships in FY2012
 to a peak of 325 ships in FY2022-FY2023, decline to 296 ships in FY2032-FY2034,
 and then increase back to 305 ships by FY2041.
- The Navy projects that the attack submarine and cruiser-destroyer forces will drop substantially below required levels in the latter years of the 30-year plan. The projected number of cruisers and destroyers drops below the required level of 94

⁵ As discussed in the CRS report on overall Navy force structure and shipbuilding plans, the Navy in February 2006 presented to Congress a goal of achieving and maintaining a fleet of 313 ships, consisting of certain types and quantities of ships. Since then, the Navy has changed its desired quantities for some of those ship types, and the Navy's goals now add up to a desired fleet of 328 ships. Navy officials sometimes refer to the figure of 313 ships as a "floor."

ships in 2025, reaches a minimum of 68 ships in FY2034, and remains below 94 ships through FY2041. The projected number of attack submarines drops below the required level of 48 boats in FY2024, reaches a minimum of 39 boats in FY2030, and remains below 48 boats through 2041.

 There would also be shortfalls in certain years in small surface combatants (i.e., frigates and LCSs [Littoral Combat Ships]), amphibious ships, and support ships.

The projected shortfalls in cruisers and destroyers, attack submarines, and other ships could make it difficult or impossible for the Navy to fully perform its projected missions, particularly during the latter years of the 30-year plan. In light of the projected shortfalls in cruisers-destroyers and attack submarines, policymakers may wish to consider two options:

- increasing planned procurement rates of destroyers and attack submarines, perhaps particularly in years prior to the start of SSBN(X) procurement, and
- extending the service lives of older cruisers and destroyers to 45 years, and refueling older attack submarines and extending their service lives to 40 or more years.

Regarding the second option above, possible candidates for service life extensions include the Navy's 22 Aegis cruisers, the first 28 DDG-51 destroyers (i.e., the Flight I/II DDG-51s), the final 23 Los Angeles (SSN-688) attack submarines (i.e., the Improved 688s), and the 3 Seawolf (SSN-21) class attack submarines—a total of 76 ships. Whether such service life extensions would be technically feasible or cost-effective is not clear: Feasibility would be a particular issue for the attack submarines, given limits on submarine pressure hull life.

Extending the service lives of any of these ships could require increasing funding for their maintenance, possibly beginning in the near term, above currently planned levels, so that the ships would be in good enough condition years from now to remain eligible for service life extension work. Such funding increases would be in addition to those the Navy has recently programmed for ensuring that its surface ships can remain in service to the end of their currently planned service lives.⁶

Affordability of 30-Year Shipbuilding Plan

As stated in the same CRS report cited above,

The Navy estimates that executing the FY2012 30-year (FY2012-FY2041) shipbuilding plan would require an average of \$15.7 billion per year in constant FY2011 dollars. The Congressional Budget Office (CBO) is now examining the FY2012 30-year shipbuilding plan and is expected to soon issue its own estimate of the cost of the plan.

A May 2010 CBO report estimated that the Navy's FY2011 30-year (FY2011-FY2040) shipbuilding plan would require an average of \$19.0 billion per year in constant FY2010 dollars, or about 19% more than the Navy estimated for that plan. The CBO report stated: "If the Navy receives the same amount of funding for ship construction in the next 30 years as it has over the past three decades—an average of about \$15 billion a year in 2010 dollars—it will not be able to afford all of the purchases in the 2011 plan."...

... the Navy was able to assemble a five-year (FY2012-FY2016) shipbuilding plan with a total of 55 ships, or an average of 11 per year, within available resources in part because almost half of those ships are relatively inexpensive LCSs and JHSVs [Joint High Speed Vessels]. Starting a few years from now, when the LCS and JHSV programs are no longer overrepresented in the shipbuilding plan, and particularly when procurement of

⁶ CRS Report RL32665, Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress, by Ronald O'Rourke.

next-generation SSBN(X) ballistic missile submarines begins, procuring an average of 10 or more ships per year will become a considerably more expensive proposition.

The Navy wants to procure 12 SSBN(X)s, and is working to reduce the estimated unit procurement cost of ships 2 through 12 in the program to \$4.9 billion in FY2010 dollars. To help pay for the SSBN(X)s without reducing other shipbuilding programs, the shipbuilding funding profile in the Navy's FY2011 30-year shipbuilding plan included a "hump" of approximately \$2 billion per year in constant FY2010 dollars during the years (FY2019-FY2033) when the 12 SSBN(X)s are to be procured. The Navy's report on the FY2011 30-year plan, however, contained little explanation of how this \$2-billion-per-year hump in shipbuilding funding would be realized, particularly if the Navy's budget experiences little or no real growth in coming years. If the \$2-billion-per-year hump were not realized, the total number of ships of various kinds procured in FY2019-FY2033 could be less than the figures shown in the FY2011 30-year plan.

As mentioned earlier, if a 30-year shipbuilding plan is potentially unaffordable, this may suggest a need for a change in defense strategy, the level of DOD resources, the allocation of DOD resources, and/or the mix of ships to be procured.

Options for Altering Content of Report on 30-Year Shipbuilding Plan

Options for altering the content of the report on the 30-year shipbuilding plan include but are not limited to the following:

- Make the report's presentations of force-level goals, procurement rates, and
 projected force levels more detailed by breaking down the categories of
 amphibious ships, combat logistics force (CLF) ships, and support ships into
 separate ship types.
- In addition to information that currently appears in the report on the 30-year shipbuilding plan, have the report also include class-specific figures for procurement quantities, deliveries, retirements, and force levels for the budget year and the next nine years.⁷
- Formalize the practice of having the Navy provide to CRS, CBO, and the defense oversight committees, at the same time that it submits its report on the 30-year shipbuilding plan, the supplementary tables and cost data for that plan that the Navy in recent years has informally provided to CRS and CBO.

Mr. Chairman, distinguished members of the subcommittee, this concludes my testimony. Thank you again for the opportunity to appear before you to discuss these issues. I will be pleased to respond to any questions you might have.

⁷ This option would implement a direction regarding the 30-year shipbuilding plan contained in the joint explanatory statement on H.R. 6523, which was enacted as the FY2011 Ike Skelton National Defense Authorization Act (P.L. 111-383 of January 7, 2011). (See footnote 8.)

Appendix: Brief History of Requirement to Submit 30-Year Shipbuilding Plans

The first 30-year shipbuilding plan was submitted in 2000, when Congress considered DOD's proposed FY2001 DOD budget. The plan was submitted under a one-time-only legislative provision, Section 1013 of the FY2000 National Defense Authorization Act (S. 1059/P.L. 106-65 of October 5, 1999).

No provision required DOD to submit a 30-year shipbuilding plan in 2001 or 2002, when Congress considered DOD's proposed FY2002 and FY2003 DOD budgets.

Section 1022 of the FY2003 Bob Stump National Defense Authorization Act (H.R. 4546/P.L. 107-314 of December 2, 2002) created a requirement to submit a 30-year shipbuilding plan each year, in conjunction with each year's defense budget. This provision was codified at 10 U.S.C. 231. The first 30-year plan submitted under this provision was the one submitted in 2003, in conjunction with the proposed FY2004 DOD budget.

For the next several years, 30-year shipbuilding plans were submitted each year, in conjunction with each year's proposed DOD budget. An exception occurred in 2009, the first year of the Obama Administration, when DOD submitted a proposed budget for FY2010 with no accompanying FYDP. The Navy that year sent a letter to the chairmen of defense committees stating DOD's rationale for not submitting a 30-year shipbuilding plan that year.⁸

Section 1023 of the FY2011 Ike Skelton National Defense Authorization Act (H.R. 6523/P.L. 111-383 of January 7, 2011) amended 10 U.S.C. 231 to require DOD to submit a 30-year shipbuilding plan once every four years, in the same year that DOD submits a Quadrennial Defense Review (QDR). Consistent with Section 1023, DOD did not submit a new 30-year shipbuilding plan at the time that it submitted the proposed FY2012 DOD budget. At the request of the House Armed Services Committee, the Navy submitted the FY2012 30-year (FY2012-FY2041) shipbuilding plan in late-May 2011.

⁸ Letter dated May 12, 2009, from BJ Penn, Acting Secretary of the Navy, to Representative Ike Skelton, and similar letters to Senator Carl Levin, Representative John P. Murtha, and Senator Daniel K. Inouye.

⁹ Regarding the three years between each QDR, the joint explanatory statement of the House and Senate Armed Services Committees on H.R. 6523 stated:

The committees expect that, following the submission of the President's budget materials for a fiscal year, the Secretary of the Navy, at the written request of one of the congressional defense committees, will promptly deliver the Navy's long-term shipbuilding plan used to develop the President's budget request for that fiscal year, as well as a certification from the Secretary of the Navy that both the President's budget request for that fiscal year and the budget for the future-years defense program is sufficient to fund the construction schedule provided in that plan. The committees expect that such a plan would include the quantity of each class of ship to be constructed in that fiscal year and the nine following fiscal years.

¹⁰ Reflecting the Navy's interpretation of the language in the joint explanatory statement cited in the previous footnote, the Navy in April 2011 provided CRS and CBO with a 10-year shipbuilding plan for FY2012-FY2021.

¹¹ The Navy's cover letter for the plan is dated May 23, 2011. CRS received the plan from the Navy on May 24, 2011 The Navy's cover letter states that the plan was submitted in response to a letter dated February 15, 2011, from Representative Todd Akin, the chairman of the Seapower and Projection Forces subcommittee of the House Armed Services Committee, requesting a 30-year plan.

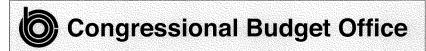
Ronald O'Rourke

Mr. O'Rourke is a Phi Beta Kappa graduate of the Johns Hopkins University, from which he received his B.A. in international studies, and a valedictorian graduate of the University's Paul Nitze School of Advanced International Studies, where he received his M.A. in the same field.

Since 1984, Mr. O'Rourke has worked as a naval analyst for the Congressional Research Service of the Library of Congress. He has written numerous reports for Congress on various issues relating to the Navy. He regularly briefs Members of Congress and Congressional staffers, and has testified before Congressional committees on several occasions.

In 1996, Mr. O'Rourke received a Distinguished Service Award from the Library of Congress for his service to Congress on naval issues.

Mr. O'Rourke is the author of several journal articles on naval issues, and is a past winner of the U.S. Naval Institute's Arleigh Burke essay contest. He has given presentations on Navy-related issues to a variety of audiences in government, industry, and academia.



Testinony

Statement of Eric J. Labs Senior Analyst for Naval Forces and Weapons

The Value of 30-Year Defense Procurement Plans for Congressional Oversight and Decisionmaking

before the Subcommittee on Oversight and Investigations Committee on Armed Services U.S. House of Representatives

June 1, 2011

This document is embargoed until it is delivered at 10:00 a.m. (EDT) on Wednesday, June 1, 2011. The contents may not be published, transmitted, or otherwise communicated by any print, broadcast, or electronic media before that time.

CONGRESSIONAL BUDGET OFFICE SECOND AND D STREETS, S.W. WASHINGTON, D.C. 20515 Mr. Chairman, Representative Cooper, Members of the Subcommittee, I want to thank you for giving me the opportunity to discuss with you the value of the Department of Defense's (DoD's) annual 30-year shipbuilding and aviation plans in the Congress's funding decisions for and oversight of the department's activities.

Every year, the Congress is asked to approve the procurement of one year's worth of expensive items such as ships and aircraft. Yet those decisions have long-term implications. Well-constructed 30-year acquisition plans for major weapon systems can provide information about those implications. I will discuss the role that those plans by DoD can play in Congressional oversight and decisions about funding, the inevitable uncertainty surrounding such plans, and a few suggestions for how the plans might be improved.

The Role of DoD's 30-Year Ship and Aircraft Plans in Congressional Oversight and Decisionmaking

The 30-year ship and aircraft plans benefit Congressional oversight and decisions about funding in at least three different ways:

- Thirty-year plans may reveal cumulative long-term effects of annual appropriation decisions that may not be apparent from a shorter perspective.
- Such plans may also reveal imbalances between long-term objectives for inventories and projected budgetary resources.
- The plans provide information on DoD's assumptions about the service lives of major weapons systems and how those assumptions may affect its inventory goals.

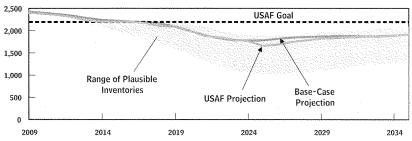
The Effects of Annual Appropriation Decisions over the Long Term

DoD's 30-year shipbuilding and aviation plans enable the Congress to assess the long-term effects of the incremental decisions that are made each year in the annual authorization and appropriation process. Ships and aircraft take decades to develop and procure, and those ships and aircraft often remain in the inventory for decades more. In the absence of a 30-year plan, the cumulative effects of those annual decisions may not be well understood. For example, during the 1990s, well before the Congress instituted the requirement for a 30-year shipbuilding plan, attack submarines were bought at an average rate of about half a submarine a year. At the time, that historically low rate did not affect the ability of the Navy to meet its inventory goal because the Navy had more than enough submarines to meet that goal for years to come. However, once the Navy begins to retire three or four submarines per year in the latter part of the 2010s, it will not be able to meet its inventory goal in the 2020s and 2030s without purchasing large numbers of submarines within a short period of time in an environment of constrained budgets. Although the existence of a 30-year plan in the 1990s might not have changed the amounts that the Congress appropriated for submarines, it would have provided more information about the long-term

Figure 1.

Potential Air Force Fighter Inventories Under a Range of Projections

(Total aircraft inventory)



Source: Congressional Budget Office based on the Department of Defense's fiscal year 2009 plan.

Published originally in Congressional Budget Office, *Alternatives for Modernizing U.S.*Fighter Forces (May 2009).

Notes: JSF = Joint Strike Fighter; USAF = United States Air Force.

Base-Case Projection:

- The A-10 and F-15 reach 16,000 and 12,000 flight hours, respectively
- · Production and fielding of the F-35A JSF remain on schedule
- Average annual flight hours accrued per aircraft equal those of the past 10 years

Optimistic Case (Upper edge of shaded region):

- The A-10 and F-15 reach 16,000 and 12,000 flight hours, respectively
- Production and fielding of the F-35A remain on schedule
- Average annual flight hours accrued per aircraft are reduced by 10 percent (relative to the average of the past 10 years)

Pessimistic Case (Lower edge of shaded region):

- The A-10 and F-15 reach 12,000 and 8,000 flight hours, respectively
- Production of the F-35A slips by two years and peak production is reduced from 80 aircraft per year to 64
- · Average annual flight hours accrued per aircraft equal those of the past 10 years

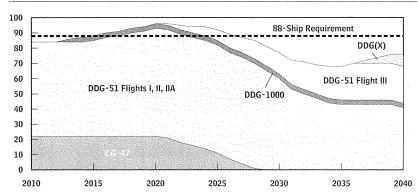
consequences of those appropriation decisions. A 10-year plan would not have illuminated those longer-term challenges.

Recent CBO reports provide examples of the value of examining procurement quantities and inventories of ships and aircraft over a 30-year period. In one report, using information contained in the 30-year projections, CBO showed that, under its base case assumptions and DoD's 2009 plan, the Air Force's inventory of fighters would fall short of its current requirements by more than 400 aircraft in 2025 (see Figure 1). In another report, CBO concluded that, under the Navy's 2011

^{1.} See Congressional Budget Office, Alternatives for Modernizing U.S. Fighter Forces (May 2009).

Figure 2.

Inventories Versus Requirements for Large Surface Combatants Under the Navy's 2011 Plan



Source: Published originally in Congressional Budget Office, *An Analysis of the Navy's Fiscal Year* 2011 Shipbuilding Plan (May 2010).

Note: DDG = guided missile destroyer; CG = guided missile cruiser.

shipbuilding plan, inventories of surface combatants would fall below the service's goal in the 2030s (see Figure 2). In light of the long lead times needed to fill those gaps, measures to address the shortfalls could require action by the Congress long before the shortfalls become a reality.

Matching Inventory Goals and Resources

Another important function of the 30-year plans is that they may reveal whether an imbalance exists between the inventory goals for ships or aircraft and the resources the military services are projected to receive. If such an imbalance was indicated, the Congress might want to more closely review the defense strategy that was the basis for DoD's inventory goals, the amount of money the department would receive, or how those resources would be spent. Specifically, if an imbalance between programs and resources were highlighted by the 30-year plans, the Congress might decide to reallocate resources from other programs to purchase ships or aircraft, take steps to reduce the costs of the desired ships or aircraft, or fund a different mix or different types of ships and aircraft within current resource levels. For example, the Navy's 2011 shipbuilding plan revealed that the service would face a substantial budgetary challenge in the 2020s and early 2030s, when it expects to purchase 12 SSBN(X) submarines—replacing the Ohio class ballistic missile submarines—generally at a rate of one per year and still pay for other planned purchases of ships. Over the past year, the prospect of that budgetary challenge has led the Congress and the Navy to focus more

^{2.} See Congressional Budget Office, An Analysis of the Navy's 2011 Shipbuilding Plan (May 2010).

attention on the early design efforts for the SSBN(X) in order to reduce the procurement costs for those ships.

The recent history of several of the Navy's 30-year shipbuilding reports serves as a useful illustration of the value of such reporting in supporting the Congress's oversight functions. After the Navy conducted its force structure assessment in 2005 and reported the results of that analysis in its 2007 30-year shipbuilding plan, published in February 2006, the service established a goal of 313 ships—some 30 ships more than existed at that time—and outlined both a procurement strategy and budgetary strategy to achieve that goal. The report stated that the budgetary strategy was based on four key assumptions about how spending growth in the Navy's various budget accounts could be restrained. The Navy took the same budgetary approach in its fiscal year 2008 shipbuilding plan. However, CBO observed the following year that the 2009 budget was already departing from the assumptions the Navy had made in constructing its 2007 and 2008 shipbuilding plans.³

Abandoning the budgetary strategy used for the 2007 and 2008 plans, the Navy's 2009 30-year plan described its intention to buy most of the ships the service said it needed to meet its inventory goals, but both the Navy and CBO estimated that the plan would cost about twice the amount the Navy had historically spent on shipbuilding.

The Navy did not present a 30-year shipbuilding plan for 2010, but in its 2011 report, the Navy presented a shipbuilding plan that the service felt was achievable within the amount of funding that it would probably be provided. However, CBO's analysis of the plan showed that it would still require substantially more funding than the Navy had been receiving historically and that the procurement schedule under the plan would not be sufficient to meet all of the Navy's inventory objectives. ⁴

In short, those year-to-year changes in the Navy's annual 30-year reports on ship-building illuminated the challenge of developing a shipbuilding program that satisfies the dual objectives of meeting its inventory goals and being affordable at funding levels consistent with recent historical experience. On the basis of such information about the procurement plans of the Navy and the other services, the Congress may want review or suggest changes in defense strategy, change how much money is appropriated for DoD's activities, or change how that money is allocated to various priorities within the department.

Information About Inventory Goals and Service Lives

The 30-year plans also provide the Congress with information about the relationship between DoD's long-term objectives for its inventories and the department's assump-

^{3.} See Congressional Budget Office, "Resource Implications of the Navy's Fiscal Year 2009 Shipbuilding Plan," attachment to a letter to the Honorable Gene Taylor (June 9, 2008), pp. 10–11.

^{4:} See Congressional Budget Office, An Analysis of the Navy's 2011 Shipbuilding Plan (May 2010).

tions about the service lives of ships and aircraft. For example, several of the Navy's 30-year shipbuilding plans include an assumption that certain existing and future classes of large surface combatants (cruisers and destroyers) will serve in the fleet for 40 years. Historical experience since 1970 indicates that the Navy has generally retired its surface combatants before the average age of the class reached 30 years. The 30-year plans make the assumptions about service life more transparent so that the Congress has the opportunity to examine whether those assumptions are realistic and to judge whether it is investing sufficient resources in maintaining existing surface combatants to ensure that they can serve in the fleet for 40 years. If not, the Congress may consider providing additional resources to either better maintain and improve existing ships or to purchase more ships in order to meet the Navy's inventory goals.

Uncertainties in 30-Year Procurement Plans

There is, of course, considerable uncertainty in any 30-year ship or aircraft procurement plan. The Navy's 2011 plan highlighted some of the difficulties in both developing such a plan and estimating its costs, particularly for ships to be purchased in the third decade of that time span. Specifically, the report stated, "The requirements during this period are not as well defined as those for the near or mid-term. The number, types and capabilities of ships are estimated based on anticipated Joint and Navy war-fighting requirements, and cost estimates are notional due to the uncertainty of business conditions affecting the shipbuilding industry. In this report, the far-term phase largely addresses the recapitalization of today's legacy ships." The Navy added that the shipbuilding profile of the third decade is "certain to change over the next two decades."

Although such uncertainties limit the utility of 30-year plans as predictive tools, the documents can nevertheless help inform the Congress of changes in plans and circumstances that are likely to arise. Such information can be particularly important in the case of military aircraft. Given the rapid pace of technological innovation in the aerospace industry (particularly in the case of unmanned aircraft), long-term aviation plans are likely to be even more fluid than those for Navy ships. Indeed, citing long-term uncertainties in requirements and technology, DoD's first two 30-year aviation plans—submitted to the Congress with the fiscal year 2011 and 2012 budget requests—included only 10 years of programmatic detail. Nevertheless, the Congress is frequently faced with events and decisions about military aircraft inventories and acquisition budgets for which the major implications may not be felt until after

^{5.} In some cases, classes of ships were retired because the ships were in poor condition and the Navy did not consider it cost-effective to spend resources to fix the problems or because the Navy no longer considered the ships to be effective in a maritime conflict. In other cases, the Navy was reducing the size of its surface combatant force and no longer needed the ships in its inventory.

Department of the Navy, Report to Congress on Annual Long-Range Plan for Construction of Naval Vessels for FY 2011 (February 2010), www.militarytimes.com/static/projects/pages/ 2011shipbuilding. pdf.

10 years. Recent occasions include the structural failure of an F-15 Eagle that could have portended the need to retire those fighters many years earlier than expected; delays in the development of the F-35 Joint Strike Fighter that will probably compel the services to retain older aircraft longer than planned; and the decision to begin developing a new long-range bomber that will require substantial funding in years well beyond the span of DoD's five-year plan provided in the Future Years Defense Program.

Although future military and technological developments are difficult to predict, long-term plans are useful in understanding the implications of individual events and decisions such as these in the context of the entire aircraft force (or ship fleet) and the funding that may be needed to support it. In much the same way that CBO's budget baseline provides a reference trajectory for federal spending under current law, a well-documented 30-year aviation or shipbuilding plan can provide a picture of how forces may evolve over time and what investments will be needed if current plans and assumptions remain unchanged. The value of that picture lies not in its accuracy as a blueprint of the future but rather in its utility as a basis for the Congress to evaluate the long-term implications of changes to today's plans and circumstances—changes that will inevitably arise.

A recent CBO projection of Air Force fighter inventories illustrates that utility. Starting from a projection of fighter inventories based on a particular set of plans and assumptions, the analysis examines the implications that potential real-world circumstances—such as a reduction in the expected service lives of in-service aircraft or delays in the development of replacement aircraft—might have on the size of the fighter force (see Figure 1 on page 2). In general, such an understanding can help inform Congressional actions that might be needed to respond to such circumstances.

Improving the Content of the 30-Year Procurement Plans

The Congress's oversight of the Navy's shipbuilding programs could be improved if the Navy included in its reports and the accompanying tables a listing by class of the types of ships that would be procured, delivered, retired, and serving in the fleet each year over the 30-year span. Currently, the Navy's plans simply group the ships together in major categories: aircraft carriers, large surface combatants, small surface combatants, attack submarines, ballistic missile submarines, amphibious ships, combat logistics ships, and support ships. Oversight could also be improved if the Congress required the Navy to deliver to the defense oversight committees and the Congressional support agencies supplementary tables on ship procurement, delivery, retirement, and cost at the same time the official report is submitted to the Congress. In the past, those tables have usually been provided informally, sometimes within days, but other times not for months, after the report was delivered.

Similarly, long-term aircraft acquisition plans would be more informative if they displayed the expected inventory of each type of aircraft over the span covered—to include the schedule over which existing aircraft were expected to be phased out of the

force and replacements phased in—as well as the underlying assumptions (for example, the years of service expected from each type of aircraft). Knowing the underlying assumptions would make possible analyses of the potential implications of changes to them.

Although DoD has not produced 30-year plans for ground combat vehicles (tanks and other armored vehicles), rotary and fixed wing aircraft, and trucks, such plans would also be useful for oversight of the Army's and Marine Corps' acquisition plans, particularly if they provided information about the size and age of current inventories, inventory goals, and plans to replace or modernize vehicle and aircraft fleets and the costs of doing so. Although a ground combat vehicle or truck costs significantly less than a ship or aircraft, the Army buys tens of thousands of them spread over many years, which makes them a large component of the Army's acquisition budget and would make a 30-year plan useful for oversight.

Of course, the level of detail in a 30-year acquisition plan must be tempered by the effort and cost to produce it. Developing and estimating the costs of DoD's 30-year ship and aircraft plans requires an investment of time, effort, and money that CBO has not analyzed. However, the cost of preparing such a plan is not large in comparison with the cost and importance of the weapon systems involved. Preparing some portions of a long-term plan—for example, projecting the service lives of ships currently in service—is likely to be less burdensome than others—for example, projecting the cost of a bomber that will not be fielded until the mid-2020s. However, rough estimates for systems far in the future might be adequate given the obvious uncertainty in long-term projections. I and other CBO analysts would welcome the opportunity to work with the Committee staff and representatives of DoD to discuss future 30-year plans in order to enhance their usefulness to the Congress.

Dr. Eric J. Labs Senior Analyst for Naval Weapons and Forces Congressional Budget Office

Eric Labs is Senior Analyst for Naval Forces and Weapons at the Congressional Budget Office in Washington, D.C. He specializes in issues related to the procurement, budgeting, and sizing of the forces for the Department of the Navy. Dr. Labs has testified before Congress several times and published numerous studies under the auspices of the Congressional Budget Office as well as a number of articles and papers in academic journals and conferences, including the U.S. Naval Institute's *Proceedings, Sea Power* magazine, and the *Naval War College Review*. He has given presentations to a variety of industry, government, and academic audiences. He was awarded CBO's highest honor, the Director's Award for Exceptional Achievement, in 2001, 2003, and 2007. He received his doctorate in political science from the Massachusetts Institute of Technology and graduated from Tufts University, *summa cum laude*, in 1988. He has worked for the Institute for Foreign Policy Analysis in Cambridge, Massachusetts and, from 1994 to 1995, as a Visiting Scholar at the Center for International Security Studies at the University of Maryland. Dr. Labs has been with the Congressional Budget Office since 1995.

Email: ERIC.LABS@CBO.GOV

Phone: 202-226-2920

EVALUATING THE EFFICACY OF THE

DEPARTMENT OF DEFENSE'S

30-YEAR SHIPBUILDING AND AVIATION PLANS

TO CONGRESS

Prepared Statement

Oversight & Investigations Subcommittee of the House Committee on Armed Services

June 1, 2011

Mackenzie Eaglen Research Fellow The Heritage Foundation

My name is Mackenzie Eaglen. I am a Research Fellow at The Heritage Foundation. The views I express in this testimony are my own, and should not be construed as representing any official position of The Heritage Foundation.

Thank you, Chairman Wittman, Ranking Member Cooper, and members of the Oversight & Investigations Subcommittee for the opportunity to evaluate the usefulness of the 30-year shipbuilding and aviation plans submitted to Congress annually.

Forcing leaders in the Department of Defense (DoD) to think longer-term is an important tool for Congress to serve as a partner in strategic planning. There are many strategies and plans that have been requested by Congress over the years that have served to greatly inform the debate, including defense strategies, roles and missions reports, long-term shipbuilding and aviation plans, and various commissions and outside reports. Yet too often, the requirements of the budget calendar have marginalized the more deliberate policymaking process. Congress needs to ensure that the policy process is the driving force in defense planning.

Soliciting periodic long-term aviation and shipbuilding plans is a useful way for Congress and the services to more thoughtfully evaluate requirements beyond the annual budget request and five-year Future Years Defense Plan (FYDP). These documents also allow Congress to identify broad trends, identify shortfalls, and help determine priorities of these investment portfolios.

Strategy always changes faster than force structure. When demands change, strategy can be modified—but it may take years to field forces adequate to implement abrupt changes. Because the lead time on development and procurement—including training on new systems—is measured in years, if not decades, the U.S. military must often hedge when making budgeting decisions. Gaining insight into these plans by the services is essential for Congress to know as they deliberate the President's annual defense budget request.

Benefits of Annual 30-Year Shipbuilding and Aviation Plans

Defense officials are seeking a reprieve from Congress on the annual requirement to submit a long-term aviation plan after Congress altered the schedule for long-term shipbuilding plans last year from annually to every four years alongside the *Quadrennial Defense Review*. While any report to Congress imposes a manpower, cost, and analytical burden, the benefits of these reports clearly outweigh the costs of preparing them. DoD officials have argued the plans do not fluctuate much year-over-year, yet a quick glance over the past three years shows that is not exactly the case.

Examples of some key programs that have benefited from the knowledge of a longer defense planning horizon for congressional oversight include the now-abandoned next-generation cruiser for the U.S. Navy, the *Ohio*-class ballistic missile submarine replacement program, the Littoral Combat Ship, and the Air Force next-generation bomber, as well as numerous legacy programs and their planned retirements or service-life extensions.

Congress has also learned of several critical brand new programs that the military will begin design and development sometime in the coming decade, including the Navy's Next Generation Air Dominance Aircraft after 2019 and the Air Force's new cargo jet starting in 2015.

Crucial information gained from these annual reports also includes cost goals, fleet size goals, and planning shortfalls. The first-ever long-term aviation plan submitted to Congress in fiscal year 2011 forecasts 3 percent average annual real growth for aviation programs over the next decade. This was a worthy goal that Congress may still use as a benchmark by which to measure future budget submissions and track progress. The FY2012 aviation report changed investment assumptions, however, and predicts a zero real growth aviation budget after 2017.

It is unclear how this significant funding reduction prediction has specifically changed the composition of future fleets. It appears that fighter/attack, strategic lift, and bomber aircraft all declined as a result of this year-over-year change in planned funding. The 2011 aviation plan assumed spending totaling \$268 billion whereas the 2012 spending plans dropped to \$259 billion over the next decade. Congress will want to seek clarity from the Department of Defense about the changes in the aviation force inventory from 2011 to 2012 due to reduced funding assumptions.

These long-term plans show Congress that the U.S. Air Force, for example, intends to enter a period in the early 2020s when several major recapitalization programs will be underway, calling into question whether future projected budgets will be enough. The Air Force will be buying at full-rate production a new tanker during that time, as well as the Joint Strike Fighter at 70 to 80

per year, and the next-generation bomber will likely enter full-rate production by the middle or end of that same decade. Congress will need to work with the Air Force today to help determine how it will afford this bow wave of planned spending starting in just seven fiscal years.

Predictability is another key benefit of these annual plans. Avoiding budget spikes provides stability in defense planning and offers a steadier workload for industry. When budget requests change so dramatically year to year—particularly when requirements stay the same—the industrial base cannot plan ahead, and this increases the cost of individual systems. The national security of the U.S. is well served by a competitive industrial base, and defense budget predictability and transparency provided as part of these 30-year planning documents contribute to this effort.

Key Program Examples Benefitting From Annual Long-Term Plans

Legacy Ships and Aircraft. The 30-year shipbuilding and aviation plans are useful to understand the Department of Defense's ever-shifting plans to retire ships and aircraft while extending the service lives of others based on modernization priorities and budget projections.

The Navy's long-term shipbuilding plan submitted in FY2011 shows an ambitious growth of the overall fleet to 324 by 2021. Key ingredients to making this plan become reality include predictability, the opportunity to block-buy multiple ships, increased and sustained funds for shipbuilding, and ensuring various legacy ships do not retire too soon.

The assistant secretary of the Navy for Research, Development and Acquisition, Sean Stackley, recently told *National Defense*, "The program to build back the navy to 313 from 286 ships faces a lot of challenges. The most important thing we have to do is ensure that the fleet we have doesn't retire early." ¹

Joint Strike Fighter. The F-35 Joint Strike Fighter (JSF) program has changed in many ways over the past three years due to restructuring and other reasons. The Department of Defense announced this year that schedule delays have caused the Initial Operating Capability (IOC) date of all three services' JSFs to slip by several years. As a result, the services have had to alter investment plans for the purchase of new fourth-generation fighter aircraft and service life extension programs of some legacy fleets.

The Navy, for example, plans to purchase additional new F/A-18E/Fs to bridge the gap due to the delayed IOC of the F-35. The Navy will also extend the service lives of select F-A-18A-D aircraft, reduce Unit Deployment squadrons from 12 to ten aircraft per squadron, accelerate the transition of ten legacy F/A-18C squadrons to F/A-18E/Fs, and purchase 67 new F/A-18E/Fs between now and 2014.

¹ Sandra Erwin, "Navy's Shipbuilding Forecast Gets Chilly Reception on the Hill," National Defense, March 11, 2011, at

http://www.nationaldefensemagazine.org/blog/Lists/Posts/Post.aspx?List=7c996cd7%2Debb4%2D4018%2Dbaf8%2D8825cada7aa2&1D=347.

Due to the delayed procurement schedule of the JSF, the Air Force plans to invest in "some late block F-16s." Air Force leaders plan to modernize some late block F-16C/Ds with "improved radars, avionics, and electric countermeasures" to keep them in the inventory through the 2030s. Congress should press Air Force leaders as to why the service is not considering the purchase of additional new fourth-generation aircraft to help bridge the growing transition to the Joint Strike Fighter as the Navy is doing today.

New in the 2012 long-term aviation plan is the announcement that the Department of the Navy is currently evaluating whether its cap on F-35B/C production capacity at 50 per year should be changed. Congress should seek additional insight into the original argument for the cap and the potential justification for changing full-rate production numbers. Congress should also learn if there will be any impact on the Air Force production plans when all three services are engaged in full rate production of the Joint Strike Fighter later this decade.

Littoral Combat Ship. The 2011 shipbuilding plan told Congress of the new increase in the number of LCS ships the Navy planned to buy. The report also told Members, however, that the Navy planned to slow the rate of construction from four or five Littoral Combat Ships per year to four a year, then three, two, and eventually just one per year.

Had Congress received a 30-year shipbuilding plan from the Navy in FY2010, it would have offered valuable information when Members were later asked to approve a dramatic shift in purchasing plans for the LCS. The Navy abruptly changed its acquisition strategy for the Littoral Combat Ship in November 2010, after planning to down-select to just one design. Under the revised acquisition plan, the Navy asked Congress for authority to award 10-ship contracts to both LCS bidders. With a long-term plan in hand ahead of time, Congress would have better understood the Navy's plans for maximum LCS procurement rate in FY2011 and the effects of a new acquisition strategy that may allow more LCSs to enter the fleet sooner than previously planned.

Bomber Fleet. The Air Force will need to keep just over 160 B-1s, B-2s, B-52 bombers until the next-generation bomber enters the inventory. At least, that was the Air Force prediction in the 2011 aviation plan. The number dropped in one year to 156. Congress must get clarity from the Air Force as to why the bomber fleet has been reduced and the implications of these changes in retirement plans.

As part of its plan to develop a next-generation bomber, the Air Force informed Congress as part of its 2012 aviation plan that the goal will be for the new bomber to have an average procurement unit cost goal of roughly \$550 million.

F-22. Modernizing the F-22 fleet was projected to cost \$1.9 billion as part of the 2011 aviation plan. The cost of modernization of the F-22 fleet jumped dramatically to \$4.5 billion in the

² U.S. Department of Defense, "Aircraft Investment Plan: Fiscal Years 2011-2040," February 2010, chart 15, "Bomber Inventories and Investments, FY 2011-2020," p. 23.

³ Department of Defense, 'Aircraft Investment Plan: Fiscal Years 2012-2041," March 2011, chart 14, "Bomber Inventories and Investments, FY 2012-2016," p. 22.

current 2012 aviation plan. The price tag of modernizing the F-22 fleet has more than doubled in one year with a \$2.6 billion increase from the 2011 to 2012 plans. Congress must identify why there has been massive cost growth in the planned modernization of F-22s.

The Air Force is considering retirement of the F-22s as early as 2025. This is crucial information for Congress to use in order to work backward and determine when the Air Force must begin research, design, and development of a new air superiority fighter jet. The service vaguely identifies the need for "follow-on capabilities to the F-22"—needed by 2025—but offers no specifics or funding timeline. The Navy, however, clearly identifies the need for a next-generation air dominance fighter with funding expected to being in 2019. The report lists options for the Navy, including replacing the F/A/-18E/F with F-35s, developing a new manned or unmanned platform or a combination of both. Congress should demand more detail from the U.S. Air Force about research, design and development—as well as funding plans—for capabilities beyond the F-22.

SSBN(X). The Under Secretary of Defense for Acquisition, Technology and Logistics testified before the House defense appropriations subcommittee on April 13, 2011, stating that

"by conducting engineering tradeoff analysis with the commencement of the *Ohio*-class replacement, essentially looking at the submarine design and figuring out what you could do to change that design in the interest of lower cost, the Navy has already reduced the estimated average procurement cost by 16 percent with the goal of fully 27 percent."

Members are concerned by this recent revelation. The current House Armed Services Committee version of the FY2012 defense authorization bill seeks to limit the expenditure of select funds for the *Ohio*-class ballistic missile submarine replacement program to not more than 90 percent until the Secretary of Defense submits a report summarizing the analysis that supported the Department's decision to reduce the planned number of missile tubes per submarine to 16.

While Congress may disagree with these changes to the program in its early stages, the fact that policymakers are able to have this conversation with the Defense Department and have the opportunity to weigh in at all are the direct result of the request for annual long-term shipbuilding forecasts.

New Programs. As part of the 2011 aviation plan, the Air Force announced a new cargo aircraft when disclosing it is "investigating options for meeting future intratheater lift needs, including potentially the acquisition of a family of airlift systems that would provide complementary capabilities with respect to maneuverability and sustainability."

Included in the 2012 aviation plan was the Navy announcement that "in the far term," the service "will need to replace its F/A-18E/F fleet, with analysis ongoing to define the Next Generation Air Dominance (NGAD) aircraft." Research and development is scheduled to begin in 2019.

⁴ U.S. Department of Defense, "Aircraft Investment Plan: Fiscal Years 2011-2040," February 2010, p. 20.

⁵ U.S. Department of Defense, "Aircraft Investment Plan: Fiscal Years 2012-2041," March 2011, p. 16.

As part of the 2011 aviation plan, the Air Force acknowledged that the Air Force must begin planning now for a new air superiority fighter. The plan notes future research and development efforts will focus on follow-on capabilities to the F-22 Raptor—needed about 2025.

The Air Force's plans seemed to have changed slightly in the next annual report, provided to Congress this year. The 2012 long-term aviation plan states, "It is anticipated that a family of systems—mixes of manned and unmanned aircraft, with varying stealth characteristics and advanced standoff weapons—will shape the future fighter/attack inventory." Congress should ask the Air Force for additional information about what changed between FY2011 and 2012 regarding the need and requirements for a follow-on air superiority fighter jet.

The 2012 aviation plan shows a possible follow-on Unmanned Aerial System sometime after 2016. The Navy also plans to employ an ISR "family of systems" to retain EP-3 Aries II and special projects aircraft capabilities during their transition out of the fleet around 2019. Congress may want to learn more about the potential plans and requirements for these capabilities.

Case Study: Tactical Fighter Shortfall

Members of Congress and Department of Defense officials have warned for years of an impending "fighter gap" and its implications for U.S. national security. A fighter shortfall is essentially a deficit between the services' fighter aircraft inventories and their operational requirements based on emerging and possible air threats to U.S. security highlighted in various documents. For the Navy, Air Force, and Marine Corps, this is the projected decade when legacy fighters begin retiring faster than the F-35 Joint Strike Fighter is sent to enter service.

In April 2008, Air Force leaders predicted a requirement gap of over 800 fighters by 2024. However, after release of the President's FY 2010 budget, officials announced a combat Air Force restructuring plan to eliminate excessive overmatch in the tactical fighter force and consider alternatives in the service's capabilities.

Instead of seeking to address the projected fighter gap, the Air Force chose to accelerate the retirement of 250 legacy fighters, including 112 F-15s and 134 F-16s. The Air Force believed it could save \$3.5 billion over the following five years and reinvest those funds to reduce current capability gaps. However, budgetary restrictions—not a changing threat environment—appear to have driven this fundamental shift in security policy.

Also in 2008, Navy leaders projected a "most-optimistic" deficit of 125 strike fighters for the Department of the Navy, including 69 aircraft for the U.S. Navy and 56 for the Marine Corps. This projected gap, then set to peak around 2017, was considered optimistic because it assumed that the service life of F/A-18s could be extended from 8,000 flight hours to 10,000. The original service life was 6,000 flight hours.

A Congressional Research Service report in April 2009 unveiled a potentially larger gap, citing a briefing to House Armed Services Committee staffers in which the Navy projected that its strike fighter shortfall could grow to 50 aircraft by FY 2010 and 243 by 2018 (129 Navy and 114

⁶ Department of Defense, "Aircraft Investment Plan: Fiscal Years 2012-2041," March 2011, p. 5.

Marine Corps fighters). However, in a move that emphasized lingering disagreement among the White House, the Office of the Secretary of Defense, the Department of the Navy, and Congress, a senior Pentagon planner reportedly claimed on April 7, 2009, during a private briefing with lawmakers that the Pentagon's Office of Program Analysis and Evaluation had concluded there was no Navy strike fighter shortfall.

The data on available fighters did not change between April 2008 and April 2009, but the Pentagon overtly altered policy as if it had. This appears to be a classic case of budget-driven requirements as opposed to strategy-driven changes.

Trying to keep pace with the Pentagon's shifting numbers on the fighter shortfalls was difficult and circuitous before there were long-term aviation plans available to Members. Now, Congress is better and more clearly informed of budget-driven changes, when they happen, due to the annual requirement for the 30-year aviation plan.

The 2012 long-term aviation plan addresses the fighter shortfall with still further revised projections of only two to five percent for the Air Force over the next five years and a peak gap of 65 aircraft in 2018 for the Navy. The Air Force revised its projections due to "recent engineering data." Congress should ask the Air Force to further elaborate on what changed in the analysis to support a lower projected shortfall in the fighter fleet.

Building a Modern Congress-Military Partnership

Reporting requirements impose a significant, but in this case, important burden on military leaders. The plans will be ever more important once the parameters of the ongoing roles and missions review takes shape that will inform up to \$400 billion in defense spending cuts over the next decade. Congress has been concerned for the past several years that the services are underestimating and underfunding the shipbuilding and aviation fleets needed to build to the stated requirements. Too often, requirements have changed when budgets have fallen leading Members to become skeptical. Both the military services and Congress need a strong relationship to help the nation build and afford the future shipbuilding and aviation fleets.

Use the 30-Year Aviation and Shipbuilding Plans to Help Inform a New DoD Long-Term Research and Development Plan

After numerous studies and a half-dozen shipbuilding plans, Navy leaders have correctly concluded that the United States needs a larger fleet—not simply in numbers of ships and aircraft, but also in terms of increased network capability, longer range, and increased persistence. Navy leaders recognize that the U.S. is quickly losing its monopolies on guided weapons and the ability to project power. Precision munitions (guided rockets, artillery, mortars,

⁷ Christopher Bolkcom, "Navy-Marine Corps Strike-Fighter Shortfall: Background and Options for Congress," Congressional Research Service *Report for Congress*, April 10, 2009, at http://assets.opencrs.com/rpts/RS22875_20090410.pdf.

⁸ Andrew Tilghman, "Fighter Gap Expands Under Latest Estimate," Navy Times, May 19, 2009, at http://www.navytimes.com/news/2009/05/navy_fightergap_051609w/.

and missiles) and battle networks are proliferating, while advances in radar and electro-optical technology are increasingly rendering stealth less effective.

Policymakers should help the Navy and the Air Force to take a step back and look at the big picture to inform future investment portfolios. Congress should mandate the development of long-range technology road maps, including a science and technology plan and a research and development plan for the Department of the Navy and Air Force. These plans should broadly outline future investments, capabilities, and requirements. The possibilities include:

- · A next-generation surface combatant,
- · A new air superiority fighter jet, and
- · Low-observable capabilities beyond stealth.

These plans should also identify and prioritize the need for additional investment in critical capabilities, including:

- More capable anti-ship, land attack, and air-to-air missiles;
- · Next-generation rotary wing aircraft;
- · Satellite recapitalization;
- · Directed energy and electromagnetic weapons;
- · Underwater weapons, including an unmanned underwater vehicle;
- Nanotechnology and solid-state and fiber lasers;
- Biotechnologies; and
- · Advanced cyber technologies.

In light of the need for a comprehensive, long-range technology road map for the services, Congress should consider adding to its requirement for 30-year shipbuilding and aviation plans by directing the Navy and Air Force to submit long-range technology road maps.

The technology road map should be holistic and should account for the rapidly declining force structure of the U.S. military's global partners and the potential emergence of new players. The Navy's analysis should also consider shifting global shipping patterns, including the expansion of the Panama Canal and melting in the Arctic.

Any long-term analysis should also carefully consider the capabilities required in the increasingly contested undersea, cyber, and space domains. Without this type of strategy-driven analysis by military leaders, Congress will continue to struggle to determine where to apply diminishing resources within the defense budget and how to justify the additional investments needed in higher-priority areas.

Universal Cost Estimates Needed

After years of outside analysis showing that the Navy was underestimating and underfunding the shipbuilding needed to achieve anything close to its own requirement for a 313-ship fleet, some Members of Congress are growing increasingly doubtful.

To increase confidence in Navy shipbuilding budget estimates, Congress should direct the Office of the Secretary of Defense, the Department of the Navy, and the Congressional Budget Office (CBO) to use a set of consistent costing methods to reduce the wide variances in cost estimates among Navy shipbuilding plans, defense budgets, CBO estimates, and external analyses. Additionally, Congress should mandate that the Secretary of the Navy certify the design wholeness and cost estimates for any new ship class before authorization of the first hull.

The Navy should seek and Congress should approve the appointment of a four-star admiral to a newly created position of Director of Navy Shipbuilding. This person would be appointed for a term of eight years (analogous to the existing Director of Naval Nuclear Propulsion, who oversees all Navy nuclear power). The director would oversee design, acquisition, construction, and life-cycle management of all surface ships, aircraft carriers, and submarines. Current program executive officers for ships, submarines, and aircraft carriers would report to this new executive, who would report in turn to both the Chief of Naval Operations and the Secretary of the Navy.

To relieve additional pressure on the already strained Navy shipbuilding budget, Congress should seriously consider funding the design and construction costs of the Navy's new replacement ballistic missile submarine outside of Navy budget controls. These national assets are employed as part of critical strategic missions. Without additional resources, the defense industrial base and the nation's conventional advantage at sea could be sacrificed to recapitalize the strategic force.

Consider Including Rotary Wing Aircraft in the 30-Year Aviation Plans

The 30-year aviation plan does not include rotary wing, tilt-rotor, or trainer aircraft. Yet the critical capabilities and requirements for various military helicopters warrant more oversight and planning. The Air Force is examining a future heavy lift aircraft, the Army is thinking about a next-generation rotorcraft, and the Navy potentially needs a new heavy-lift rotary wing aircraft.

Yet, DoD's "investment in rotorcraft science and technology has decreased dramatically over the past 25 years." The U.S. Navy's MH-53E Sea Dragon helicopters are, for example, the "only heavy-lift helicopters in the fleet," and it is unclear whether the Navy plans to purchase additional ones in the future.16

Sikorsky's director of innovation recently told National Defense that if DoD "wants a new nextgeneration rotorcraft to replace the Kiowa Warrior, then industry should already have begun maturing the technology for it about five years ago." Otherwise, "the aircraft you end up with in 2025 is pretty much the same as what you've got now." Congress should add rotary wing aircraft to those that should be included in the 30-year aviation plans.

⁹ Eric Beidel, "Manufacturers: Technology Will Make Rotorcraft Faster, Safer," National Defense, May 2011, at http://www.nationaldefensemagazine.org/archive/2011/May/Pages/ManufacturersTechnologyWillMakeRotorcraftFa

Andrew Tilghman, "Plan to Outline Aviation Needs Through 2040," Navy Times, March 11, 2009, at http://www.navytimes.com/news/2009/03/navy_aviationplan_031109w/.

Beidel, "Manufacturers: Technology Will Make Rotorcraft Faster, Safer."

Recapturing Innovation and a Sound Industrial Policy

Despite the fact that "industrial policy" became a dirty word from its association with socialist governments during the Cold War, Congress needs to prevent the loss of innovation in defense-related research and development. Members should already know and be alarmed that the U.S. military has no manned aircraft under development—a first in the history of aviation. Similarly, no surface ships, manned aircraft, or attack submarines are in the design phase. With development cycles lasting 20 years or longer, elected leaders need to ensure that the Defense Department is not losing critical skills that will be needed to imagine and build the next generation of ships, aircraft, sensors, and weapons for the U.S. Navy and Air Force.

The critical workforce ingredients needed to sustain an industrial base capable of building next-generation systems are specialized design, engineering, and manufacturing skills. The growth of the defense industry after World War II peaked in the late 1950s when defense production became a leading sector of the national economy, a trend that continued well into the 1980s. This period was also marked by an increased focus on developing advanced defense technologies. By 1960, the federal government was responsible for 58 percent of the nation's research and development investments. This emphasis required a new level of engineering skills and capabilities within the industry to develop the complex defense systems the government sought to build.

Since World War II, the United States has benefited from the skills of a robust defense industrial and manufacturing workforce. For more than six decades, various U.S. defense strategies have emphasized the benefits of a technologically superior military to help to deter and win wars. The U.S. military has pursued this "technical overmatch" for decades in an attempt to deter potential enemies from engaging the U.S. in conflict and to reduce risk and loss of life on the battlefield.

When the Cold War ended in 1991, the sudden apparent dissolution of national security threats prompted a period of intense downsizing and consolidation. Whereas more than 50 major defense firms dominated the market in the early 1990s, only six prime contractors remain today. Contrary to popular perception, 60 percent to 75 percent of work programs in the aerospace and defense industries are performed by sub-prime companies and lower-tier suppliers, not the big defense contractors. These small companies are increasingly vulnerable to the vagaries of defense budgets, and reductions in defense research and development will cause them to disappear along with their tooling and skills.

An expected, the emerging round of consolidation of the defense industry has increased the burden on the small collection of defense companies. The contraction of major defense contractors has generally reduced the number of available workers. Already at a turning point, the potential closure of major defense manufacturing lines in the next five years with no additional scheduled production could shrink this national asset even further.

While the manufacturing workforce alone should not dictate congressional defense acquisition decisions, Congress needs to consider the potential defense "brain drain" when determining whether or not to shut down major production lines permanently, particularly in shipbuilding and aerospace. More often than not, once these highly skilled workers leave the federal workforce,

they are difficult to recruit back and even more expensive to retrain. This dynamic creates significant project gaps.

Conclusion

As defense budgets are set to enter a period when planned spending will likely see no real growth, Congress will need updated information to inform its oversight functions and help prioritize investment priorities. The 30-year shipbuilding and aviation plans serve an important purpose by shining a light on the military's investment plans, changing requirements, and fleet composition and sizes.

####

The Heritage Foundation is a public policy, research, and educational organization operating under Section 501(C)(3). It is privately supported and receives no funds from any government at any level, nor does it perform any government or other contract work.

The Heritage Foundation is the most broadly supported think tank in the United States. During 2008, it had nearly 400,000 individual, foundation, and corporate supporters representing every state in the U.S. Its 2008 income came from the following sources:

Individuals	67%
Foundations	27%
Corporations	5%

The top five corporate givers provided The Heritage Foundation with 1.8% of its 2008 income. The Heritage Foundation's books are audited annually by the national accounting firm of McGladrey & Pullen. A list of major donors is available from The Heritage Foundation upon request.

Members of The Heritage Foundation staff testify as individuals discussing their own independent research. The views expressed are their own and do not reflect an institutional position for The Heritage Foundation or its board of trustees.

Mackenzie Eaglen

Research Fellow for National Security Studies, Allison Center for Foreign Policy Studies Douglas and Sarah Allison Center for Foreign Policy Studies

Mackenzie Eaglen specializes in defense strategy, military readiness and the defense budget as research fellow for national security studies at The Heritage Foundation. Eaglen, a policy expert attached to Heritage's Allison Center for Foreign Policy Studies, also focuses on the defense industrial base and the size and structure of the nation's armed forces.

In 2010, Eaglen served as a staff member of the congressionally mandated Quadrennial Defense Review Independent Panel, a bipartisan, blue-ribbon commission established to assess the Pentagon's major defense strategy.

Her commentary and analysis have appeared in major newspapers such as The New York Times and The Washington Post, in military-focused publications such as Defense News and Army Times and in journals such as Armed Forces Journal, Proceedings, National Defense, Ripon Society Forum and Military Technology.

Eaglen also is a regular contributor to leading blogs, including GlobalSecurity's "SitRep," NRO's "The Corner" and Time magazine's "Battleland."

Before joining Heritage in 2006, Eaglen was principal defense adviser to Sen. Susan Collins (R-Maine), a senior member of the Senate Armed Services Committee and ranking member of the Homeland Security Committee. She previously served as legislative assistant to Rep. John E. Sweeney (R-NY).

Eaglen served for more than two years at the Pentagon as a Presidential Management Fellow. She researched and analyzed defense resources and budgeting, strategic planning, Iraqi reconstruction efforts and the U.S. defense industrial base. She wrote speeches for Air Force Gen. Richard B. Myers, chairman of the Joint Chiefs of Staff following the September 11 attacks. Earlier, she was a national security analyst at the Association of the United States Army's Institute of Land Warfare.

She has lectured at the Army War College, National Defense University, American University, Georgetown University, George Washington University, University of Georgia, Indiana University and Hofstra University.

Eaglen has appeared on defense panels at venues such as the Foreign Policy Research Institute, National Guard Association, Reserve Officers Association, Federalist Society, National Defense Industrial Association, Center for Security Policy, CATO Institute and the Security Industry Association. She participated in the Department of Defense Executive Course on National and International Security and the Army G-8 leadership symposium.

Eaglen received her master's degree in national security studies in 2001 from Georgetown University. She graduated from Mercer University, in Macon, Ga., with a bachelor's degree in international affairs. She and her husband welcomed a son in 2010.

DISCLOSURE FORM FOR WITNESSES CONCERNING FEDERAL CONTRACT AND GRANT INFORMATION

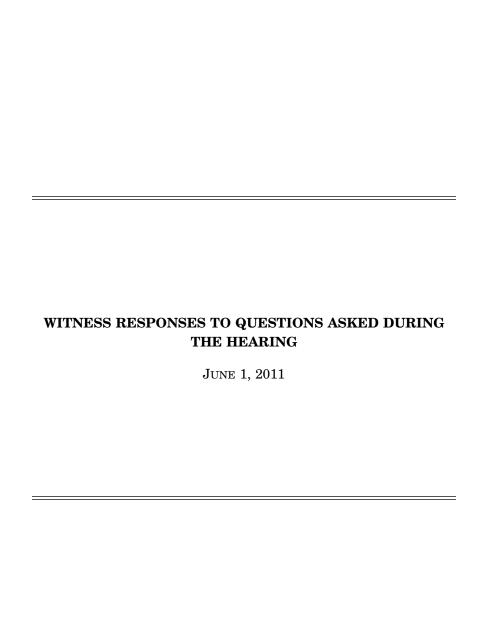
INSTRUCTION TO WITNESSES: Rule 11, clause 2(g)(5), of the Rules of the U.S. House of Representatives for the 112^{th} Congress requires nongovernmental witnesses appearing before House committees to include in their written statements a curriculum vitae and a disclosure of the amount and source of any federal contracts or grants (including subcontracts and subgrants) received during the current and two previous fiscal years either by the witness or by an entity represented by the witness. This form is intended to assist witnesses appearing before the House Armed Services Committee in complying with the House rule. Please note that a copy of these statements, with appropriate redactions to protect the witness's personal privacy (including home address and phone number) will be made publicly available in electronic form not later than one day after the witness's appearance before the committee.

appropriate redaction and phone number) v	is to protect the witness will be made publicly av s appearance before the	's personal privacy (inc ailable in electronic fo	luding home address
Witness name: Ma	ickenzie Eaglen		
Capacity in which a	ppearing: (check one)		
_X_Individual			
Representative			
If appearing in a repentity being representative FISCAL YEAR 2011		name of the company,	association or other
federal grant(s)/	federal agency	dollar value	subject(s) of contract or
contracts N/A			grant
11/7			
		,	
		1	
FISCAL YEAR 2010			
federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
N/A			

FISCAL YEAR 2009

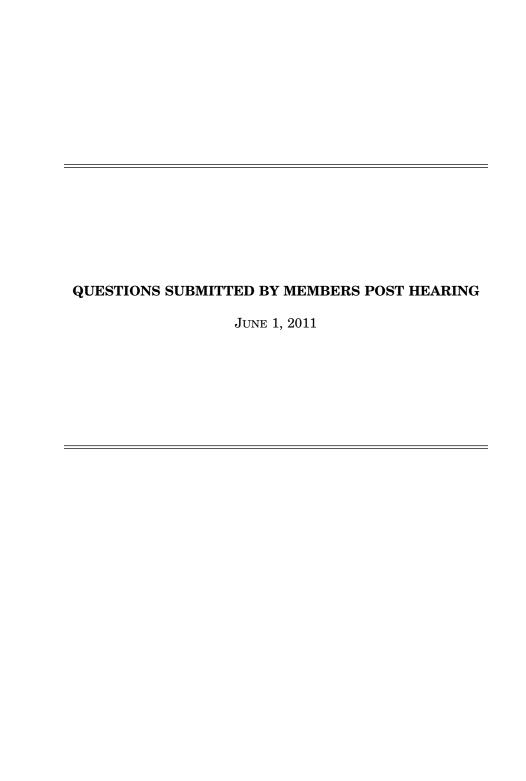
Federal grant(s) / contracts	federal agency	dollar value	subject(s) of contract or grant
N/A			
1			
Federal Contract Info on Armed Services has please provide the follo	contracts (including su wing information:	bcontracts) with the fe	deral government,
Number of contracts (in	neluding subcontracts)	with the federal govern	nment:
Current fiscal y	rear (2011):_N/A		;
Fiscal year 201	0: N/A	***************************************	•
Fiscal year 200	9:_N/A		The state of the s
Federal agencies with w	hich federal contracts	are held:	
Current fiscal ve	ar (2011):N/A		
Fiscal year 2010	N/A		<u>'</u> :
Fiscal year 2009:	N/A		Mindred stones on the contract or state.
,			
List of subjects of federa manufacturing, software services, etc.):			
Current fiscal yea	ar (2011):N/A		;
Fiscal year 2010:	N/A		
Fiscal year 2009:	N/A		*
Aggregate dollar value o	f federal contracts held	ķ.	
Current fiscal yea	r (2011):N/A		•
Fiscal year 2010:	N/A		***************************************
Fiscal year 2009:	N/A		,

Federal Grant Information: If you or the entity you represent before the Coarmed Services has grants (including subgrants) with the federal government provide the following information:	
Number of grants (including subgrants) with the federal government:	
Current fiscal year (2011): N/A	;
Fiscal year 2010: N/A	;
Fiscal year 2009: N/A	
Federal agencies with which federal grants are held:	
Current fiscal year (2011):_N/A	,
Fiscal year 2010: N/A	;
Fiscal year 2009: N/A	•
List of subjects of federal grants(s) (for example, materials research, sociolog software design, etc.):	ical study,
Current fiscal year (2011): N/A	;
Fiscal year 2010: N/A	;
Fiscal year 2009: N/A	at-traceres .
Aggregate dollar value of federal grants held:	
Current fiscal year (2011):_N/A	;
Fiscal year 2010; N/A	_;
Fiscal year 2009: N/A	



RESPONSE TO QUESTION SUBMITTED BY MR. WITTMAN

General Flynn. Before submitting the Department of the Navy (DON) 30–Year Aircraft Investment Plan to OSD, the Navy and Marine Corps assess affordability of the entire Naval Aviation portfolio to include fixed-wing, rotary-wing, and unmanned aircraft systems. For that reason, rotary-wing aircraft should be included in the 30–Year Aircraft Investment Plan. [See page 9.]



QUESTIONS SUBMITTED BY MR. WITTMAN

Mr. WITTMAN. What are your thoughts for ways to improve the 30-year ship-

building and aviation planning process?

General FLYNN. 1. The shipbuilding plan serves to provide Congress with a resource strategy for Naval force employment—a strategy that is developed through a shared Naval vision. Today that strategy exists in Cooperative Strategy for 21st Century Seapower, a shared vision between the Navy, Marine Corps and Coast Guard in support of the President's National Security Strategy. This strategy is placed into operational terms by the Naval Operations Concept 2010 (NOC 10) which describes when, where, and how U.S. Naval forces contribute to enhancing national security, preventing conflict, and prevailing in war. The shipbuilding plan is the end result of matching the necessary resources to support both the cooperative strategy and the operations concept.

2. The shipbuilding plan development must be an integrated process, combining naval strategy, its operational concepts, and resource allocation. The process would be enhanced by including a Naval risk assessment that defines the shortfalls between operational needs and resources across the full range of military operations.

3. The following comments apply to the 30–Year Aircraft Investment Plan.

- A. Include rotary-wing aircraft in the 30-Year Aircraft Investment Plan (AIP). Before submitting the Department of the Navy (DON) 30-Year AIP to OSD, the Navy and Marine Corps assess affordability of the entire Naval Aviation portfolio to include fixed-wing, rotary-wing, and unmanned aircraft systems.
- B. Adjust scope of the 30-Year AIP to 20 years instead of 30 years to reflect well-defined requirements and reasonable cost estimates.
- C. Adjust the report timeline to allow Selected Acquisition Reports (SARs) to advise the AIP; SARs are submitted in April.
- D. Consider tying the AIP requirement to the Quadrennial Defense Review (QDR). There are minor changes to the AIP from year to year that primarily reflect changes to service budget priorities. By tying the AIP to the QDR, Congress will be better able to track programmatic adjustments related to changes to defense strategy and threat posture.

Mr. WITTMAN. What are your thoughts for ways to improve the 30-year shipbuilding and aviation planning process?

Admiral Blake. The Department of the Navy supports the requirement for the submission of the Long Range Shipbuilding and Aviation Plans as they provide imsubmission of the Long Range Snipbuilding and Aviation Plans as they provide important information for Congress, the Department of Defense, and industry to make critical investment decisions. These plans support the Department's ability to build a force structure in accordance with requirements addressed in the National Defense Strategy, the Maritime Strategy and the 2010 Quadrennial Defense Review; however, some modification to the timing for submission and the time period required for investment projection will likely increase the accuracy and value of these

reports.

The shipbuilding report would be improved if its scope was limited to a period of twenty years, with the submission of funding tables for only the first ten years. The first ten years of the report are the most definitive aspect of the report, both The first ten years of the report are the most definitive aspect of the report, both in terms of requirements and cost data, and would provide the data necessary for meaningful analysis by outside entities such as the Congressional Budget Office (CBO) and Congressional Research Service (CRS). The second ten years relies on analysis of trends and projections, and the cost data is not as accurate. However, the data tables provide valuable information concerning future acquisition intentions for various ship platforms necessary to meet the perceived and anticipated

The Department of the Navy fully supports the amendment to the 2011 Ike Skelton National Defense Authorization Act, changing the requirement of the ship-building report from an annual requirement to one that requires the plan be submitted only in QDR years. However, submission of the report in the year following the QDR vice in the year of the QDR would improve the efficacy of the report. This would permit better synchronization within the Department of Defense since suffi-

cient time would have elapsed after QDR delivery to interpret the broad strategy and guidance against the practical requirements and resources backdrop. Such a process would allow the Department of the Navy to align its plans with the QDR submission. Finally, the existing requirement to submit a shipbuilding report when the number of ships drops from previous submissions should also be reconsidered. A single ship deletion or move from one year to the next is not an indicator of success or failure of the shipbuilding plan, and typically does not provide a change of

sufficient substance to warrant a new submission.

The aviation report can be improved by inclusion of all aircraft in the report. The aviation report can be improved by inclusion of an arcial in the report. Fixed wing, rotary wing, unmanned aerial systems, and trainer aircraft are all part of the Navy and Marine Corps aviation planning and programming process. Each platform has capabilities that are delivered through sufficient capacity that must be balanced in an affordable, integrated warfighting plan. Congress could then view the aviation plan in its full context. As with the shipbuilding plan, Navy recommends that subsequent aviation reports be limited to a twenty year timeframe due to the highly speculative nature of future threats and technology. Also in line with the shipbuilding plan, the aviation report should be submitted every four years in the result is a second control of the submitted every four years. in the year following each QDR.

Mr. WITTMAN. What are your thoughts for ways to improve the 30-year ship-

building and aviation planning process?

Admiral STANLEY. Because of our inability to precisely predict the future, 30-year plans should not be viewed as precise roadmaps for execution. Instead, the planning process used to assemble the reports provides a useful opportunity to consider and confront outyear implications of near-term decisions. By finding problems early, the Department can work to plan a program that will meet needs, but spread the costs

and industrial workload more reasonably.

Both plans should be submitted every four years. Current legislation requires the 30-year shipbuilding plan to be submitted every four years while the 30-year aviation plan is submitted annually. Given that the first five years of the plans contain the same information that is included in the President's Budget FYDP and that the period beyond the FYDP is less subject to change, submission of both plans every four years would reduce the burden of producing the reports while allowing Con-

gressional oversight.

Submission of both plans in the year following the Quadrennial Defense Review (QDR) would be an improvement. Current law requires the shipbuilding plan to be submitted in the same years as the QDR; however, this may provide insufficient time to incorporate QDR results. Delaying submission until the year following the QDR would ensure that the plan reflects the new strategy. Additionally, three Congressional reports require integration: The President's budget, the Selected Acquisition Reports and the 30-year plans. In order to allow this integration, submission of the 30-year plans should be required 60 days after submission of the President's budget request.

Reducing the time-frame covered by the plans to 20 years would also be an improvement. Future projections are always speculative however, those beyond 20 years are even less credible. While there is value in looking ahead, especially to the near future, we should recognize that the accuracy and value of the plans dimin-

ishes the further we get beyond the FYDP

We understand your important oversight role and want to provide information that empowers Congress to fulfill its responsibilities. I believe that implementing these improvements will result in a more balanced approach to our shipbuilding and aviation planning.

Mr. WITTMAN. What are your thoughts for ways to improve the 30-year ship-

building and aviation planning process?

General JOHNSTON. The United States Air Force takes very seriously its Strategic Planning process in order to better understand the impacts of the decisions made today, and to identify issues we will face in the out-years. We believe our planning greatly informs and improves the way we budget in order to provide the most capable Air Force at the best value for the nation's defense. Over the past two years, the 30-Year Aircraft Procurement Plan has been incorporated into the Air Force's Strategic Planning System. This past year's process for the second plan built for Congress was well executed, allowing the Air Force the opportunity to provide the Office of the Secretary of Defense (OSD) its input to the report. We are cognizant of the need for the DoD to provide the committee this report in a timely manner, and will continue to improve our processes to meet the needs of the Congress.

Two changes can help improve the planning process and the utility of the report. First, the requirement to submit an annual report should be modified to require the plan every two years or upon specific request by the Congress in response to a strategically significant budgetary change. The plan is rooted in national strategic documents that are modified either biennially or quadrennially; therefore the basis for the planning changes little each year. As such, the requirement to submit the report annually provides only marginal benefit. Second, a modification from a 30-year to a 20-year Aircraft Procurement Plan would prove just as useful in matching strategy to long-range planning because predicting the security environment and technological needs of national defense beyond 20 years into the future is highly speculative and adds little value to the national defense.

QUESTIONS SUBMITTED BY MS. HANABUSA

Ms. Hanabusa. Reflecting back on your graduation from the Naval Academy 36 years ago, do you think you would have been able to predict where we are today with regards to shipbuilding needs and current status of United States shipbuilding efforts? How impossible of a task is it to accurately predict needs thirty years in the future?

Admiral Blake. In the last thirty years, no one could have predicted the Vietnam drawdown, the end of the Cold War in the 1990s, the tragic events of September 11th, or the fact that we would be involved in two wars today. None of us can predict with 100% accuracy what the future will hold. I do, however, believe that planning is indispensable and that the Navy's planning process provides valuable insight into projected future shortfalls and needs from the shipbuilding industrial base. For example, if we did not do long range planning then we would not be able to identify the significant funding challenge with the OHIO Replacement Program or that our inventory of surface force combatants and submarines declines in large numbers in the 2020s. With this insight, we can make decisions and plan changes earlier to address concerns such as these projected shortfalls.

Ms. Hanabusa. Reflecting back on your graduation from the Naval Academy 36 years ago, do you think you would have been able to predict where we are today with regards to shipbuilding needs and current status of United States shipbuilding efforts? How impossible of a task is it to accurately predict needs thirty years in the future?

Admiral Stanley. Simple answer is no. There have been many profound events that have occurred since my graduation from the Naval Academy. Many of these affect our Defense Strategy and how we view our requirement for ships and aircraft. Precise predictions of these events or their effects are not possible.

It is the uncertainty inherent in trying to predict the future that diminishes the value of the later years in the 30–Year plans. Outyear predictions necessarily involve considerable speculation about such things as the future security environment, technology development, operational concepts, and fiscal constraints. Long range projections unravel in the face of unforeseen developments or advances. An example is the recent explosive growth in unmanned aerial systems, which would have been impossible to predict 30 years ago. It is because of this fundamental problem with long-term prediction that I recommend reducing the time-frame covered by the shipbuilding and aviation plans to 20 years.

Ms. Hanabusa. Reflecting back on your graduation from the Naval Academy 36 years ago, do you think you would have been able to predict where we are today with regards to shipbuilding needs and current status of United States shipbuilding efforts? How impossible of a task is it to accurately predict needs thirty years in the future?

General Johnston. The 30-Year Aircraft Procurement Plan provides a view of how the USAF intends to recapitalize and modernize its aircraft. Within the Future Years Defense Program (FYDP) it mirrors the President's budget. Beyond the FYDP, the recapitalization and modernization predictive profile is less precise further out in the future. Nonetheless, the USAF values the time spent developing the 30-Year Aircraft Procurement Plan for two main reasons. First, it's a tool that helps us understand the impact of decisions made today. For example, decisions regarding large scale acquisition programs like the F-35 and KC-46 will have significant influence on the shape of the Air Force ten to twenty years from now. The impact of decisions to delay or accelerate procurement profiles can be readily viewed within the plan. The second advantage of long-range planning is a greater understanding of issues that will need to be addressed in the years outside of the FYDP. For example, we recognize the need to invest in the Long Range Strike Bomber (LRS-B) and Next Generation Trainer (T-X) during these out-years. The plan helps the USAF de-conflict the timing of these programs and, in turn, mitigate the risk of unaffordable spikes in spending. That said, predicting in the out-years is difficult

because the future strategic environment will change for a variety of reasons—to include the capabilities of our allies and future threats.

 \bigcirc