

**OPTIONS AND CONSIDERATIONS FOR
ACHIEVING A 355-SHIP NAVY FROM
FORMER REAGAN ADMINISTRATION OFFICIALS**

HEARING

BEFORE THE

SUBCOMMITTEE ON SEAPOWER

OF THE

COMMITTEE ON ARMED SERVICES
UNITED STATES SENATE

ONE HUNDRED FIFTEENTH CONGRESS

FIRST SESSION

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**OPTIONS AND CONSIDERATIONS FOR
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TUESDAY, JULY 18, 2017

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

The subcommittee met, pursuant to notice, at 4:01 p.m. in Room SR-222, Russell Senate Office Building, Senator Roger Wicker (chairman of the subcommittee) presiding.

Committee members present: Senators Wicker, Rounds, Tillis, Strange, Hirono, Shaheen, Blumenthal, Kaine, and King.

OPENING STATEMENT OF SENATOR ROGER WICKER

Senator WICKER. Thank you very much. This Senate Armed Services Subcommittee hearing on Seapower will come to order.

We convene this afternoon to receive testimony on achieving the 355-ship Navy, and we receive testimony today from former Reagan Administration officials. We welcome our three distinguished witnesses: the Honorable John F. Lehman, Jr., former Secretary of the Navy; the Honorable Everett Pyatt, former Assistant Secretary of the Navy for Shipbuilding and Logistics; and the Honorable William J. Schneider, Jr., former Associate Director for National Security and International Affairs at the Office of Management and Budget.

Welcome, gentlemen.

Our subcommittee is grateful for your decades of service and your willingness to appear before us. Your experience and counsel will be invaluable as we consider options for increasing the size of our Navy and protecting our nation's security.

Today's hearing represents another step in this subcommittee's effort to examine the Navy's 355-ship requirement. We have received a classified briefing on the basis for the requirement. We have heard from shipbuilders and suppliers, held a shipbuilding hearing with Navy officials, and will meet with naval analysts next week. Our actions this year will set a firm foundation for an intelligent and responsible expansion of the fleet in the future. To that end, I would note that all members of the subcommittee have co-sponsored the SHIPS Act, legislation which would codify the Navy's requirement for 355 ships as U.S. policy. The full committee has adopted the SHIPS Act into the Fiscal Year 2018 NDAA, and our House counterparts have done the same.

The Seapower title also authorizes additional funding for five ships above the Administration's budget request while maintaining effective cost control measures on existing programs.

The Navy's 355-ship requirement has received plenty of attention on Capitol Hill and in the press. It is important to put the desire to grow the fleet into proper historical context. The United States has embarked on naval buildups roughly every 30 years over the past century—in the 1910s, then in the 1940s and 1950s, and most recently in the 1980s—in response to emerging threats, technological development, and the condition of the fleet. This is now our time to lead.

Our task is to increase the fleet's size from 276 ships today to 355 ships as soon as practicable, an increase of 79 ships. In comparison, during the 1980s' buildup, the Navy added 75 ships to the fleet in eight years, from fiscal year 1981 to fiscal year 1988, according to the Congressional Research Service.

I would stress that we need the optimal mix of ships. Tomorrow's Navy should not replicate the one we had in the past or the one we have today. In other words, this subcommittee has no intention of funding shipbuilding only for the sake of shipbuilding. Our witnesses took the 1980s buildup from a vision to reality, proving the naysayers wrong all the way. The 1980s' buildup was based on a comprehensive naval strategy, thorough analysis, and sound acquisition practices. Our witnesses thought outside the box. Thank you.

For example, they supported outfitting our ships with cutting-edge technology, but also brought battleships out of mothballs. Perhaps most important, once the Navy established the famous 600-ship requirement, the senior leadership, uniformed and civilian, rallied around it.

The subcommittee is interested in lessons learned and insights for how best to proceed with the task at hand today. Specifically, I hope our witnesses will discuss the importance of strategy for embarking on a buildup and the necessity of getting buy-in from the White House, Secretary of Defense, the Congressional defense committees, and industry; clear lines of authority and accountability for executing the shipbuilding program; fixed-price contracts and competition; delivering ships at or below cost, on schedule, with the promised capability; evaluating options related to existing ships, including extending service lives and reactivating decommissioned ships; and maximizing the use of the commercial industrial base.

It should be an interesting discussion, gentlemen. We're delighted to have you. I look forward to your testimony.

Now I recognize my dear friend, the Ranking Member, Senator Hirono.

STATEMENT OF SENATOR MAZIE HIRONO

Senator HIRONO. Thank you, Mr. Chairman.

I join the Chairman in welcoming our witnesses to the hearing this afternoon.

Last week we had a tragic loss of life for the Marine Corps and the Navy family with the crash of the KC-130 tanker in Mississippi. My thoughts, our thoughts, are with the families of the 15 Marines and one sailor who lost their lives in service to our country.

The investigation into this tragedy should guide our decisions going forward to prevent these kinds of tragedies and to provide support for our sailors and Marines.

Over the past weeks we have held hearings on the future of a number of Navy and Marine Corps programs. A major subject in these hearings has been the Chief of Naval Operations' new force structure assessment that points to having a fleet of some 355 ships. That would amount to an increase of some 80 ships from the current fleet inventory. Today's witnesses will tell us about President Reagan's expansion of the Navy that increased the fleet by roughly 70 ships by the end of the 1980s decade.

We hope to gain some insight from our witnesses today on what happened during the 1980s to increase the Navy's fleet. Reviewing that history may help us deal more effectively with the challenges facing us today. Our task before us is daunting enough, but we have to recognize that the Budget Control Act is looming in the background and will have to be dealt with. While that will not necessarily raise the debt ceiling, it also imposed Draconian caps on defense and non-defense programs and included sequestration. Sequestration or automatic, across-the-board cuts was included as a worst-case scenario to motivate Congress. The mindless cuts to defense and non-defense programs were meant to be so bad that Congress would be forced to find an alternative way forward. We all learned a lesson in 2013 when sequester was allowed to take effect. In fact, some in our industrial base are still working through the aftermath of that fiasco. Yet here we are, six years later, living with sequestration still not eliminated.

Funding for critical programs, both defense and non-defense, is not an either/or proposition. One thing is clear: if we do not deal with the Budget Control Act, we will end up cutting, not increasing, the size of the Navy. We all know the ongoing negative impact of sequestration and yet have not mustered the political will to do something about it. My hope is that at some point, sooner at this point rather than later, we will come together to pay more than lip service to the need to end sequestration.

So I look forward to working with the Chairman and other committee members to balance the needs of our military with critical domestic programs. The Navy has not submitted a plan for ramping up to meet this new 355-ship goal. Presumably, we will begin to see that plan with the submission of the fiscal year 2019 budget. I look forward to hearing your testimony this afternoon and learning from your out-of-the-box experiences in the 1980s.

Thank you very much, Mr. Chairman.

Senator WICKER. Thank you, Senator Hirono.

Dr. Lehman, we begin with you. You are recognized.

**STATEMENT OF HONORABLE JOHN F. LEHMAN, JR., FORMER
SECRETARY OF THE NAVY**

Dr. LEHMAN. Well, thank you very much. It's a real pleasure, an honor to be back in these precincts. I once did an analysis—or I didn't, but my office did an analysis of my calendar for the six years I was Secretary, and I spent a third of my time up here on the Hill, and much of that in this very room; and, of course, a lot

of other private time with members and staff. It's really a pleasure to be back.

It's not just remembering my schedule and the amount of time we spent up here, but it's often said that history doesn't repeat itself, but it sure rhymes. Those days when we started the quest for the 600-ship Navy have many close parallels to today.

Then we were at the end of a period of what was called then the "peace dividend" after Vietnam. Budgets were cut. The Navy was really in serious condition. The shipbuilding program was moribund, and everything was over running. As a result, as a nation we were losing our ability to deter the disturbers of the peace.

The same situation with very different actors is true today. Our diplomacy is weak around the world because our deterrence is weak. Diplomacy is the shadow cast by military power and naval power, and our adversaries and our allies perceive today that we cannot always be counted on. As a result, those who wish us ill are taking advantage of that and pressing the envelope of risk in North Korea, in the South China Sea, in the Arabian Gulf, the Persian Gulf.

So it's time to rebuild the Navy and restore the credibility of our diplomacy around the world by deterrence. It's my wish today that the three of us can help persuade you that not only is the time urgently here and now, but that it can be done, and it can be done affordably, and it can be done quickly.

But before I talk about that, I'd like to request, Mr. Chairman, if my full statement could be submitted for the record?

Senator WICKER. Without objection, it will be submitted.

Dr. LEHMAN. Well, thank you.

So, it all starts, as I think this subcommittee recognizes, with strategy. We have, as a nation, been ad-hocing our strategy. We've not really had a strategy for the last two decades, and it's time to restore a strategy. One of the strengths we had back in the 1980s was that starting around 1977-1978, there was a bipartisan effort to really reach agreement on a strategy. It was led by the great Scoop Jackson and the great John Tower and former chairman of this subcommittee and committee, full committee, John Warner, who I was honored to see just left the room, and Chairman Stennis. This was a true bipartisan effort to really see if there was a clear consensus on what should be done to rebuild our Navy, and to what size, and to what makeup, and under what strategy.

As a result there was a coherent, well-thought-through and, indeed, budgeted strategy that drove actually the election debate, and it was truly bipartisan. At the time, the Republicans were the minority, and it was led, as I say, by Senator Stennis and Senator Jackson. But with the help of the Navy Department and other outside thinkers, there was a truly fully-thought-through and budgeted strategy to pursue to rebuild the Navy.

My distinguished colleague to my left, Bill Schneider, was responsible for the work in putting that budget together in the two years before the Reagan Administration and oversaw its execution in the years after, and he was a very tough comptroller of our currency in the Navy. It was Ev Pyatt—these were two of the greatest leaders of that time that really carried out this strategy. Ev was responsible for executing and for putting the discipline into the ac-

quisition process and the procurement and the building of the ships, and the reactivating of the ships, which was a very important part of the strategy.

From the way we put together the strategy—again, I keep emphasizing it was a bipartisan strategy that started with our vital interests. We’re not going to be the world’s policemen. We’re not going to go looking for dragons to destroy. We are going to defend our vital interests, the vital chokepoints, the Malacca Straits, the Sunda Straits, our ability to maintain deterrence in Europe, our ability to keep hostile forces from getting control of the oil in the Persian Gulf, et cetera. From that, we derived the size and makeup of the force that would be necessary to prevail, and hence to deter, in each of those geographic areas.

From that came the number 600. The number 600 was not just pulled out of a hat. It was logically deduced from our vital interests, and that’s what must be done today, and is done and underlies the 355-ship Navy. It’s a different era. It’s different technology. The adversaries are much different. It was a bipolar world. It’s a multi-polar world today, but the same principles apply.

It’s important that that number, 355, be solidified and understood. It wasn’t just we picked it out of a hat, rolled the dice, came up with that number. This number has been developed by a lot of hard work by real operators who have had to deal and look across the waters at their adversaries just a few hundred yards away and see the tasks that they have. So this should not be treated lightly. It has to be incorporated in all of the actions taken here in this committee.

It also, if the number is solid and agreed by this committee, then it can be bid out competitively with the assurance in the shipbuilders world that, yes, this is a serious commitment, and so we will put the capital into tooling up to build these additional ships. If that number wanders around or it’s not logically based, then you will not have that economic payoff.

So this was what underlay our strategy when we launched it. It depended on the clear consensus on the nature of the strategy. That strategy understood and supported in a bipartisan basis in Congress, in the White House, in the Office of Management and Budget, in the Pentagon, and, of course, in the uniformed Navy and Marine Corps as well, and that we had.

As a result, the choices made in ships tradeoffs, we would not sacrifice readiness and sustainability. These have to be done simultaneously. You can’t say—it’s a nostrum to say that first we’ve got to take care of the readiness, then we’ll worry about expanding the fleet. It can’t be done that way. It’s got to be done simultaneously. In fact, each reinforces the other. So that allows sensible tradeoffs to be made.

I hope that you do have time to deal with the procurement side of this because one of the reasons we succeeded in building the 600-ship Navy—we got to 594—was because we put discipline in from the beginning. No contract could be let for production or ship construction without the design being complete, and then once it is let, it’s in production, that you protect the contractors from the constant change orders and changing of minds and requirements that

goes on, particularly in the post-Goldwater/Nichols bureaucracy, impinging on those contracts.

You've got to freeze the design once it's complete. When the technology changes, you introduce it in block upgrades. That allows you to compete on a firm fixed-price basis without the contractors worrying that they're going to be constantly pulled around in every different direction by change orders. It requires a continuing discipline and oversight by this committee to see that the disciplines of fixed price, of competition and production are met.

Well, I think we ought to—I can't wait for your questions. Thank you.

[The prepared statement of Mr. Lehman follows:]

PREPARED STATEMENT BY JOHN F. LEHMAN, JR.

Good afternoon Mr. Chairman, Ranking Member and members of the Committee. It is a pleasure to be here to describe the events that made the 1980s Navy build-up possible, both in planning and execution. My purpose here today is to recommend to you that it is time for another such naval buildup and to try to convince you that it can be done affordably and rapidly.

To begin with, the successful building of the 600 Ship Navy of the '80s was based on a coherent global National Strategy and its integral naval component; something that has been absent for the last twenty-five years.

Since World War II it has been rare to find major changes of direction in American national security policy. The first of these changes took place in the years after the war when optimism for world peace was replaced by the Iron Curtain, NATO, and the policy of Containment of a militant Soviet Union.

Another sea-change took place in 1981, when a bi-partisan majority emerged to adopt a more activist pushback against Soviet aggression and Iranian terror. The new strategy was backed up by a major expansion of American military power.

At the center of the new strategy was the U.S. Navy. To carry out this global forward strategy the Navy and Marine force structure had to be expanded rapidly to 600 ships including 15 carrier battle groups with 14 Active and 2 Reserve carrier air wings, four surface action groups built around four battleships, Marine amphibious shipping sufficient for 50,000 marines, 100 attack submarines, 100 frigates, 137 cruisers and destroyers and more than 30 ballistic missile submarines. Of equal importance was a massive program of global forward naval exercises to demonstrate the power of NATO to command the seas and surround, attack and defeat any attempt by the Soviet Forces to attack NATO in central Europe.

We believed at the time that 90% of the deterrent power of this buildup could be achieved in the first year. This was done by publicly declaring and explaining the strategy, especially its naval component, and taking actions that left no doubt among friend and foe that it would be achieved. Those actions were to submit a revised Defense budget to Congress that fully funded the buildup; a program to reactivate four battleships and modernize frigates and destroyers, commission into the USN, four ultra-modern destroyers built in Mississippi ordered and paid for by Iran, extend the lives of four carriers through a SLEP program, re-open two aircraft production lines and increase the procurement of others.

Implementation was the next step. It was clear that long term success of the plan depended on controlling cost and building the fleet on schedule. At that time, full acquisition authority and responsibility rested with the Secretary of the Navy, the CNO and the Commandant.

We knew that affordability was the major challenge. Others believed that the task was impossible within the time frame. Yet the 600 ship Navy was nearly complete when the Soviet Union collapsed. Key to achieving this end was a clear focus on ship affordability recognizing that budgets were limited and a high/low, new/old mix of ships was necessary to satisfy military needs and required force levels.

Even with the substantially increased budget we knew that success depended upon maximum use of fixed price competition which required design stability, firm control of design changes and planned block upgrades over system life. These principles were implemented in a competitive procurement environment giving maximum incentive to contractors to lower costs rather than justify the highest costs possible in a negotiated procurement. If real competition had not used, (as it is not commonly used today,) then program completion would have been impossible. Reliance on competition also preserved and expanded the industrial base.

My first procurement action as secretary was to recruit George Sawyer, a very successful engineering CEO with extensive experience in the private sector and the Navy as a former nuclear qualified submarine officer. We then recruited Ev Pyatt, a career civil servant with top level experience in R&D, force planning and acquisition policy. He had been Principal Deputy assistant secretary for logistics in the prior administration overseeing production and logistics. The two combined to provide the leadership necessary to get the system moving. George concentrated on activating battleships, invented the two carrier acquisition strategy and dual source annual competition in submarines and surface ships. Ev developed a plan to acquire 12 prepositioning ships for the Marines and 5 tankers. These were built with commercial specifications rather than military specifications at one fifth the cost of producing them under Defense Acquisition Regulations. Funds saved in that program were used to build additional combatant ships. They developed the plan to bring competition into the sole source cruiser program, accelerating completion and saving hundreds of millions. This also provided shipyard capacity to start the DDG-51 program originally planned for 23 ships, but the success has raised total production to over 60 ships.

Equally important in immediately improving deterrence was sending a NATO fleet of 83 ships including three carriers north to exercise in the Norwegian and Barents Seas adjacent to the Soviet Union only 7 months after the new administration was inaugurated. These exercises were then carried out annually in the Atlantic, Pacific, Mediterranean and Arctic theaters with tactics and numbers increased and improved with lessons learned each year.

At first, the Soviets were aghast at this new United States Navy and NATO strategy, and then soon tried to react with increasing vigor. But as more and more ships, aircraft and technology joined the American fleet it became clear to the Soviet Navy that they could not cope. After NATO's *Ocean Safari* exercises in 1986, confounded and humiliated the Soviet air and naval defenses with United States carriers now able to operate with impunity inside Norwegian fjords, the Soviet General Staff informed the Politburo that the budget of the Northern Fleet and Air Force must be trebled if they were to be able to defend the homeland. Many have seen this as the point of collapse of Soviet will. After beggaring their economy to achieve the dream of military superiority they now found themselves worse off than ever.

The forward strategy and maritime supremacy that had been asserted and built since 1981, led by the President and supported by a bi-partisan Congress had been vindicated. Along with the modernization and increase in NATO land and air forces, ten years of aggressive global forward naval operations had convinced the Soviet leadership that they could not defend their strategic assets and their homeland without impossibly large increases in spending. That fact had removed the political power of the Soviet military, and created the political opportunity for strong leaders like Gorbachev and Yeltsin to pursue *Perestroika* and *Glasnost* and to seize the opportunity to negotiate an end to the Cold War with President George Bush and his Secretary of State Jim Baker.

On December 8, 1991, The Soviet Union was dissolved and the Cold War was over. There were many factors that brought about this momentous threshold in History; the reforms and leadership of President Ronald Reagan, Margaret Thatcher and Mikhail Gorbachev, were major factors. But the fundamental shift in the naval balance and re-assertion of the power of geography was decisive and created the environment in which Western diplomacy could prevail and bring an end to the Cold War.

LESSONS FROM THE 1980S THAT APPLY TODAY

One of the consequences of the U.S. maritime program in the 1980s was it gave the President (and his successors) many more options to respond to intense security crises than would have been the case if Reagan tried to conduct his foreign policy (that was aimed at upending six decades of murderous Soviet rule rather than containing it) with his two predecessors' flaccid defense program and budget.

The consequences of a quarter century of the bipartisan neglect of our defense posture had deeply eroded our ability to deter disturbers of the peace. The situation today is similar. Our adversaries actively seek to take advantage of our weakness. We are for instance currently being held at bay by one of the poorest nations on earth. The President's diplomatic power is deeply diminished by a navy stretched too thin and woefully underfunded. The President should have the option to prevent North Korea from launching any ballistic missiles that don't return to earth on its territory. He should have the option to maintain a carrier Battle Group in the Yellow Sea and Sea of Japan with a suitable number Aegis ships that could prevent North Korean ballistic missile launches in the boost/ascent phase.

To move rapidly to restore that essential capability to deter our enemies:

1. We must have a strategy with a strong naval component.
2. Attack the enormous bureaucratic bloat that can streamline processes and save tens of billions of dollars.
3. The procurement reforms enacted in the last two NDAs must be implemented
4. The SecNav, CNO and Commandant must be given the authority and held accountable for Procurement execution
5. They must have firm control of all design changes in production.
6. No program should be put into production until the design is completed.
7. Fixed-price competition for production programs should be the rule.
8. Early retired frigates, cruisers and logistic ships should be re-activated with essential upgrades
9. The 1980s program for build/convert and charter for non-combatant logistics ships should be re-started.

There are of course other very important issues that need to be addressed including readiness, personnel policies, zero-tolerance, political correctness, compensation, and reserves. All of them however can be resolved by good leadership.

The experience of the 1980s demonstrated that 90 percent of the benefits from a program to restore American command of the seas and naval supremacy can be reaped immediately. Our adversaries will be forced to trim their sails. As John McCain famously said "Russia is a gas-station with an economy the size of Denmark." They know that they cannot challenge a rebuilt U.S. Fleet with their professional but very small one-carrier Navy. The Chinese are at least a decade away from matching American naval and air capabilities, and more likely, can never do so. American diplomacy, again backed with naval and military superiority will instantly regain credibility.

Senator WICKER. Well, thank you very much for your testimony.

I think, Mr. Pyatt, Mr. Secretary, we have you next. So proceed in your own fashion, sir.

STATEMENT OF HONORABLE EVERETT PYATT, FORMER ASSISTANT SECRETARY OF THE NAVY FOR SHIPBUILDING AND LOGISTICS

Mr. PYATT. I guess, in kind of relating here, he was the architect and I was the garage mechanic.

But I'd like to talk to you about some of the details that caused success and caused failure.

He's right on discipline in the system. It loves to make changes, loves to award a cost-plus contract to get going, even though the design is not done, and invariably it's a disaster, and you've seen that on what you've done on the CVN-78 and the way you followed it and tried to lead it and corral it into something that has a long way to go.

One of the fundamental things that I see is that over the last period of time you're talking about until now, the average cost of ships and cost of dollars, the program has increased from \$1.6 billion per ship to \$2.3 billion. This is caused by technological things. It's caused by business activity being a very low rate, so overhead doesn't get amortized over such a large basis. This is what the management has to work on to make an affordable program to bring to the Congress.

It's a lot of details involved, but one of the ones that you have to worry about is incremental funding, invariably a disaster. Incremental funding was abolished in the 1950s or 1960s because it was impossible to control the cost of ships. It's been basically adhered to since then, with the exception of the CVN-78, the DDG-1000, and the LCS, which have all gotten into serious trouble. It takes away the discipline needed to manage.

Senator SHAHEEN. Mr. Chairman, may we ask the witness to define incremental funding?

Mr. PYATT. Yes. Incremental funding—full funding, let's start there. Full funding means that when you authorize and appropriate a ship, you give them all the money necessary to complete that ship. There may be and usually is a small amount of long lead money that buys engines and things like that. But when you authorize and appropriate a ship, it should be full funded. That's been a successful program. Every ship we built was full funded, including two carriers and Tridents. It's not an impossible task. What it really says is, executive department, this is all the money you're getting, you'd better live with it. I think that's a very important thing to control the cost of the Navy.

But it also allowed us to make some savings and, as I mentioned in the testimony, which I'd like to be included in the record, if I may, sir—

Senator WICKER. Your testimony will be included.

Mr. PYATT. Thank you.

It allowed us to set up the competition. The contractors knew what was there, and it just—it's important.

I put in here a little side commentary that ships aren't the only thing having the disease of excessive cost growth. Airplanes—in fact, one of the four studies recommended not building more carriers until you get enough airplanes to put on them. It's not quite that bad, but not far off. So it's something to think about.

But the most important aspect of what we did was our people. Navy was blessed with a strong technological and business group at that time. It was partially destroyed in the 1990s and is slowly being rebuilt. So one of the things that whoever does this has to worry about is developing and maintaining, both in uniform and in civilians, the skill of a knowledgeable buyer. Everybody can turn out 600-page respect for a handgun, but it takes somebody to realize there's an essential way to buy a handgun.

So that's what I would say, and I would also add on to that, there's a person called a contracting officer. Most people don't have any idea who that is, but it is the only person who can obligate the government. We can talk all we want to, but until that person signs on the line, it's not an obligation. You need to develop him and support him. This is, again, from the garage mechanic's point of view.

From this committee in particular, the program could use a little positive support. You've had some successes, the P-8 program, the DDG-51 program, which I'd note that the GAO still calls it an overrun. I call it a success because they started out with 23 and wound up with 63. That's a successful program, and that's what this committee should reinforce and encourage.

So again, I'd summarize it and say that all programs are not typified by the LCS and CVN-78. You know a lot about the CVN-78, and while I was waiting today I just discovered there's another \$700 million buried in the post-delivery costs for reasons I don't understand. But the R&D shouldn't be that much. It's \$400 million in R&D for a ship that's been delivered.

There's another issue on carriers that's coming up. I'm talking about the future now. These are the things I think you will need

to consider in the future. Another issue is coming up regarding the use of a small carrier. That's been a long-time issue, and there's lots of reasons for a smaller carrier, but the study that was done, to me, ignored the most obvious answer, which is a stripped down, basic Ford, get rid of a lot of the excessive stuff that's not necessary, because when you go to a carrier, the place that really determines what you need is the maintenance deck. There you see the airplanes that are being worked on, and particularly now, with many types and models, and probably expanded, the fellows who run that deck are going to need space, and I'm not sure a small carrier provides it. It's a worthwhile study, and I hope it gets continued.

The SSBN, early in its design phases, plenty of time for things to go wrong, also get corrected. I think it's probably the most competent technical team in the government, and I would expect success, but things are never easy.

The attack submarine program, running very smoothly right now. The risks coming up involve the addition of the Virginia module and what turbulence it may bring.

Another problem with the submarine that I only talked about a little bit, and I'm sure this is heresy amongst many, is something smaller than the Virginia class. They're now at \$2.5 to \$2.7 billion, and I'm not really sure that all those capabilities are really needed for the missions of the future, since many of the missions require much less capability.

You might want to look at what I call a submarine frigate, a smaller ship, a little less money, but I don't think we're going to get to the force levels and within the budget you're talking about with a submarine.

Senator WICKER. Where can we look at one?

Mr. PYATT. You can't. Look at the idea is what I said, should have said. I misspoke.

Senator WICKER. No. No, you didn't misspeak. I just wondered if that concept existed anywhere on the face of the earth.

Mr. PYATT. Right here.

Senator WICKER. Okay.

Mr. PYATT. This is a small part of the face of the earth.

[Laughter.]

Mr. PYATT. DDG-51 Phase III, that's a scary program to me. I think the idea of doing it as a change order based on the basic ship was a good idea, but there's a lot of places where it could still go wrong, and I'm particularly worried about the radar, and it's the plan to deliver it on time for a radar that hasn't been developed yet. There are some problems built in there.

This committee has been very supportive and very imaginative in pushing a new frigate. We need a real frigate in the Navy. We need an ASW frigate. The Navy just started in the evolution of a design. It's got a long way to go yet. The last version of it, even though it's an ASW ship, did not include ASW weapons, so there's some work to be done. It didn't include VLS, a vertical launch system, which is kind of mandatory for any future weapon system.

So, there are problems the next managers have to worry about. We talked about the tanker, the new tanker. I don't know why it

cost so much. It has more than doubled in price since the ones we bought, and I don't understand why.

Now there's a new concept of icebreakers in the defense budget. This is a perfect candidate for a build and charter program like we did on the TAKs. Build and charter rules are a little different now, but I don't see why you want to spend scarce defense dollars and displace a destroyer or two destroyers and a submarine for building icebreakers. They're necessary, I understand that. There's got to be an alternative way to achieve it, and I'd like to leave that as an idea.

So that concludes. We did it, and we did 17 ships that way. I did them. It can be done, and I think it's a good use.

The other thing that happened to us and building the TAKs, even at that time I think the Navy estimate was \$400 million for militarized ship. We built in the commercial standards. They survived and have been used for 30 years or so, and they've done quite well for the Marines, I understand. So there's no reason to go through all the defense bureaucracy to build an icebreaker. There are plenty of icebreakers around and, first of all, you need to involve Defense. They're the experts in the world, and they built all the Russian ones. So I encourage that line of thought.

Sir, that concludes my summary of my testimony, which was not much of a summary, I think. Appreciate your time, sir.

[The prepared statement of Mr. Pyatt follows:]

PREPARED STATEMENT BY EVERETT PYATT

ACQUIRING THE FUTURE NAVY

Good afternoon, Mr. Chairman, Ranking Member and members of the Committee. It is my pleasure to relate some of my experiences in rebuilding the Navy and review future opportunities.

Both Armed Services Committee markups contain resolute support for an enlarged Navy consisting of 355 ships. Based upon the experiences described by Secretary Lehman, this is reasonable task, well within existing industrial capabilities. Some assurance will be needed to support limited expansion at the supplier level, but these can be handled within existing authorities. The current NDAA will be a very important part of providing necessary assurances for supplier firms.

However, there are many risks that could destroy this posture. The most obvious is cost growth. As Secretary Lehman described, we placed great emphasis on controlling cost, knowing that overruns would be destructive. The same applies now, and even to a greater extent due to the current budget deficit issues. The expansion is likely to extend over a decade and involve changes in the military balance, new technology and production issues. Risks must be anticipated and eliminated where possible.

The Navy Secretary Lehman described involved the addition of 73 ships from the FY 1981 fleet to reach 594 by the end of FY 1987. The plan for the future calls for 80 ships to be added to the current 275 ship fleet. This can be achieved if funds are available. There is not likely to be a technical problem if current risks are managed. I will discuss these later.

The fundamental financial problem is that the average cost of the shipbuilding program in FY 2017 dollars has increased from \$1.6 billion in the 1980s to \$2.3 billion now. Both packages include high-end carriers and ballistic missile submarines and are generally comparable packages. Reasons include military performance improvements, lack of competition, low facilities utilization rates, overhead growth and likely others. All need to be challenged as part of the program.

Funding will determine the pace of any fleet increase. Current budget plans support a 275 ship navy. Building ten additional ships a year will add \$23 billion to SCN funding annually, funding the 355 ship Navy in approximately 8 years. The exact number depends on deactivation rates and the number of ships now under construction.

Average funding requirement can be changed through reactivations and service life extension renewals. These have to be a part of any plan as it was in the 1980s. Reactivation should start with several of the retired FFG-7 class and outfitted to support current operations.

Cost of ships has led to more incremental funding instead of full funding. Incremental funding was eliminated in the early 1960s because it did not provide adequate cost control. That conclusion has been proved right again in the *Ford*-class and DDG 1000 programs. It is now planned for the SSBN.

During the 1980s, there was no incremental funding except for limited long lead funding. Tridents were full funded, as were the two-ship carrier procurements.

In the interest of cost control, all shipbuilding budgets should resume the policy of full funding. This eliminates budget caused manufacturing disruptions and allows smoothly running programs to proceed quickly and reduce costs.

Production profiles must be considered to maximize production efficiency. Too often profiles are determined without considering production impact resulting in excessive ship cost.

Competition is the most effective means to control cost. It brings at least a 10% reduction in cost and a much faster learning process. We achieved these savings. Each year, I would bring the savings list to the HASC Seapower Subcommittee and ask for another ship in the plan to be authorized. It always happened.

The bottom line is the planned program, if completed in 8 years, will require 10 ships above the current program, effectively doubling the funding. These 10 ships will cost \$23 B a year more given current management attitudes. If management adopted a more aggressive cost control approach as outlined by Secretary Lehman, these costs would fall by 10–20% a year, making the program more affordable. This committee has defined the need for cost control with actions regarding carrier funding in FORD and now in following carriers. Cost control emphasis needs to be extended to all ship classes by demanding results from Navy leadership. Otherwise I fear the necessary buildup will die on the budgetary table.

Ships are not the only category of systems with this disease. Aircraft costs have grown so rapidly that there are not enough aircraft to fill all air-wings. As a point of departure, the Navy and Marines have about 4000 aircraft. Since aircraft have roughly 20-year lives, annual procurement should be 200 aircraft. That has not happened for years. Consequently the force has aged much beyond the optimal 10-year average age. In fact, one of the studies suggested not building more carriers until sufficient aircraft were available to fill the decks. Major efforts need to be concentrated on aircraft cost reduction.

People make success happen. We pay too little attention to the process of developing professional skills and rewarding success. Secretary Lehman approved and we implemented the Navy Materiel Professional program for military hoping to provide a good career path for the future. It was copied and integrated into a DoD wide program and now appears to be dead. Hopefully this concept will be restarted as a way to include military experience more into the acquisition process.

He eliminated a layer of bureaucracy, the Navy Materiel Command, not needed for effective management. It has not returned.

We need to be more supportive of the folks trying to make these programs happen. It is often a thankless task, but many successes happen. These are program managers, technical professional, business managers and an increasing number of lawyers needed to negotiate the procurement law quagmire. And then there are the people we forget who are the only ones authorized to obligate the government to a contract. They are contracting officers holding warrants for contracting. They must make the determination that the prices are “fair and reasonable”. They deserve our full support in the quest for cost control.

Acquisition could use some positive support. We know the problem programs, but the successes should also get prominent recognition. Results are not all bad as some proclaim. The P-8 program is being completed within the original estimates. The submarine program is within the multiyear budget. The DDG-51 program has expanded to include more than 40 ships above the original plan. For some reason, the GAO continues to insist this is an overrun. I call it a success. Hopefully the DDG-51 phase 3 will not ruin this record.

In summary, all programs are not typified by LCS and CVN results.

Each ship class will have its own challenges.

This Committee knows about the CVN problems and has been the leader in focusing attention to the problem areas, starting with cost, continuing with the Navy's decision to skip component shock testing and deferring ship shock testing several years. Given the number of weapons being designed to attack carriers, this attitude is unfathomable. For some reason, the Navy thinks the delay that might be caused if there are bad test results is unacceptable, but it is fine to hold the KENNEDY

two years awaiting a radar development that is not necessary for ship operation. I simply do not understand.

Carrier costs have re-raised the issue of a smaller carrier to provide more fleet options. This is a worthwhile effort, but the RAND study left out an obvious alternative of a conventionally powered *Ford*-class ship. If the full range of air wing aircraft is envisioned, then hanger space will be very important for maintenance operations. The *America*-class LHA solves this problem by limiting aircraft types. The current NDAA plan probably does not meet the analytic requirements for a new start defined in last year's NDAA. The idea should not die for procedural reasons. Controlling carrier cost will be a basic challenge to the whole 355 ship navy. We did it by building a frozen design in two ship packages, fully funded at the start.

The *Columbia*-class SSBN is following a sound risk reduction process, but cost growth risk remains. A significant increase in the cost of this program could derail the whole Navy growth plan. Each description of the cost status by the program office seems to show less assurance of cost control. This program should be full funded after long lead items are purchased. Each Trident ship was full funded successfully.

The attack submarine program is under a multiyear contract and proceeding smoothly. The addition of the Virginia payload module introduces additional risk. If the program is expanded to 3–4 ships a year, that expansion should be done competitively and allow each shipbuilder to build the complete ship rather than portions if justified by cost.

Increasing submarine cost and tight budget suggest it is appropriate to look at a less costly submarine. The fleet studies suggested air independent ships, but this concept is being rejected. Another approach could be a smaller SSN, designed to be more special purpose, in other words a submarine frigate. This may be the only way to get to the desired submarine force level.

The DDG–51 phase 3 program shows early signs of problems. The current program plans an on time delivery of a radar that has not completed development and is on a very optimistic schedule. As shown in the carrier program, the radar program office often has delays and has been an advocate of two-phase ship completion to mask these delays. Refusal of the designing shipyard to accept a fixed price incentive contract is a very clear indication of risk problems due to design problems and late government furnished equipment. Agreement by the second shipyard may simply be a bid low and get even on changes ploy. However, the concept of building a lead ship in two yards is a good one because there will be many ships built. This step enhances the possibility of competitive production.

The new frigate program is in the early stages of requirement definition. Hopefully it evolves as a significant anti-submarine warfare platform, and very much interconnected with the distributed lethality concept. It may evolve that foreign designs can provide the basic ship to be outfitted with current U.S. combat systems. We did a foreign ship transfer with a mine countermeasures ship. Even though the design was frozen, it was not an easy task.

A meaningful frigate is a necessity. The program will require significant leadership attention to make it happen. It is off to a good start. However it does not include a ceiling price, or provision for anti submarine weapons including ASROC and ship launched torpedoes and precludes the use of vertical launchers. As soon as industrial interest determined, the process should change to include funded competitive concept studies. This would allow contractors to include ideas and systems not in the current list. The Navy program office would then evaluate realism. Contractor teams would include a second source and must demonstrate capability to produce pre-outfitted modular designs. The conclusion of these studies would be competitive proposals to design and build a lead ship with priced options for follow ships. This process is a copy of the original concept formulation/contract definition process defined by DepSecDef Packard.

In my opinion, this Committee deserves accolades for getting a new frigate program underway.

An example of failure to achieve cost control is the new replenishment ship. It is claimed to have the same performance as the current tankers, yet costs almost twice as much in constant dollars. I have no idea why this is.

The NDAA includes Coast Guard icebreakers as part of the Navy program for the first time. This will eliminate 2–3 destroyers or submarines from the program, given the budget constraints. They will not count as part of the 355 ship navy. This program is an excellent candidate for a build and charter program similar to the one we did for the prepositioning ships and tankers. They can be either bare boat and crewed by Coast Guard personnel or a mixed crew as the Navy did it.

This concludes my testimony based on my experiences of acquiring nearly 200 ships for the Navy in an executive role and providing staff support to several other ship acquisition decisions.

Thank you for your time.

Senator WICKER. Well, we appreciate your participation. If Mr. Lehman was the inspirational leader and you were the garage mechanic, was Mr. Schneider the banker?

Mr. PYATT. Yes.

[Laughter.]

Senator WICKER. Okay. Well, Mr. Schneider, you are recognized.

**STATEMENT OF HONORABLE WILLIAM J. SCHNEIDER, JR.,
FORMER ASSOCIATE DIRECTOR FOR NATIONAL SECURITY
AND INTERNATIONAL AFFAIRS AT THE OFFICE OF MANAGEMENT AND BUDGET**

Mr. SCHNEIDER. Thank you very much, Mr. Chairman and distinguished members of the committee. I do also have a prepared statement. With your permission, I'd like to submit it for the record.

Senator WICKER. Without objection, all three statements are admitted to the record.

Mr. SCHNEIDER. Thank you again, Mr. Chairman.

I served as Associate Director of OMB for National Security and International Affairs, which was the budgets of the Department of Defense, the intelligence community, and the Department of State. The function of the Office of Management and Budget, which is, as you know, an office of the Executive Office of the President, was to assure that the President's intent was reflected in both the programs and budgets that were submitted for the President's approval.

As Secretary Lehman noted, there was a good deal of preparation that took place before the election so that the staff, including myself, had a very clear idea of the strategy that then-President Reagan would pursue as President.

Second, the President was very well aware of the intersection of a sound economy and the ability to produce a strong national defense. At the time, although it's hard to remember now, one of the most frequently used statistics was the misery index, which was the sum of inflation and the prevailing short-term interest rate, and it was over 20 percent at the time. The economy was in a chaotic state at this point, but the President recognized that you could not fix the economy first and work on the defense program later. He recognized the congruence of the two. He had a very affable personality that could work very well with the opposition, and he was very successful in working a deal with then-Speaker O'Neill that produced a combination of tax cuts and defense program increases that kept those forces united in the Congress. So it was a very effective collaboration on bringing the economy together so that the resources would be available for a very substantial increase in defense.

The President recognized the centrality of maritime power in American national security policy, and his success in building a 600-ship Navy was a remarkable story of a committed executive and legislative branch leadership.

The rebuilding of American military power as a maritime nation was one of the major themes of his presidency and perhaps is among the most enduring legacies of his tenure. Naval power and presence was a primary enabler of President Reagan's policy focus

of inflicting costs on the Soviet Union as they attempted to maintain their grip on Europe while projecting their power in the Western Hemisphere, Africa, and the Middle East.

The strategy that Secretary Lehman mentioned walked away from the previous administration's strategy of defense of sea control, which was mainly for protecting sea lanes, to a strategy of maritime supremacy, a term he often used, and delineated a defense program that was explicitly in support of those activities, and he had a very sharp focus on programs that should be supported in the defense budget to achieve that strategic aim and those that should be jettisoned. I was pleased to have an opportunity to be ruthless in getting rid of the programs that did not support the strategy.

I'll just reinforce the point that Secretary Pyatt made about using the discipline of full funding. That was a very important dimension of the success because it assured that the program funding was going to be there when the ships were built and that the leadership in the Department had the ability to enforce discipline on the acquisition process, and that was very valuable.

Nevertheless, because of the efficient way in which the Department managed the contractor base, the Reagan Administration had 32 multi-year programs in the defense program to be able to take advantage of the economies of scale. Looking at the 355-ship goal, I believe it is achievable. The acquisition discipline that Secretary Lehman and Secretary Pyatt referred to is certainly there and will help deliver the program, and there is adequate excess capacity in the industry to be able to make good on what is a congressional commitment, as well as a presidential commitment.

So I think the opportunity is here to recover our maritime strength, and I would be pleased to do anything I can to contribute to the ability of this committee to be helpful.

Thank you, Mr. Chairman.

[The prepared statement of Mr. Schneider follows:]

PREPARED STATEMENT BY WILLIAM SCHNEIDER, JR.¹

FINANCING THE REAGAN 600-SHIP NAVAL MODERNIZATION PROGRAM, 1981-89

Mr. Chairman and distinguished Members of the Seapower Subcommittee:

President Reagan recognized the centrality of maritime power in American national security policy. His successful effort in creating a 600-ship Navy to support it is a remarkable story of committed national Executive and Legislative branch leadership. More than three decades later, it is important to recall the policy context within which those decisions were made and how that policy context shaped his effort to rebuild U.S. military to support American diplomacy based on a policy of "peace through strength".

President Reagan was elected to office in November 1980 at an extraordinary juncture in our modern history. Soviet dominance of Central and Eastern Europe, in place since 1945, was solidified by the ruthless Soviet enforcement of the Brezhnev Doctrine. This doctrine was imposed following the invasion and suppression of the Prague Spring movement in 1968. Regrettably, Western resignation and acceptance of the invasion's permanence reinforced and amplified Soviet dominance.² By

¹ Senior Fellow, Hudson Institute; he formerly served as Associate Director, National Security and International Affairs, Office of Management and Budget, Executive Office of the President, and Under Secretary of State during the administration of President Ronald Reagan.

² Following the Soviet invasion of Czechoslovakia in August 1968, Soviet Communist Party General Secretary, Leonid Brezhnev declared at the Fifth Congress of the Polish United Workers' Party on November 13, 1968 a doctrine to justify future intervention in States subordinate

1980, the Soviet Union had invaded Afghanistan and projected its military power through surrogate movements in the Western Hemisphere, Africa, South Asia, and the Middle East. The Soviet Union's nuclear modernization surge, enabled by the unenforced arms control agreements of the early 1970s jeopardized the credibility of the U.S. nuclear deterrent, and the extended deterrent. Moreover, the hollowed-out United States military force was unable to impose a credible deterrent to arrest the global Soviet advance. The failure of the Desert One mission to rescue United States diplomats taken hostage by Iranian authorities in 1979 was both a tragedy and a metaphor for the failed policies President Reagan ultimately reversed.

National policy paralysis in 1980 was twinned with the consequences of extraordinarily damaging sequence of economic and financial policy choices made by the prior administration. When President Reagan took office, the rate of inflation was over 12 percent, while the prime interest rate was over 15 percent; ruinous to both the economy and national defense. This was not a promising fiscal environment to initiate a major defense recapitalization and modernization effort.

President Reagan recognized that a vibrant economy was a precondition to being able to conduct an effective national security policy, but—perhaps uniquely—he also recognized their mutual interdependence. In 1981, rather than “fixing” the ailing economy he inherited first, he, in collaboration with House Speaker Tip O’Neill, put aside their considerable policy differences and converged on a policy course of action that permitted both economic and national security aims to be harmonized and implemented. The outcome produced by their collaboration resulted in an 18 year-long economic expansion, and the collapse of the former Soviet Union.

THE REAGAN NAVAL MODERNIZATION PROGRAM IN ITS FOREIGN POLICY CONTEXT

U.S. defense modernization needs were extensive. After a prolonged period of neglect—as Secretary Weinberger put it at the outset of the Reagan administration, “there was nothing we did not need”. However, the President’s national security strategy drove the defense budget toward a narrow range of priorities that would underpin his specific diplomatic objectives. President Reagan reversed the policy of containment that had been in place since 1950. He adopted instead a United States national security policy to undermine the legitimacy of the Soviet State and its capacity to dominate the nations of Central and Eastern Europe while mounting a global threat to United States vital interests.

The rebuilding of American military power as a maritime nation was one of the major themes of the Reagan Presidency, and among the most enduring legacies of his tenure. Naval power and presence was a primary enabler of President Reagan’s policy focus of inflicting costs on the Soviet Union as they attempted to maintain their grip on Europe while projecting their power into the Western Hemisphere, Africa, the Middle East and South Asia. The implementation of the policy was not simply a question of the number of ships; instead the mix of types of ships and their capabilities were decisive.

The Reagan administration rejected the maritime doctrine of the Carter administration—“defensive sea control”—which focused on keeping major sea lanes open. Instead, the Reagan administration implemented its “maritime supremacy” strategy as President Reagan often referred to it, which shaped the characteristics and sizing of its associated naval recapitalization and modernization program. The Reagan administration’s maritime strategy was designed to contribute to deterrence of Soviet efforts to coercively threaten or use its military power against United States or allied nations’ interests. It was also designed to be global in reach based on the forward deployment of naval forces. Typically, over 100 naval combatant vessels were forward deployed at any given time on a world-wide basis. The maritime strategy was also coupled to collaborative operations with allied naval forces.

The three-phase approach to the implementation of the maritime strategy (“deterrence or the transition to war; seizing the initiative, and carrying the fight to the enemy”) meant that aircraft carrier battle group expansion would be the most significant driver of President Reagan’s modernization initiative. Each carrier battle

to the Soviet Union. He said, “When forces that are hostile to socialism try to turn the development of some socialist country towards capitalism, it becomes not only a problem of the country concerned, but a common problem and concern of all socialist countries.” The Department of State counseled acceptance of the Brezhnev Doctrine. For example, “Because the United States interpreted the Brezhnev Doctrine and the history of Soviet interventions in Europe as defending established territory, not expanding Soviet power, the aftermath of the Czech crisis also lent support to voices in the United States Congress calling for a reduction in United States military forces in Europe”. United States Department of State, *Milestones in the History of Foreign Relations, “Soviet Invasion of Czechoslovakia, 1968”*; <https://history.state.gov/milestones/1961-1968/soviet-invasion-czechoslovakia>

group was composed of a tactical air wing (80–90 aircraft), 2–3 cruisers, 2–4 destroyers, 2–6 frigates, 2 fast-attack nuclear submarines, and one combat support ship (fleet oiler or ammunition ship).

The capacity to project United States military power world-wide was the centerpiece of the Reagan administration’s policy objective of blocking the expansion of Soviet military power. It enabled attacking the extremities of its global reach in areas such as Central America, Africa, the Middle East, and South Asia while holding Soviet military power in Europe at risk. The Naval modernization program was also able to leverage technology developments, particularly the technologies of precision strike and persistent surveillance that was responsible for the eclipse of Soviet military power in Europe. The U.S. Navy’s forward presence amplified the parallel investments made in the U.S. Army’s Air-Land Battle program and the U.S. Air Force “Follow-on-Force-Attack” initiative. Taken together these efforts created a powerful combined arms force to support the President’s national defense strategy that in turn underpinned his national security strategy of delegitimizing and rolling-back the Soviet Union’s dominance of Central and Eastern Europe while blocking the outward thrust of Soviet military power elsewhere in the world.

THE REAGAN ADMINISTRATION’S NAVAL MODERNIZATION PROGRAM

Figure 1 below summarizes the impact on both the number and capabilities mix of naval combatant vessels of the Reagan naval modernization program during his term of office.

Figure 1: Naval Modernization During the Reagan Administration, 1981–89

DATE	9/30/1981	9/30/1989
BATTLESHIPS	0	4
CARRIERS	12	14
CRUISERS	27	40
DESTROYERS	91	68
FRIGATES	78	100
SUBMARINES	87	99
SSBNS	34	36
COMMAND SHIPS	4	4
MINE WARFARE	25	23
PATROL	1	6
AMPHIBIOUS	61	61
AUXILIARY	101	137
SURFACE WARSHIPS	196	212
TOTAL ACTIVE	521	592

Source: U.S. Ship Force Levels, 1986–Present
<https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html>

During its eight-year term, the Reagan administration added 71 ships led by two additional aircraft carrier battle groups to the Fleet. The shift in the nation’s naval strategy from the Carter administration’s “defensive sea control” to the Reagan administration’s “maritime supremacy” transformed the contribution of the Navy to support for the President’s national security strategy and the administration’s core foreign policy objectives.

HOW THE REAGAN NAVAL MODERNIZATION PROGRAM WAS FINANCED

In President Reagan’s first defense budget (fiscal year 1983), the U.S. Navy budget grew by 35 percent over the last Carter Administration-proposed budget (fiscal

year 1982). During the Reagan administration's term of office, \$268 billion was appropriated for the U.S. Navy procurement accounts including \$100.4 billion for the shipbuilding account (SCN). An additional \$75.7 billion was appropriated for naval aircraft procurement. The administration's advocacy for its naval modernization initiative was well-received by the Congress including some additional funding provided by the Congress in fiscal year 1981, fiscal year 1982, fiscal year 1988, and fiscal year 1989.

The funding for the program did not require any unique statutory concessions or changes in existing appropriation disciplines. U.S. Navy management changes in its acquisition practices in the shipbuilding program (compared to the previous practice) proved to be constructive in controlling cost. These managerial initiatives included:

- Aligning the Navy's modernization priorities to the administration's national security strategy;
- Building ships based on standard designs with limited opportunities for design and engineering changes; and
- An increased focus on competitive procurement.

The administration's long-lead funding for pacing subsystems for naval combatant vessels of (e.g. nuclear reactors for aircraft carriers and submarines) stabilized naval shipbuilding and enabled programs to adhere to a well-defined production schedule. This enabled the administration to avoid the persistent cost-growth growth that adversely affected the Carter administration's naval shipbuilding program.

The Navy took advantage of a broader defense-wide practice of multi-year procurement. During the Reagan administration, 32 multi-year procurements (MYP) were initiated across all Military Departments. In some cases, the cost-reducing property of MYPs were magnified by integrating DOD procurements with those of foreign buyers to reap further economies of scale and reduce the cost of national defense.

The success of the Reagan naval modernization program using the acquisition practices available at the time offers a useful basis for comparison with the experience of a subsequent administration. The administration of President George W. Bush faced a need to rapidly accelerate the procurement of a widely-supported special-purpose armored combat vehicle based on a South African developed "V-hull, the Mine-Resistant Armor Protected (MRAP) vehicle. The MRAP vehicles were urgently needed to reduce the exposure of United States and allied forces to improvised explosive devices in Afghanistan and Iraq.

While this program was a remarkable defense-industrial success in tactical and operational terms (12,000 vehicles procured between 2007 and 2012), it was only possible with an extraordinary effort to "bend" to the breaking point, DOD acquisition regulations. It necessitated intense personal involvement by the Secretary of Defense to surmount the baroque accumulation of financial, managerial, statutory, and cultural barriers to the rapid acquisition of urgently needed systems in the DOD. It was not a model for future rapid procurement efforts. The intense regulatory barriers are well known and have been identified by several studies by the Defense Science Board as well as other entities. Nevertheless, they persist despite for an accumulation of cultural, political, and institutional reasons despite the determined effort of several Secretaries of Defense to change them.

IMPLICATIONS FOR THE TRUMP ADMINISTRATION'S "355-SHIP" NAVAL MODERNIZATION PROGRAM

The U.S. Navy's 2016 Force Structure Assessment added 47 ships to its 2014 FSA for a total of 355 active ships in the Fleet. The scale of the increase compares favorably with the increase in naval vessels in the Reagan naval modernization program in the 1980s. The Reagan program increased the number of ships in the Fleet from 521 in 1981 to 592 in 1989.

The current Fleet, at the end of a slow recession that has been underway since 1989, has been reduced to 275 ships. This is the lowest figure in a century (245 in 1916). There is significant excess capacity in the industrial base for surface shipbuilding—a circumstance which closely paralleled those of the 1980s. Management changes using precedents set during the Reagan administration shipbuilding initiative would support the delivery of the additional 80 ships to reach the desired 355 ship Fleet. This recapitalization and modernization is within the existing industrial capacity of the industry.

The submarine production capacity is more stressed, but it seems likely that the industry will be able to deliver one of the Columbia SSBNs (*Ohio*-class) and two of the *Virginia*-class fast attack submarines per year.

The administration's 355-ship Navy goal is achievable based on modern fiscal and industrial experience during the Reagan administration, and an evaluation of the capacity of the industrial base to produce the desired number of ships and submarines.

Perhaps the most significant unresolved issue is whether the DOD and U.S. Navy leadership will be able to overcome the bureaucratic, managerial, contractual, and oversight encumbrances that have accumulated since the 1981–89 period. These encumbrances pose the most significant risk to the ability of the administration to achieve its naval modernization and recapitalization objectives.

Senator WICKER. Well, thank you very much for that interesting testimony, and let me just make a comment or two, and then we're going to do 5-minute rounds.

Secretary Pyatt, you said that you needed a little help back in the day. Well, that's why we're here as a subcommittee, and we're unanimous on the SHIPS Act in putting this requirement as U.S. policy. We're here to provide help to industry, we're here to provide help to the administration and to the military in actually getting this done.

Thank you, Secretary Lehman, for emphasizing bipartisanship. Yes, that's a distinguished list of names you mentioned—Scoop Jackson, John Tower, John Warner, John Stennis. We could only aspire in this year, 2017 and going forward, to stand on the shoulders of those leaders. So, thank you for mentioning that.

I would stress to you that this SHIPS Act is a bipartisan bill unanimously endorsed by every member of the Seapower Subcommittee. This morning we had a hearing, as a matter of fact. This has been our day to have hearings. This is my third Armed Services hearing, and there are not that many hours in the day. We did break for lunch at one point.

But Senator Ernst brought up a point, and that was enlarged on by Senator Heinrich, and I followed him by agreeing with him about the seriousness of what the Russians are up to. They will do what they can get away with, and they target our threshold of tolerance and try to get just below what they think we'll tolerate or what the end of our patience is, and they try to stay there. I was so gratified to hear that Senator Blumenthal picked right up on that.

So really, at the subcommittee level, and at the full committee level, there is a great degree of bipartisanship. Yes, we were delighted to hear John Warner today come and introduce some distinguished nominees, so I would emphasize that.

Secretary Lehman, I've mentioned the SHIPS Act. It's part of both bills, House and Senate, and in my opinion it is a critical statement for laying the foundation for what we need to do over the next few years. Do you believe this action is necessary, Dr. Lehman?

Dr. LEHMAN. Yes, I do believe it's necessary. I believe it's essential. I do believe it's quite necessary. It gives the yardstick for this subcommittee, which we always in the Navy Department have viewed as our Board of Directors. We report to you, and certainly for the use of the troops and the ships that we build and train, the President is the Commander in Chief, but you are the Board of Directors. So we take the relationship very seriously.

We also—I would hope that you would keep in mind the CEO of the Navy Department, the Secretary of the Navy, when he is con-

firmed by the Senate, and the CNO [Chief of Naval Operations] and Commandant who have been, thanks to this committee and the tremendous innovative reforms that have been put in place in the last two NDAs [National Defense Authorization Acts] and the current one that you are working on, have really given back to the management team the responsibility, the authority, and the accountability. They know that you are going to hold them accountable and that cost overruns are not somebody else's problem. Even though I had to deal, we all had to deal with a much smaller bureaucracy in the Department of Defense, and it has grown to a bloated extent, nevertheless you have to protect the authority that you are going to hold these people accountable to execute, because now with 40 different joint requirement committees in this vast bureaucracy, there are constant pressures on execution.

This office wants this change, this one wants two or three more knots on the LCS [Littoral Combat Ship], the other joint requirements committee wants greater length, more missiles, et cetera. It is essential that you do hold the Secretary and the CNO and the Commandant responsible for this execution. If there is a 20 percent cost overrun that they come in and ask you for, you should be asking them, "Why the hell should we give you that extra money" Hold them accountable the way a private-sector CEO is held accountable, and that means you have to protect them from the intrusions of all azimuths against their ability to run the Navy Department.

Senator WICKER. Thank you.

Dr. Lehman, you mentioned our vital interests, and you also mentioned that you came up with a strategy and suggested that there have been decades where we didn't really have a strategy. When I think of our vital interests today, I think of Russia, I think of Iran, I think of the Asia Pacific and China's invigorated objective to dominate that area, and I think of North Korea. Am I missing anything in terms of our vital interests?

Dr. LEHMAN. There are other areas that also have to be worried about as well. But the point that you make is a good one because, in fact, what President Reagan found, and all of his senior subordinates, that he reaped 90 percent of the benefits of his rebuilding program and his forward strategy in the first year, because as soon as it became clear that this was not just a passing fancy, that Congress was passing the bills, that the ships were being contracted, that reactivations were coming into the fleet, that readiness was going up, that shadow of power reinvigorated American democracy and gave great pause, which we now know because we have a lot of the intelligence from that era. Don't think you have to wait 10 years to get the benefit of building a 355-ship Navy. I guarantee you that 90 percent of it will adhere to the U.S. Government and to our national security by the first year after it has committed to it and funded it.

So that is an important consideration, because the strategy we had was very simple. It was a bipolar world, and the Soviet Union kept a discipline on the Warsaw Pact and potential troublemakers like Iraq and North Korea, and today it's a multi-polar world with lots of troublemakers, each requiring deterrence. We have to deter the North Koreans from proceeding with the course they're on, and we have to deter the Russians. We don't have to worry about the

Russians becoming the Soviet Union again. That will never happen. The fleet that they're building today is a formidable fleet, but it's tiny compared to what it was, and they do not have the economy. As your committee Chairman, John McCain, has often said, Russia is a gas station with a real economy the size of Denmark's. So we can't paint them as this vast potential threat.

Senator WICKER. There go the Danes.

[Laughter.]

Dr. LEHMAN. But the fact is the Russians—

Senator WICKER. We love our Danish friends.

Dr. LEHMAN. The northern flag of NATO would be lost without Denmark. They're reliable, they modernized, and they're essential.

But my point is that Russia is using a much smaller economy than they had in the Soviet Union, so they focused it. They had at the end of the Cold War, they had over 1,000 ships, the Soviet Union, and they were building a 100,000-ton aircraft carrier. Today they can't even keep one aircraft carrier, which doesn't even have catapults. But they have spent their money wisely from their point of view, and that is in submarine warfare. They learned their lessons, what we could do to them, which brought about the end of the Cold War, and so they are building submarines that are formidable threats. It's a focused threat. To deter that, we need more capability.

The threat that we face, for instance, in the South China Sea is a very different one. We're not going to go to war over the South China Sea at this point, but we want to be able to deter the Chinese from using their increasing naval power, which is directed at our naval power, to close down vital shipping lanes.

So every one of the vital interests we have is different, but you don't have to have a different Navy to deal with each of these different threats. You have to have a Navy that's big enough to deploy and deal with flexibility and agility with each of these different kinds of geographic and military threats, and that 355-ship Navy is derived from that analysis. So toying with that number and saying, well, if we just build more capable ships we don't have to build nearly as many, that's baloney. The world is a big place, and if you don't have the presence, you're not going to deter. So I think your path is clear.

Senator WICKER. Thank you.

We'll move on now to Senator Hirono.

Senator HIRONO. Thank you, Mr. Chairman.

Dr. Lehman, you chatted a little bit about the importance of accountability so that ships can be delivered on time and on budget, but accountability is often quite elusive for this committee, and the SAS [Senate Armed Services] Committee, to hold the appropriate people accountable, which is one of the reasons that Chairman McCain, as far as I can see, has spent so much time and focus on acquisition reform, so that we can build in better accountability.

Having said that, it would appear that one of the major differences between the early 1980s' buildup and the situation we face now is that the President back then could propose any top line for the Defense Department that he wanted without regard to the deficit, and that was true until the passage of the Gramm-Rudman-

Hollings Balanced Budget and Emergency Deficit Control Act of 1985.

For example, in 1983, when the administration added two aircraft carriers to the Navy budget, the administration increased the Navy top line unilaterally to account for that with no offset anywhere in DOD [Department of Defense] or to other domestic programs.

Is it safe to infer or to say that each of you would support eliminating the budget caps in the Budget Control Act in order for the administration to ask for ships and other defense programs it believes are needed?

Dr. LEHMAN. I can answer for myself.

Senator HIRONO. We'll start with you, Dr. Lehman.

Dr. LEHMAN. Yes, those caps have to be increased.

Mr. PYATT. I'll add one yes to that.

Mr. SCHNEIDER. I'll also agree that the caps should be eliminated. The problem is economic growth and not caps.

Senator HIRONO. Can you explain a little more? What do you mean the problem is economic growth?

Mr. SCHNEIDER. One of the enablers for President Reagan's decision to increase naval expenditure in fiscal year 1983 was the performance of the economy. The turn-around was remarkable. The tax cuts had a very profound effect on economic activity, which in turn generated tax revenues which enabled the President to have confidence that our economy was able to produce the resources necessary to sustain the modernization that had been proposed when he became president.

Senator HIRONO. Thank you for that explanation. So not only—I think there are a lot of economists who are saying that our economy is slowing and there are indications along those lines, and at the same time we have the sequester to deal with.

The Navy has raised concerns about how quickly we should ramp up production, and in a recent report to Congress on the possibility of producing additional attack submarines during the 2017 to 2030 period the Navy said, and I'm quoting, "Producing seven additional VCS (Virginia Class Submarines), during the fiscal year 2017 to 2030 timeframe, will be a challenge to the submarine industrial base that can be solved only if the shipyards are given sufficient time to address facility plans, develop their workforces, and expand the vendor base". The seven extra boats mentioned in the Navy report amounts to the equivalent of one half of a boat per year.

Secretary Pyatt, do you believe that we could add 10 ships to the fiscal year 2018 budget without overwhelming the industrial base?

Mr. PYATT. Yes. Yes, you can add 10 ships. I don't know where the Navy got those numbers. They must have been controlled by the budget office. But that industrial base in submarines is flexible, it's knowledgeable, and with the two building facilities they were kept there, and they could easily build three ships a year before. I think we got up to five one year, along with Trident being built. So I don't know why the Navy said that, but I certainly do not agree with it.

Dr. LEHMAN. What we found when we ramped up in both destroyers and cruisers and the submarines, that the mobilization base adapted rapidly. In my judgment, what we should do is for-

ward fund and fully fund a multi-year for the subs at three a year and compete them. That's what we did with the 688s, with General Dynamics competing against Newport News every year for the production. Low bid, which was a real low bid because they were firm fixed price, because they were mature designs, low bid got two, high bid got one. But if they went above a certain percentage, as GD [General Dynamics] did once, and they bid to get rich on the one, we took it away from them and gave it to Newport News.

So it's easy to control if you have the benefit—and this was why it was such a wise thing to keep both sub manufacturers in business, because they could, each of them could build the Virginia class, and it makes a lot of sense to make them compete for that, and I don't mean a beauty contest for the next 10 years. I mean competing every year for the two versus the one, and you can do the same thing with the new destroyers. You can get the benefits of multi-yearing if you keep competition in those five years of multi-yearing. That's the way to do it.

Senator HIRONO. I have to say that I am astounded that the Navy, upon whose assessments we rely in making decisions as to whether or not our industrial base has adequate resources, manpower, et cetera, to move us faster toward a 355-ship goal, and here you are saying that, from what I gather, not a problem. There's such a disparity there between your position as articulated today and what the Navy itself is saying that I think, Mr. Chairman, I personally would need a much better understanding of what really realistically we can move towards.

Thank you for that very different opinion. Did you want to add something?

I am running out of time. But, Mr. Chairman, if you don't mind?

Mr. PYATT. I'd like to add not a problem, it's a little too easy. It's a problem, but it doesn't stop anything. They can build up. They have the facilities. They'll need to train some manpower. But any number you have below five a year is achievable.

Senator HIRONO. Thank you.

Thank you, Mr. Chairman.

Senator WICKER. Thank you.

Senator Strange?

Senator STRANGE. Thank you very much, Mr. Chairman.

It's great to have you here today. I appreciate your service to our nation and the work you did to achieve an almost 600-ship Navy during your time. More than anyone else, I believe, you gentlemen understand that our industrial base is not a spigot you turn on and off but something that needs to be maintained and nurtured and thought about strategically.

I have a couple of questions related to that, Secretary Lehman, maybe for you, but I would be interested in any views here. Do you agree that we should build ships at a rate most efficient to the taxpayer, the industrial base, the war fighters, or do you think we should merely keep a program on life support of procuring ships at a higher cost per ship, ignoring the Navy's stated need for the 52 small surface combatants on its way to a 355-ship fleet? I think you can probably tell from my question the concern that we stop and start and we don't keep the hot lines going to achieve our goals.

Dr. LEHMAN. No, that's true. But again, it's not a black and white issue. The most important thing in the industrial base is the facilities that can deal with shipbuilding. The other is the human resources, the men and women that do the welding and the ship-fitting and all of the other skills required. That is why you have to look at a balanced program and why many of us have been advocating reactivating ships, because there are a lot of ships that during the last 20 years have been retired very early, some of them with less than half of their service life. So the hulls and the HM&E and the propulsion systems are good. The weapon systems and sensors have to be upgraded, but this is the kind of work that can be dispersed, and quickly, out to the industrial base that are not building ships now. It doesn't just go to the primes that have the huge graving docks and so forth. It can be done rapidly and can be done very cost efficiently, and maintain the mobilization base.

The FIG-7s, I think there are eight or nine of those that clearly have that possibility. You've got the first flights of the Aegis cruisers that were retired at 14, 15 years of a 30-year life. They're sitting there in the Philadelphia Navy Yard. You have Reefers that were retired early as the fleet shrank. They're available for reactivation. That's the kind of work that can be bid out competitively and spread and maintained, the skill base and workers and facilities.

Senator STRANGE. Well, we have a magnificent shipyard that I'm familiar with, Austal, in my home state of Alabama, in Mobile.

Mr. SCHNEIDER. Yes.

Senator STRANGE. They do an excellent job consistently, and it's part of my background way before politics, workforce development. I'm really proud of that group.

Let me quickly ask you a question, and maybe it's for you, Mr. Secretary, because I understand you have a little bit of helicopter background in your past, as well as all the other accomplishments. But as we progress towards this 355-ship Navy, we also have to look at the procurement of helicopters, the Seahawks and so forth, to meet the needs of the sea presence.

So I wonder if you and perhaps others could share briefly your experience in dealing with that issue as you built up the Navy capabilities during your service.

Dr. LEHMAN. Yes. We always pursued a high/low mix in helo's because we never felt comfortable being reduced to one supplier, because no matter how much goodwill they may have, and patriotism, the effects of monopoly are inevitable, and we've seen that.

We had the Sea Hawk-2. We put that back in production for the frigates. Then, of course, we had the Sea Hawk-60, which is a great airplane. That's got to be a major part of it.

But the same rules apply for airplanes as for ships. They're constant. In my civilian capacity I built the Hawaii Super Ferry, of great fame, right next to the first aluminum ship built by Austal down in Mobile, and Austal is a great shipyard. They have a very, very quality force. But because of the bureaucracy, the Navy averaged 75 change orders a week in that first ship because the design had not been finalized when the contract was let, and right next to it, same size ship, two hulls instead of three, we built the first Hawaii Super Ferry, an 800-passenger ferry, with two change or-

ders for two ships, the whole life of it. Once you sign a contract in the commercial world you can't say, "Oh, we've got another 75 changes we'd like to make.

So the discipline has to be there, and it's even worse and more opportunity for change—

Senator WICKER. Where does this have to be? Where does that discipline have to originate?

Dr. LEHMAN. It's got to originate and be held accountable with the Secretary of the Navy, the CNO, and the Commandant. The trouble today is there are 22 offices in the Office of the Secretary of Defense, assistant secretaries, under secretaries, deputy under secretaries, all who have access to his autopen. So there are change orders coming in from the combatant commands, from all the different joint requirements committees, and there's only one way to stop that, and that is to put the chief executive in charge. If he approves a change order, he's got to worry about where the money is going to come from. He can't just say, oh, well, we'll cost-plus it later.

So I think that having absorbed the hearing and what you put the current nominee for the Secretary of the Navy through, rightly, you've got the kind of chief executive that is needed to carry this program out. So I think you have to hold him to it, because who else are you going to? You know, the F-35 went through 17 project managers. Which one are you going to fire? For what? The same with the carrier.

There should be one person where the buck stops, and that's got to be the service secretary.

Senator WICKER. Thank you.

Senator Shaheen?

Senator SHAHEEN. Thank you, Mr. Chairman.

Gentlemen, thank you for being here.

I would argue, Dr. Lehman, that the problem is not our industrial capacity. It's our commitment. This Congress could, today or tomorrow, this week, get rid of the sequestration caps, except there's no commitment to do that. There's no incentive. There's no outcry from the public that we should do this. There is not the same perceived threat from nation-states that we had at the time of the Cold War, and that has been challenging the threat that my constituents perceive is from ISIS [Islamic State of Iraq and Syria], from terrorist attacks. They're not worried about China and the fact that they're going to have a 350-ship Navy by 2020 and the second biggest economy. They're not worried about Russia and the fact that they're buzzing our ships in the Black Sea and the Baltic.

So I think the question is where is the commitment to address this challenge, and I don't think we've seen it yet. Maybe if people, if the country feels threatened, we will then decide this is something that we're going to achieve, but I don't think we've got it yet. We can all talk about Senator Wicker's legislation, which I signed on to. I think everybody on this committee signed on to it. This is a goal we want to accomplish. But the fundamental commitment to say we're going to do this because we are a nation that's threatened is not there, and until it gets there, we're not going to do it.

So I appreciate what everyone is saying, and I think you're talking about things that we ought to try and incorporate. But I think

fundamentally, that's the problem. So, I don't know what your view is.

Dr. LEHMAN. Well, I agree with you, Senator, on the industrial base. We have plenty of industrial base. That's not the primary worry. The commitment is the worry. But that is the role of this subcommittee. Historically, the Chairman talked about the 30-year cycles, and he's absolutely correct. But in the years leading up to those cycles, it was the subcommittees, the Seapower Subcommittee and, I guess up until the '60s, the Naval Affairs Subcommittee, that even though they didn't have the commitment from the political base, there were other things that were taking priority. If it weren't for what Congress and the two Seapower Subcommittees did in 1936, we would have lost the war in the Pacific, because even though "America First" was ruling the political base, there wasn't a constituency for mobilizing. Nevertheless, the committees that were responsible understood the absolute need for the threat that was coming. So they undertook the 1936 and the 1938 shipbuilding programs in which every major capital ship that fought in World War II was the funding, at least the design was done.

I've seen the same thing in my tenure on a bipartisan basis. It was when there was no constituency, after Vietnam, to rebuild the Navy. Far-seeing people like Harold Brown in both Republican and Democratic administrations saw that the funding was protected for the innovation, the new technologies that were necessary. So, in a sense, we reaped the benefit of that. When Reagan came in and said we've got to do it, here's the funding, the programmatic were there because they'd been done by the committees, working with the people who understood it in the executive branch.

So that is what you've got to do now. This committee, this subcommittee, has to lead.

Senator SHAHEEN. Well, I certainly agree that there's no strategy and that we need to develop one.

Let me ask, to follow up on Senator Hirono's question about the capacity of the industry to do the shipbuilding, one of the things we have heard from them is that they have the capacity, but the suppliers often can't meet their needs. Do you have any thoughts, any of you have any thoughts about what we can do?

My guess is that that has a lot to do with certainty, with the belief that if they have a contract for so many ships and they're certain that those are going to get funded, that then the suppliers will come up with what they need to meet industry's need to get those ships done. But right now that's an issue, and I think it's because of the uncertainty.

Dr. LEHMAN. I'd like to hear from my colleagues here, but since I left the Navy, I went into the private equity business and acquiring aerospace and Marine contractors, suppliers, second-tier and third-tier subcontractors. We have owned about 100 of them in the 25 years that I've been in this business. I can guarantee you, if we had the opportunity to bid on a double production, we would have been able to, in virtually every company that I was involved with. I think that's a red herring. I think that the supplier base will respond. That's the magic of our industrial base and our free enter-

prise system. So I don't buy the argument that they're holding everything back.

Senator SHAHEEN. But you're saying if the contracts are there.

Dr. LEHMAN. Yes, if the contracts are there, sure. I mean, they're not going to tool up and start hiring programmers and so forth if there's no budgetary projection past the next six months.

Senator SHAHEEN. So one of the challenges is the uncertainty around the budgeting process.

Dr. LEHMAN. Absolutely.

Mr. PYATT. May I add a couple of words?

Senator WICKER. Yes, sir.

Mr. PYATT. The commitment from the Congress comes first, and these are the things that John just described. But the budgets show that's reality. The contracting process takes some time for the prime. They will go to their suppliers and they say, hey, we're bidding this, it's going to happen. The competitive enterprise will work, and I'd rely on it. We did, and it worked.

Thank you.

Mr. SCHNEIDER. Senator, if I just may add a footnote to this, one of the things that's worth keeping in mind since the 1980s has been the military applications of information technology. While we've mostly been discussing shipbuilding, in most combatant platforms more than half the value is in things other than the structure.

The industry here is much more accessible in terms of being able to get product out that's very competitive. I think we can do very well with this. I've had the privilege for a number of years of serving on the Defense Science Board, including eight years as chairman, and the technology is remarkable that can respond much more rapidly than was the case in the 1980s.

So I think with the leadership of this committee and reinforced by the executive branch, I think these problems can be readily overcome.

Senator WICKER. Senator Tillis?

Senator TILLIS. Thank you, Mr. Chair.

Gentlemen, thank you for your service and for being here today.

Mr. Pyatt, I do agree with you. You said something I think is important. As we're trying to crack this nut and figure out how to actually get the capabilities we need, I think the icebreaker is a classic example of something that you don't need to put \$100 saddle on a \$10 horse. You go find a good shipbuilder, probably in Finland, you figure out an economic way to create that capability. I'm the one that always harps on—you mentioned the 600-page RFP [Request for Proposal] for the next-generation handguns. Actually, 680 pages in 10 years.

Mr. PYATT. I got it from you, sir.

Senator TILLIS. So I think it makes more sense to come up with a competitive procurement strategy to deploy that capability and get that out of the DOD and get it into the high C's. That sort of thinking is necessary.

I wanted to talk more about something, Dr. Lehman, you brought up, and it probably is something that all three of you could give me some feedback on. But to me, getting to 355 ships, I'm less obsessed with clicking off and high-fiving when we get to 355 than

I am getting to the capability, the ability to project power and the gross capability that, say, 355 ships would give us.

So a discussion, Mr. Chair, I don't know if we've had it or if it's the subject of possibly a future subcommittee hearing, but one of the discussions would be to what extent, through reactivation, can you start building some of those capabilities that buy you time. Admittedly, they may be halfway through their lives, and through the up-fit you may be able to extend their lives. But they're not going to be 30-year ships. They're going to live for some period of time, but that buys us time to also move into innovations that you all didn't really have the option.

We've heard a number of folks come before the Senate Armed Services Committee and say that unmanned smaller vehicles for survivability, particularly if they're not manned vehicles, could draw the lower unit rate so that you create more quantity, and as Admiral Harris has said more than once before the committee, quantity has a quality of its own.

So if you were instructing us to take the lead on this and I think setting that target of 355 and understanding what that means in terms of capabilities, lethality, and projection of power, what would be the wisest way for us to do it so that we don't come up and think we've got the absolute inventory for the next 20 years or 30 years that we want to get built at the expense of maybe taking a leap technologically over that period of time?

Dr. LEHMAN. Very, very good question. First, I think all of us totally support reactivating the ships that were put away early. They've got plenty of life left in them. They're going to have to be modernized. They're going to be upgraded. But you can do that very rapidly.

Senator TILLIS. They're known quantities.

Dr. LEHMAN. They're known quantities.

Senator TILLIS. Most of the up-fits are relatively known quantities. We probably ought not be planning on reactivating a ship that's got to be filled in two years with a radar that may take four years or ten years—

Dr. LEHMAN. Exactly.

Senator TILLIS.—to develop.

Dr. LEHMAN. That's right.

Senator TILLIS. But known quantities. So that's one tier of capability.

Dr. LEHMAN. Absolutely. Another tier of capability is getting control. By getting control of the change orders in the design, by ensuring that the design is complete before a production contract is let is another way. I always use the example of the Polaris program, which involved a new submarine, a new missile, a new launch system, a new guidance system, a new warhead, a new bus, done literally from the back of an envelope to the first deployment of the George Washington in four years.

Today, the average for the ACAT 1 [Acquisition Category] and 2 programs is 22.5 years. The reason was somebody, somebodies were put in charge, by name—everybody knew who Admiral Rickover was—and held accountable, given the budget at the beginning, held accountable, and it was delivered ahead of time, on budget.

So that collapses the time that enables you to put those systems out there early on. Again, the best is the enemy of the good. That's why, for instance, we had 101 frigates, essential anti-submarine weapons for the deploying battle groups. Today we have none, literally none, none. So we've got to get frigates out there. We can do some with eight or ten of the FIG-7's. But there are at least two first-class, foreign-designed frigates which could be built in this country. They could be done—the design can be finalized to American standards, to put American weapons systems, where applicable, on them. It's that kind of creative thinking which, believe me, there are plenty of terrifically creative people in our bureaucracy. It's not just the political appointees or the uniformed people. I mean, here we have a bureaucrat who came up with some of the most innovative ideas to really get things moving fast in the Reagan Administration.

But again, we were able to do it because we were protected by this committee from all of the requirements of the defense acquisition regulations. One of the best and most innovative jobs done along this line which you all were part of was in the Obama Administration. They had to come up with the IED [Improvised Explosive Device] or the bomb-proof personnel carriers. The Secretary of Defense—Ash Carter was then the Deputy Secretary of Defense for Procurement, and he granted waiver after waiver after waiver from all this vast bureaucracy, and they were able to get it out to the troops. The MRAP [Mine Resistant Ambush Protected] was one example. But he did 30 or 40 of them by granting waivers, and that's what makes things go for 22.5 years, because if you actually go through every hoop in the current existing defense acquisition regulations, it takes 5.5 years just to get approval for a requirement, just the piece of paper.

But the Secretary of the Navy, with the Secretary of Defense, has the power to waive that bureaucracy sensibly, to do what common sense dictates. If you support these people in this committee, you can collapse the time. Time is money. So I think it's very doable. The 355-ship Navy is doable on an affordable basis and a lot sooner than the current system and process is projecting.

Senator WICKER. Dr. Lehman, should we revamp the FAR [Federal Acquisition Regulation], repeal the FAR, or just make sure that the leadership of the Navy understands that they have a robust waiver—

Dr. LEHMAN. The latter is the essential thing. You know, the Brits have a system, a process of legislative reform every ten years, so everything is grandfathered, and that's something going forward that you put sunset requirements in all of these new bureaucratic expansions. I think in the House there are something like 22 new reports that are proposed to be done, which means 22 new offices to hire more bureaucrats to slow things down.

Forget about the FAR. The FAR takes up 141 feet of shelf space. It's not a book, not even a thick telephone book. It's 141-feet thick. So trying to reform that is impossible.

Do what you just said. Make them come and get waivers from the things that drive the time and eliminate the discipline and the accountability.

Senator WICKER. Thank you.

Senator Kaine?

Senator KAINE. Thank you, Mr. Chairman.

Thanks to the witnesses.

To pay you a compliment, it's not often that we—like today, we have the nominee for the Navy secretary here in the room, and he is here because he wanted to hear your testimony, and that's a tribute to him as well. I think it's a tribute to a good leader to come and listen to the expertise of others. So, as you've been saying what we need to hold this person accountable for, I've been looking back there.

[Laughter.]

Senator KAINE. That's a tribute to you, and it's a tribute to him.

I will associate myself with Mr. Tillis, Senator Tillis. I really like the commitment to 355 ships, but I am more interested in capability than the number. I don't think we should be mechanistic about it. One of the things these hearings have been good at, including in Mr. Spencer's hearing, was trying to say, okay, there's a ship number, but this is about an industrial base, it's about the personnel that go on the ships, it's about aviation support for the ships, it's about the mix of the ships, what's the mix between surface and underwater, what's the mix between manned and unmanned. You could have a 355-ship Navy that would be exactly wrong, and that would be worse than a 300-ship Navy that was better configured.

So this is a big question that we're going to be grappling with to get to 355. I think the industrial—I am with you. I think the industrial base can respond to this, but I think we have a lot of challenging strategic decisions to make in tandem with our military leadership about what the right mix is.

I also wanted, Dr. Lehman, to just go after one issue that you mentioned. You said during the Reagan-era buildup that you guys worked on—and I thought this was fascinating—we got 90 percent of the gain of the buildup in the first year. I want to just unpack that statement.

I gather that what that means is what we did in the first year demonstrated our commitment, and no one doubted our commitment, and thus we got a lot of the gain out of it before it was even completed because once we were underway, people didn't doubt us.

Dr. LEHMAN. Right.

Senator KAINE. Now, you probably did not deal with a government shutdown during your tenure, did you?

Dr. LEHMAN. No, I didn't, happily.

Senator KAINE. Were you dealing with CRs [Continuing Resolutions], or were you generally dealing with appropriations bills?

Dr. LEHMAN. CRs.

Senator KAINE. So you were dealing with CRs.

Dr. LEHMAN. Oh, yes.

Senator KAINE. So that was a reality in the 1980s.

Mr. SCHNEIDER. It was shorter then, but they were still destructive.

Senator KAINE. So to go back to your statement we got 90 percent of the gain in the first year, we're not going to be able to get the gain out of a commitment to 355. I mean, it passed unanimously in this committee as an amendment, and then it passed

unanimously, the mark passed unanimously out of the committee, and say it passes unanimously on the Floor, and say it's in a conference report that passes unanimously. We're not going to get the gain out of that if there's a lot of budgetary gamesmanship that leads not only adversaries and allies but even our own people to wonder, well, is this just a brochure thing or is it really going to happen?

Dr. LEHMAN. Your point is well taken.

Senator KAINE. So the certainty issue, this committee and the Armed Services Committee more generally has been a voice for certainty, but the broader budgetary and appropriations processes had to be absolutely critical to accomplishing the goal and communicating the certainty of the momentum going forward.

Dr. LEHMAN. Absolutely, absolutely.

Senator KAINE. That was bipartisan. This was a time during your buildup when this was supported in both parties and nobody questioned the commitment of this body in terms of actually carrying forward with the president in doing that build-out.

Dr. LEHMAN. Right. Then, in those halcyon days, there was a very clear distinction between the authorizing and the appropriating. There was no legislation in appropriations bills, and there was a very close coupling between the Defense Appropriations Subcommittee and this committee, and that's got to be really strengthened.

Senator KAINE. I'm a Budget Committee member who wonders whether the budget has any more relevance because it seems like it's all appropriations, and I'm starting to worry about even the authorizers because, for example, we did a mark this year, we didn't have a top line, so we just did the mark to the number that we wanted. But we don't know how that top line, how our mark will be treated when it gets into an appropriations process.

I think part of the answer to really sending that commitment is also probably going to be some budget and appropriations reform issues, as well as grappling with these strategic decisions about how, among the 355, how you allocate between the manned/unmanned surface ship, and then what that means with personnel and aviation components as well.

So having committed to this, I'll just be blunt and parochial, I was all for 355. I'm from Virginia. I mean, I know what this means. I want to do shipbuilding. But as we've gotten more and more into the layers of it, what it means for aviation, what it means for personnel, what it means for the industrial base—and I think Mr. Spencer's testimony was good about this when he was before us—this really is a big, big strategic question that we're going to have to grapple with, and maybe the biggest piece of it is going to be the budgetary discussion.

So anyway, I appreciate your being here today and offering the perspective about how to do it right, and hopefully we will. This has been a helpful hearing and we'll learn some things from it.

Thanks, Mr. Chairman.

Senator WICKER. We are doing our part to the fullest in this subcommittee, and we seek to send a strong signal to everyone else that's listening, including our colleagues. So, a point well taken.

Senator King is next.

Senator KING. Thank you.

Mr. Schneider, I particularly want to greet you because you and I served on the staff in this outfit at exactly the same period, in the early 1970s. But neither one of us is any older, which is amazing.

[Laughter.]

Mr. SCHNEIDER. The land that time forgot.

[Laughter.]

Senator KING. Mr. Pyatt and Mr. Lehman, I have probably been to 20 hearings in the last five years that have involved—I think probably more than that, 30 hearings that have involved procurement, and the same issues keep coming up, and we just talked about it in the full committee earlier today, and you've mentioned it, because if we're talking about a 355-ship Navy, we're talking about procurement. I mean, that's where we're at.

Fixed requirements, design before you build, finalize design before you build—I think, Mr. Lehman, Secretary Lehman, you said that. Off the shelf where possible, foreign designs where possible, 80 percent solutions that are on time are better than 99 percent solutions that are late; and then finally, and I think you mentioned this, Secretary Lehman, continuity of staff. One of the problems is turnover of project managers so nobody can be held accountable.

Anyway, I want to bring this down to the very particular. Mr. Pyatt, in your prepared testimony you talked about the DDG-51 flight III. We just authorized a 15-ship multi-year starting next year on that ship, which has never been built. I have concerns about the ability of our shipyards to bid realistically on a ship that's never been built and that the design isn't complete. Do you share those concerns?

Mr. PYATT. Absolutely. I mentioned that that can be a recipe for disaster. I think something that could be very important that you've done is authorize a multi-year procurement to tell everybody this is a serious program and you're going to be behind it, but the actual procurement of those ships should be on an annual or a bi-annual basis with options. Then you can have real competition between the two shipbuilders. They're both fine shipbuilders. You can have real competition. If you need to make a change someplace along the line, you can, and it's inevitable that it happens.

I worry about the delivery of the radar, which hasn't been developed, or is in the development—

Senator KING. That's the heart of the ship.

Mr. PYATT. That's right.

Senator KING. There are going to be modifications to the ship based upon how the radar is—

Mr. PYATT. That's right. It's bound to happen. So I would not encourage entering into a multi-year contract for that ship. I would encourage this committee and the Congress to say, yes, we think that's a good idea, and we'll give you a multi-year authorization or multi-year support because that helps build up the industrial base that you'll need to carry it out. So, we agree.

Senator KING. Then I want to associate myself with Senator Kaine's comments. It seems to me the real issue is what ships, and it's a strategic issue of what do we need, where do we put our effort, and we have to try to project ourselves. I've been in hearings

in the last few days that have talked a lot about cyber. That's going to be a huge part of the threat of the future, and that has to be a consideration not only in shipbuilding but in every other aspect of how we defend our country.

So, Secretary Lehman, brainstorm a bit in a minute and 13 seconds on what the shape of this new Navy should be in terms of mix. Are we talking about more undersea, more surface combatants, larger, smaller? Give us some thoughts.

Dr. LEHMAN. Sure. There's got to be a high/low mix. That's why one of the most urgent needs is for frigates. As I said earlier, we had 101 frigates in the 600-ship Navy. They were built and they were deployed. We have none now.

Senator KING. Is there some strategic reason for that, for the demise of the frigate?

Dr. LEHMAN. The threat was perceived. If you recall, 30 years ago it was the end of history. There was no threat anywhere and we were the only superpower. As happens in democracies, cuts went way too deep. Now we have to rebuild in the most sensible way.

Frigates are essential because the real threat is submarines. There are almost twice as many capable, quiet, diesel electric submarines in the world today as there were back in our day.

Senator KING. The Soviets are—the Russians. Sorry.

Dr. LEHMAN. Exactly. The Russians—

Senator KING. We're showing our age.

Dr. LEHMAN. The Russians have concentrated. They're not a global threat the way the Soviet Union was. They're small, and their one carrier is worthless. They may be able to build one smaller effective carrier, but they're not a global power. What they have concentrated their spending on is the ability to sink our ships and the ability to use their submarines to make sure it's got the best possible quieting technology to protect theirs.

Senator KING. So counter-submarines are important.

Dr. LEHMAN. Counter-submarines, absolutely. So we have to be able to be better at submarines, and I think we can. We are. We're staying ahead of it. But we also have to have, first of all—the Navy ought to change its nomenclature from calling these strike groups, because a full battle group deployed with 25 or 28 ships in the Cold War, because you had to cover all azimuths from very substantial multiple threats. Today, a carrier deploys with maybe five or six ships. If you're going against the kind of threats that are already in existence and are being built by the Russians, by the Iranians, by the North Koreans, by the Chinese, you've got to go from five back to 20 because you've got to cover in-depth the defense. You've got to have lots of tails and lots of active sonar. You need platforms for the ASW [Anti Submarine Warfare] helo's to live on.

So I agree with you. The mix of what you're building is just as important as the number. But the number 355 came from very solid analysis. When you have to have this mix of high/low and defensive capability, you've also got to be there. The whole idea of the Navy is to deter the disturbers of the peace, not to fight them. Of course, to be able to deter, you have to be able to fight them and defeat them.

Senator KING. I characterize our destroyers at Bath Ironworks as instruments of peace.

Dr. LEHMAN. Yes, they are, in a very real way. When Ronald Reagan said it in 1977, when he was asked what he thought about the Cold War, he said we win, they lose. How do you like that? He meant, and he truly believed at the time, that this could be done without violence, without fighting, and by ending the war with negotiation, if you built back the strength to deter, to show the Soviets that here we were cruising along with a growing economy with one hand tied behind our back and running them into the ground financially, and we topped their huge buildup that they had sacrificed so much to build. We were going ahead with Star Wars, and we were going ahead—the Navy was up in their backyard and front yard and showing that we were going to kick their ass. They finally realized that, and they didn't have the money to keep up with us.

So that's what we've got to do again. We've got a different kind of threat, but we have to show the disturbers of the peace that if they think they can continue in the adventurism that they're doing now, that they can prevail against us and use that political leverage to invade other countries or to close off sea lanes or whatever, that they are going to lose that. That requires numbers, a coherent number that we should stick with because it was logically derived, and not stinting on the quality of what is done, and carrying out with the discipline of fixed price. The best is the enemy of the good. Make sure we've got the capability to prevail, but no more home plating. Do it by block upgrades every four years, or whatever. It can be done.

Senator KING. Thank you, Mr. Chairman.

Senator WICKER. Thank you, Senator King.

We've been a little informal here in this hearing, so before I recognize my friend, Mr. Blumenthal, let me just remind committee members, subcommittee members that in testimony about this subject over the last number of weeks, the testimony has been that the requirement comes from the experts in the form of a mix. They have informed the Navy about what mix is needed in the various areas around the globe, and that's the way that we arrived at the 355.

For example, in the mix, it's fast attack submarines, 66; destroyers, cruisers, 104; carriers, 12. So the 355 ship requirement is derived from the mix. Now, we may need to revisit that and we may need to talk about a number of the alternatives that have come from the testimony today such as reactivation, but it's not just a number that was grabbed out there. It was a number that was boiled down from the absolute requirement we need to make this country safe.

Senator Blumenthal, you are recognized for at least 5 minutes.

[Laughter.]

Senator BLUMENTHAL. Thanks, Mr. Chairman.

Senator WICKER. A minimum of 5 minutes.

Senator BLUMENTHAL. You are very, very gracious, as always.

First of all, I want to thank you for reminding us of that famous quote from John McCain that Russia's economy is a gas station, or Russia is a gas station with an economy the size of Denmark. I've

heard that it has an economy the size of Mexico, but Denmark is even a better—

Senator WICKER. We're now hoping the Danes can go help the Finns build those icebreakers, I think.

Senator BLUMENTHAL. I want to mention a word that I understand has not been raised here today, and that word is "cyber." Going to your comment, the Russians, for example in the undersea domain, cannot hope to match us. Their goal is to sink our ships. They can't match us in the capability of the Virginia class attack submarines, but they can render at least some of our fleet useless, maybe not sink them through cyber but lead to sinking them by, in essence, making them inoperative in key respects in defending themselves.

So my question to you is, assuming that Russia's strategy is, in effect, to use cyber, they don't need huge investments, obviously, for cyber capabilities. They've used cyber against our democratic institutions. They have been audacious, to say the least, in attacking this country in the cyber sphere in the last election. They used it against our allies in Europe in a very direct way. They used it in Ukraine to disable their defense forces. They are obviously developing that as a strategy.

Does that change your view of what the United States should be doing either on the 355-ship Navy or on the mix of what it should be? I'll just throw out what a lot of laymen should say—you know, we've invested in the USS *Ford*; now, because of the \$2 billion cost overrun, maybe larger, \$12 or \$13 billion in that one carrier, which conceivably could be rendered a sitting duck out there by cyber. Does that change your view of how we ought to be investing our resources?

Dr. LEHMAN. Well, it certainly assumes that we have the same philosophy in cyber, which you can make a very strong case is the greatest threat we face. But you have to assume that offense is the best defense. In other words, making clear to our adversaries that we can do worse to them than they can do to us, as well as defending and building into our technology weapon systems being able to degrade gracefully, which used to be a very important term in the military.

I mean, I flew the A-6 in the olden days, and we had inertial navigation. If that failed, we had Doppler navigation. If that failed, we had electronic navigation not dependent on satellites, and ultimately we had dead reckoning. So you had the highest technology available. But if you lost that or it was jammed or whatever, you degraded gracefully. We've got to have the same thing.

If we find that they are able to get into our CQ, our networked capability, that we don't just go dark and ineffective. We have a better technology base in this country and in the Atlantic Alliance than any other area of the world. So we've got to mobilize that. We've got to build more partnerships, which I know this committee has been very strong in advocating with Silicon Valley and the other technology centers, so that there's more interaction, more ability.

I was on the 9/11 Commission. We urged the intelligence communities to have more horizontal hiring and fellowships and internships and so forth with the top technological centers to keep that

fertilization, because the danger of a bureaucracy that's over 900,000 civilians in the Department of Defense, you're constantly fighting against inertia and just entropy.

So that has to be worked just as hard as every other part of the technological equation. But you can't say because we have some vulnerabilities, particularly in aircraft carriers and other systems, that therefore we don't build them or we build fewer of them. We've got to do it all because we are too small today. The fleet is being run into a shambles with less than, as everybody knows, less than half of the tactical fighters able to fly, with ships being run way past their maintenance schedules and so forth.

You've got to do it all, and it can be done because it's self-reinforcing. The costs become more containable if you have more ability to get the work out there and to compete and to get the cost reductions. But you are absolutely right to put cyber at the very top of the priority.

Senator BLUMENTHAL. Thank you for that excellent answer.

I have another question related to submarines, and I understand Senator Hirono asked a couple of questions about the Navy's report on our defense industrial base. But the idea—I think you said that at some point we were producing five submarines a year?

Dr. LEHMAN. Yes, 688s.

Senator BLUMENTHAL. That is staggering. I mean, they were different submarines, but—

Dr. LEHMAN. You know, people have forgotten the benefits of fixed price when you've got a solid design and it's complete and won't be changed. The ability—the amount of money you can save by competing every year, that's what we did. When we had five, the low-cost bidder got three and the high-cost bidder got two. When you have three, you do two and one. You can do that. You can really provide a challenge to the contractors if you aren't going to change the design in the middle of the contract, and they know that, so they can sharpen their pencils. They sign a contract that is not going to bring a loss, but then they start innovating and finding ways to cut costs and get better prices from their suppliers because on a firm fixed-price contract they can make a 40 percent margin if they do it the right way. So we've got to get back to that, and numbers count.

Senator BLUMENTHAL. Well, I represent the state that is home to Electric Boat. We're very proud of Electric Boat's capacity to build two, and soon it will be three with the Columbia class, submarines a year. But the Navy correctly identifies, and we've seen it up close on the ground, the difficulty of recruiting, retaining, and most importantly, training that defense industrial base, and it's not just at EB [electric boost] at the yard, it's also the supply chain which is often ignored.

I am told that the numbers of contractors or the numbers of active suppliers was, in the 1980s, around 17,000. There are now about 3,000. So we've gone from 17,000 to 3,000 suppliers in that defense industrial base. I think that's where, from a production standpoint, we need to be investing some of our attention and maybe our resources.

I think you're right, we can do it, but it will take some training, effort, skill education and so forth in our vocational technical skills,

which is a good thing because we need those welders and pipefitters and electricians and engineers and designers, but it won't happen by magic.

Dr. LEHMAN. No, you're absolutely right. It's a challenge.

Senator BLUMENTHAL. Thank you.

Dr. LEHMAN. Thank you.

Senator WICKER. Thank you, Senator Blumenthal.

Gentlemen, can you stay another 5 or 10 minutes?

Dr. LEHMAN. Sure.

Senator WICKER. Secretary Lehman, when you did your strategy, how did you lay it out? What form did it take?

Dr. LEHMAN. It was laid out in a comprehensive document that started with my confirmation hearings. Thanks to the way this committee operates, I was nominated, had my hearing, was reported out and confirmed in two weeks after the inauguration. So February 5th, I was on the job.

The statement that I submitted for my confirmation hearings was the same—I didn't think it was so shortened, but it was a comprehensive explanation of what we hoped to achieve, what the intellectual process was, going to each geographic area and the threat, and then we really spent so much time communicating, and not just public affairs but, more importantly, congressional affairs. We spent so much time up here. As I said earlier, throughout my tenure of six-plus years, I spent about 30 percent of my time up here, sitting down and having breakfasts and lunches and explaining—

Senator WICKER. Who signed on to the strategy, sir?

Dr. LEHMAN. A better point to make, because everybody signed on to it. The President ensured that that took place because we had to have OMB [Office of Management and Budget], we had to have the Defense Department, the Secretary of Defense, we had to have, in effect, the entire bureaucracy understand it. They might not all agree with it, but the fact is that we ensured that the Defense Logistics Agency, the nuclear agency, all of the 23 independent agencies were all brought into the picture to understand what the tradeoffs would be, how it would be executed, that discipline is required, and what we believed the result would be.

So everybody has to be part of it. There has to be consensus with the committees, bipartisan committees and membership of both houses of Congress, the White House, the White House staff, OMB, and the Defense Department itself in all its many layers.

Senator WICKER. Okay. Have you looked at our Navy title? Have you been able to read the NDAA Seapower title?

Dr. LEHMAN. I haven't.

Senator WICKER. Well, let me just say this. I hope you will agree that in terms of getting to this 355 with the right mix and making the requirement the policy of the United States Government, we funded five ships over and above the administration's budget request, and they include one destroyer, one amphib, one submarine, one float forward staging base, and one cable ship, in addition to what the administration had asked for.

I hope you gentlemen would agree that in terms of getting to our stated policy of 355 as soon as practicable, that we're off to a good start in the first year.

Dr. LEHMAN. I think it's terrific, and I think also the two NDAAs that I have read that preceded this one have laid the groundwork to enable it to be accomplished, the headquarters reductions, all of the reforms that you've done. You are providing the new team the foundation to get this thing done, which wasn't there before. So this committee has really broken new ground with the last two NDAAs.

Senator WICKER. Senator Hirono?

Senator HIRONO. I'm fine.

Senator WICKER. Are there any other questions?

[No response.]

Senator WICKER. Gentlemen, thank you very, very much for your lifetime of service and for your helpful testimony today.

This hearing is concluded.

[Whereupon, at 5:52 p.m., the subcommittee was adjourned.]

