

Testimony of Everett Pyatt, former Assistant Secretary Of Navy(Shipbuilding and Logistics) 1984-1989 before Senate Armed Services Subcommittee on Seapower July 18, 2017

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 US 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.