

**STATEMENT  
OF  
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CHAIRMAN AND CHIEF EXECUTIVE OFFICER  
NEWPORT NEWS SHIPBUILDING  
BEFORE THE  
SEAPOWERS SUBCOMMITTEE  
SENATE ARMED SERVICES COMMITTEE  
APRIL 4, 2001**

**Mr. Chairman, and members of the Subcommittee, I am pleased to appear before you this morning to discuss issues confronting the shipbuilding industrial base. In addition, your staff has asked that we cover a broad range of topics from individual shipbuilding programs to more general issues such as the supplier base, the role of commercial shipbuilding and alternative budgeting and funding approaches for Navy shipbuilding. I will touch briefly on each of these and then be prepared to answer your questions.**

**The current condition of the shipbuilding industrial base is that it is surviving but struggling. The quandary for shipbuilders today is that the Navy has stated a need of 300 to 360 ships which is the equivalent of 10 to 12 ships per year, yet we continue to build about half that many. So the industry's challenge**

**is whether to invest in a program to upgrade facilities for twice the workload or continue to retrench to build the number of ships that are actually being authorized each year. In order to realistically assess the future of the industrial base, it is critical to know how many and what kinds of ships are going to be built.**

**Another area that has a particularly high level of interest for the committee is cost control and the predictability of current shipbuilding programs.**

**The touchstones of a successful shipbuilding program can be reduced to three fundamentals. The first is stability of production, which allows for the planning of both facilities and workforce. The second is stability of design, which firmly defines the product being built without having to go back and make significant and costly changes. The third and final fundamental is a reasonable cost target, which allows for the planning of the entire program and provides incentives for continued performance improvements.**

**In the 35 years that I have been in the shipbuilding business, I have never seen a program at Newport News, or in fact at any of the other yards, lose control of costs when these three fundamentals were in place.**

**Throughout this testimony, you will hear me repeat a very critical word and one I'm confident you will hear from the other shipbuilders. It is the watchword of the industry. The word is stability. We need stability to strengthen and improve both the industrial base in general and the individual programs. We need a commitment from the government to define and stay the course with Navy shipbuilding programs.**

**With those three fundamentals outlined, let me discuss some of the other areas of interest.**

**First, let me address the subject of productivity improvements. Many of you have heard about the low cost shipbuilding in Japan and Korea. I have been there many times. We have worked with their companies and we have walked their factory floors and their dry docks. There is no mystery to their low cost model. They have stability in production. They have stability in design.**

**Because of that, they can invest heavily in their plants and in their up front planning. These investments pay large dividends in reducing costs. Although the ships they build are almost exclusively commercial, and not as complicated as military warships, the model works for both.**

**The U.S. shipbuilding industry stands ready to make those same kind of investments once it becomes clear we have a dependable future market. That is not to say that this industry has not invested in itself. Newport News has invested more than a billion dollars in the last 12 years. These investments, in computer-aided design, robotic manufacturing and new facilities, have enabled us to substantially reduce the man-hours required to build carriers and submarines.**

**You asked about the impact of ship funding alternatives. These various alternatives, such as multi-year funding, advance procurement, block buys, and advance appropriations, all support the first fundamental of a successful shipbuilding program -- a commitment to stability. And therefore I enthusiastically support them.**

**What these alternatives do to varying degrees is allow the shipbuilder to plan ahead, invest ahead and buy several ship-sets of material at once -- all which help to reduce the costs of the ships.**

**Advance appropriations are more in line with how business finances its capital programs, which is on a cash outlay basis. For example, if we build a new dry**

**dock, we will approve the entire project but budget the cost over the future years when it is expended. It is certainly worthy of careful consideration.**

**Therefore I hope the Senate will not agree with the House Budget Resolution provision that would deny the Congress the flexibility to consider the use of advance appropriations for Navy shipbuilding. Using advance appropriations, shipbuilders can build more ships over the next five or six years and certainly build them at reduced costs.**

**Some of these ship funding alternatives can be used in combination with each other and there are various levels of savings that can be realized, and because there are pros and cons to each of them, I won't get into any more detail at this point. We can save that for questions and answers if you desire.**

**In addition to the more general issues I have discussed thus far the subcommittee staff has also asked that we address some specific questions.**

**First, can commercial shipbuilding serve as a reliable means to preserve the industrial base? My general answer is no. Because of the subsidies overseas, the world commercial market is not available to U.S. shipbuilders and the domestic market is not that large. It can, however, be an important**

**supplemental and therefore be of some help to maintaining the industrial base, albeit a small one. Additionally, the most logical place for that work to take place is in the two yards that build military ships that are closer to the design of a commercial ship, products such as the auxiliary ships built for the Navy.**

**You also inquired about the teaming on the *Virginia*-class submarine program and whether there were lessons-learned that could be applicable to other programs. With respect to the *Virginia*-class submarine program, it is our view that the Electric Boat/Newport News Shipbuilding teaming agreement is an unqualified success.**

**Despite skepticism by some in the beginning, the Electric Boat/Newport News teaming has resulted in the Navy getting the best both companies have to offer. We have demonstrated that the two companies can seamlessly share and utilize electronic design and construction data, while incorporating the best practices of both companies into the construction process.**

**The Subcommittee staff has specifically asked if lessons learned from the teaming agreement can be incorporated into other programs, and I think there may be that opportunity. For example, this teaming between two fierce**

competitors has matured the *Virginia* class program to the extent that it will be ready for multiyear contracting soon. The teaming agreement provides for a discrete work split between the companies so that each performs separate yet identical work on every boat. This means that each company has essentially one learning curve on its half of the work, rather than both companies having a separate learning curve on the entire boat.

The EB/NNS teaming agreement is also a true partnership with financial incentives in which both partners stand to gain equally if both perform well, and in which both partners stand to lose equally if either performs poorly. It remains to be seen whether the benefits to the Navy from the EB/NNS teaming agreement can be captured in other shipbuilding programs that do not have such a partnership structure.

I will now address the specific shipbuilding programs, starting with aircraft carriers.

We are currently building the *Ronald Reagan* (CVN 76) which is about 60 percent complete. This ship includes a completely redesigned island using the most modern tools for 3-D product modeling, and other changes that resulted

**in reconfiguring almost two-thirds of non-electronic design drawings of the *Nimitz* class carrier. It will be delivered to the Navy in 2003. The company is also designing and accelerating construction on the transition ship to the new class of carriers. The as yet unnamed CVN 77 will have a newly designed warfare system and unlike previous carriers where this integration was preformed by the Navy, Newport News is managing the technology insertion with Lockheed Martin in a subcontractor role.**

**Here I would like to briefly highlight what I believe is an important success for both the Navy and for Newport News. That is the recent negotiation for the CVN 77 contract. Newport News and the Navy, for the first time probably in 30 years, agreed to a fair and reasonable target cost. It is important to note however, that to meet this goal Newport News has to further reduce its man-hours on CVN 77 by nearly 10 percent compared to CVN 76. This goal, while challenging, is achievable. We also have a reasonably stable design and a stable production plan. In short, all three of the fundamental ingredients required to have a successful program are present for CVN 77. It should be a model for the future.**



Newport News is also working on the first of the new class of carriers, CVNX1. This ship will have a newly designed propulsion system that will, in effect, reduce manpower requirements, thereby saving money. It is also scheduled to have an electromagnetic launch system for aircraft. The second ship of the new class, CVNX2, is anticipated to have a newly designed hull as well as an electromagnetic aircraft recovery system.

Much of the work on future carriers will take place in the new \$60 million Virginia Advanced Shipbuilding and Carrier Integration Center located in downtown Newport News, Va. Scheduled for opening this summer, this Center will serve as the nucleus for all carrier research, design, test and integration. Eleven Virginia colleges and universities, as well as industry partners and the Navy, will participate in this Center.

With regard to the submarine program, I have already mentioned how well the teaming on the *Virginia* class is progressing. Newport News and Electric Boat have exchanged two modules thus far and will exchange the third later this month. The lead ship of the class, *Virginia*, is 50 percent complete and scheduled for delivery in 2004. The second ship *Texas*, is 40 percent complete and slated for a 2005 delivery. This summer, Newport News will deliver a

**quarter-scale model of the *Virginia*-class submarine, called LSV-2, to the Navy. This autonomous test vehicle will provide the Navy with the opportunity to conduct large-scale testing that will be invaluable to technology development and insertion in a very cost-effective manner.**

**A very important element in the shipbuilding industrial base is the supplier base for materials. Both submarines and aircraft carriers literally have thousands of different suppliers from all over the country. They range from very large corporations to very small businesses. The downturn in defense spending and the lack of follow-through on proposed shipbuilding programs has dealt many of these suppliers a critical blow. In many cases, the industry is down to single source suppliers. We remain concerned about our dependence on select suppliers of complex equipment and components.**

**Like the prime shipbuilders, these suppliers have based their business models and manufacturing capabilities primarily upon Navy shipbuilding programs. In a U.S. economy driven by growth in technology and services sectors, it is doubtful that new manufacturing companies will emerge as alternative suppliers, given the shrinking military opportunities. In addition, it is unlikely that even the more established companies can, over time, make the plant**

**investments necessary to keep up with improvements in manufacturing technology and practices unless they see stability in the shipbuilding programs. And, as with the shipbuilders, the remaining sole source suppliers struggle to maintain skilled employees and capabilities given the gaps in contract awards and low order quantities.**

**A month ago, Newport News was proud to christen the newest carrier, *Ronald Reagan* (CVN 76). This ship, when it enters the fleet in 2003, will be the most modern, flexible, and survivable surface ship capable of projecting American power and presence around the world. This ship is a true tribute to the skilled workers of both Newport News and our suppliers. And importantly, this ship is indicative of the quality that the U.S. shipbuilding industrial base delivers, in spite of some of the handicaps it is under.**

**The industry can continue to reduce its costs and cycle times but there must be stability in shipbuilding and a commitment from the government for these programs to effectively make these kinds of improvements.**

**In summary, Mr. Chairman, the Navy shipbuilding industrial base faces many challenges, but we are working hard with our customer to meet them. We**

**know that we can restrain the costs of constructing Navy ships by allocating sufficient time and resources to the early planning and integration of the design and construction processes, by reducing the number of changes in ship designs, by increasing production rates, and by attaining stable production schedules and funding.**

**I look forward to working with you and Members of the Subcommittee as we all seek to reach these goals.**