

Testimony before the House Committee on Armed Services Subcommittee on Projection Forces

Statement of
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Mr. Chairman and Members of the Subcommittee, thank you for inviting my testimony today and for your continued interest in the Navy's DD(X) next-generation destroyer program. It is a privilege to be here today, representing the shipbuilders of General Dynamics Marine Systems.

Introduction

Before going into the DDX program specifically, let me comment on the situation confronting the Navy and its shipbuilding partners today and try to offer some context that I hope will contribute to better understanding current challenges. This industrial base sector and its resources - including most importantly its skilled designers, engineers and production workers - are focused on delivering the next-generation Fleet that involves an unprecedented number of lead or first-of class ships in the same timeframe: VIRGINIA, DDX, CVN-21, LPD-17, T-AKE, and LHA-R. We are doing so in a time of unprecedented volatility and instability in Navy shipbuilding plans which has served to add to the degree of challenge. In over-forty years as an American shipbuilder, I have never seen an environment comparable to the one we are in today. Yet, this unique industrial-base sector remains focused on managing through this period and successfully meeting these challenges. We are up to the task. However, some semblance of long-term stability and predictability needs to be restored to Navy shipbuilding plans and acquisition strategies.

The name Bath Iron Works (BIW) has been synonymous with U.S. Navy surface combatants since the closing years of the 19th century. BIW's first U.S. Navy warship, gunboat MACHIAS, was delivered and commissioned July 23rd, 1893. Since that date, more than 230 Bath-built ships have taken their place in the Fleet to serve in America's defense. BIW has designed and built more first-of-class U.S. Navy surface combatants than any other shipbuilder in operation today, and most recently served as lead design and construction yard for the DDG-51 ARLEIGH BURKE-AEGIS Destroyer Class, which is still in active production. The Navy's DDG-51 dual-shipyard acquisition strategy has made this a successful and affordable program for over twenty years.

General Dynamics Bath Iron Works has been engaged in preparations to build the Navy's next-generation destroyer since 1998. It is important to highlight that the acquisition strategy for the next-generation destroyer shipbuilding program was formulated from the outset explicitly to leverage the collaborative talents of both General Dynamics and our industry partner and lead of the DD(X) National Team, Northrop Grumman Ship Systems (NGSS). This shipbuilder collaboration was designed to extend through all program phases – from initial design through detailed design and the entire anticipated ship construction program.

Since the selection of NGSS as the National Team Leader in 2002, BIW has had secondary roles in both DD(X) preliminary design and Engineering Development Models (EDMs). BIW's limited involvement has restricted our detailed knowledge of the EDMs and thus I am not in a position to speak about their specific status. To date, BIW has performed about 20 percent of the preliminary design activity. With strong Navy encouragement and support, however, last summer NGSS and BIW agreed our roles for detailed design would be shared at a near-equal percentage. Due to the Navy's proposed changes to the current DD(X) acquisition strategy, shipbuilders have not been able to transition to detailed design. An immediate start of DD(X) detail design is extremely important to the program schedule and to avoid the loss of a highly skilled engineering and design workforce in place today.

DDG-51 Destroyer Program

Over the past twenty years of DDG-51 ship construction and in-service fleet support, BIW and its dedicated workforce of skilled men and women have continued to pursue significant cost and schedule performance improvements. Ongoing efforts to reduce the costs of building U.S. Navy ships at Bath have also been dramatically assisted by major investment by the shareholders of General Dynamics in a new, more efficient ship-construction facility with important tax support from the State of Maine and City of Bath. Since the state-of-the-art Land Level Transfer Facility (LLTF) became operational in 2001, BIW has reduced overall ship-construction durations by more than 25 percent

from DDG 87, the last ship built on the ways, to DDG 96, the fourth ship constructed on the LLTF. Work completed in the LLTF also has reduced the water-borne period of ship construction, the most costly and least efficient period of construction, by more than 50 percent.

Today, BIW continues to benefit from the LLTF as evidenced by the last three DDGs delivered by BIW. These ships - DDGs 92, 94, and 96 - were completed with progressively fewer engineering and support and production hours per ship. In fact, when compared with DDG 92, DDG 96 was completed with close to 30 percent fewer engineering and support hours and 10 percent fewer production hours. Such productivity improvements result in savings that are shared 50/50 with the government resulting in lower cost to taxpayers for the DDG capability delivered to the fleet.

These investments and savings have occurred in the context of what has been a period of relative stability and predictability in the mature DDG-51 program. Congressional implementation of two successive multiyear procurements, each covering four fiscal years' worth of ship contracts for each surface-combatant shipbuilder, significantly enhanced critical stability and predictability. Predictability is fundamental to the functioning of a successful business.

Naval shipbuilding is an undertaking that requires decisions about investments in facilities, equipment, and retention/enhancement of critical workforce skills be made years in advance. These critical decisions are necessarily predicated on assumptions about future workload. BIW continues to take necessary and at times difficult steps across the enterprise every day to prepare the yard for a future that likely will involve low-rate production. Recent examples include dramatic reduction in overhead and support personnel, implementation of lean practices across the shipyard, improvements in efficiency against a declining backlog, and the termination of third shift work – a practice that has been in place at BIW for decades. These changes in process, staffing and facilities are being demonstrated today in the construction of the DDG 51 class. Changing BIW now ensures that we will be an affordable, high-quality producer of surface

warships for the Navy's DD(X) construction requirements even at low rates of production.

DDG-51 Destroyer Modernization Program

Many of the life-cycle cost reduction technologies being developed to reduce the cost of DD(X) are available for installation on the DDG-51 ARLEIGH BURKE-Class AEGIS destroyers during their modernization availabilities. I urge Congress to continue to support an aggressive approach to reducing the manning and operational support costs of the Fleet's largest surface-combatant class through the congressionally initiated DDG-51 Modernization Program. Sustaining this effort with additional funding can help significantly reduce crew size and minimize overall Operation and Support (O&S) costs.

Current DD(X) Acquisition Strategy

Compared to the DDG-51 multiyear procurements, there has been little stability or predictability in the next-generation destroyer program. The FY2004 and FY2005 Budget Requests and associated projections provided a basis to assume that a total of 12 DD(X) ships would be procured over the Future Years Defense Plan. The FY2006 Budget Request and associated documents now suggest that only five DD(X) ships will be procured over the next six year period, although CNO Admiral Clark and other Navy leaders have suggested in FY06 Congressional testimony that the total requirement for DD(X) ships is more on the order of ten ships. Today there is great uncertainty about how many DD(X) ships the Navy wants to build either in the near-term FYDP or over the life of the DD(X) program.

There is also uncertainty about who will build the DD(X) Class ships despite the fact that since the inception of the next-generation destroyer program in 1998, the Navy has consistently pursued an acquisition strategy involving both surface-combatant shipbuilders in all program phases. Instead of implementing the traditional lead yard-follow yard approach, from the program's inception the Navy has had BIW and NGSS designers, engineers, and manufacturing trades preparing together to cost-effectively

design and support the construction of the next-generation destroyer class at two shipyards.

Surprisingly, less than one week after submission of the FY2006 President's Budget the Navy announced a change in the DD(X) acquisition strategy to a winner-take-all competition for design and construction. This new strategy was both premature and impossible to execute fairly and consistent with the Federal Acquisition Regulation (FAR). Since the first announcement of that proposed change in strategy, the Navy has introduced several different proposals.

For example, the latest proposed plan appears to have some positive elements, particularly having both shipbuilders proceed now - collaboratively and equally - into detailed design. Beyond that, however, the proposal to have two concurrent lead ships and an FY09 competition with the implication that it would determine a single yard for all subsequent ship production before either yard has completed 20 percent of their first production ship makes little sense from a shipbuilding perspective. That approach could increase costs and schedule risks including the potential for design rework issues across hulls. It could put pressure on the supplier base to simultaneously provide two lead-ship sets of equipment.

Given the original Navy DD(X) acquisition strategy and the work accomplished by the National Team to date, General Dynamics found the Navy's recent plans to abruptly change course to a near-term winner-take-all competition for the design and construction of DD(X) very disturbing. We had a difficult time understanding a policy that completely eliminated the prospect of future shipbuilder competition for a major category of warship. How could reliance on a single source ultimately save money, foster innovation and otherwise serve the national interests in the future? We are grateful that this Congress was concerned enough by that proposal and its ramifications to impose a statutory prohibition with broad bipartisan support on the Executive Branch's ability to implement such a strategy in the DD(X) program.

Additional Thoughts about A Single Surface Combatant Shipbuilder

Some have offered opinions about the strengths of a path that could leave our nation with a single provider for major surface-combatant ships. It has been expressed that alternating ship allocations between two shipbuilders provides no government leverage, no cost control, no competitive pressures, and no motivation to design the ship with urgency and collaboration. Such conclusions are truly off the mark as demonstrated by the success of several other recent shipbuilding programs.

In recent decades, Navy acquisition officials have successfully contracted and managed the construction of major warships through dual-source procurement. The 62-ship 688 class Los Angeles Class attack submarine program enjoyed solid, ever-improving cost control; continual learning, and a collaborative, at times urgent, approach to improvements to the ship over twenty years of construction. The DDG-51 program - another long run of successful ships with excellent cost control - where award fees were judiciously used on a ship-by-ship basis as the Navy used leverage to incentivize shipbuilders toward ever-improving cost performance. Both DDG-51 shipyards achieved scores of 92 percent or greater during the last deliveries evaluated and each has shown a continually improving trend over the last three ships scored respectively.

There have been statements that the current planned DD(X) quantities will not support steady employment levels at two shipyards (which is true in BIW's case), and that the yards will face unmanageable peaks and valleys as they deliver a ship, live through a one-year gap, and then build the next ship. My counterpoint to such assertions is that there is never a steady employment level in a shipyard because of the very nature of the business. Consider that from 1991 to today BIW has taken its workforce from 12,000 to less than 6,000 - with swings both up and down of many hundreds annually - and during this same period has become a more productive and cost-effective provider for the Navy. A few decades ago, BIW provided quality ships to the Navy at an employment level well below today's employment. BIW is aggressively re-engineering itself for cost-effective low-rate production until the nation again decides it needs new surface combatants in quantity. To give up on shipbuilders who have been providing quality warships to our

nation in every decade of the last fifty years is not only shortsighted but will, in my view, lead to higher costs, less innovation and dramatically reduced capacity to surge production to meet future threats.

Finally some in the Navy have suggested that to build a single DDG-51 in 2006 would cost in the range of \$1.65B to \$1.8B. The DDG-112 ship at BIW is scheduled to start shipyard fabrication in 2007 and has a shipbuilder contract price of about \$550M – less than one-third of the projected total program cost for another mature warship.

Capping the Cost for DD(X)

Industry must continue to work with Navy leadership to hold down the acquisition costs of the DD(X) and other Navy shipbuilding programs, and General Dynamics is committed to this effort. Some believe a cost cap is a reasonable method to hold down acquisition costs or may be the only effective method to communicate Congressional displeasure with the mounting costs in Navy shipbuilding programs to the Navy.

Although it clearly sends a strong signal, and I believe both Navy and industry have heard it, there may be unintended long term consequences of applying a cost cap, especially at the outset of a major new program like DD(X). Let me illustrate with an example. The DDG-51 Flight I cost cap resulted in a design that excluded a helicopter hanger. Several years later the Navy redesigned the ship for Flight IIA helo-hanger capability at a substantial additional cost. Cost caps need to be balanced with system requirements and performance.

Charting the Course for DD(X)

What is the right path for proceeding with the next-generation of major surface combatant warship and major surface-combatant force for our Navy?

- Congress should fully fund the FY06 DD(X) Program R&D request for \$1.1B
 - DD(X) research, development, test and evaluation funds are critical to retiring risks involved in the major new technologies planned for DD(X). These technologies promise significant capability advances which can be applied to both current and future programs.

- Congress should fully fund FY06 DDX SCN Advance Procurement in the amount authorized by the Senate Armed Services Committee, \$766M, with \$200M (\$100M for each shipbuilder) earmarked for ship detailed design.
 - While Congress authorized and appropriated FY05 advance procurement funds for detailed design, the Navy's recent proposed Acquisition Strategy changes have delayed release of those funds. Consequently, BIW has had to lay-off designers required to execute the DD(X) detailed design with more design team erosion projected.
 - Furthermore, based on information provided by the Navy, the Navy plans to reduce the FY05 DD(X) second-shipbuilder design funding from \$84M to \$30M or less. This reduction will result in an FY06 BIW detailed design funding requirement of \$100M in SCN.
- The Navy should immediately seek authority to commence detailed design and release the FY05 funds designated for such work to proceed.
 - As supported by both the Navy and industry, this detailed design work should involve both shipbuilders equally.
- The Navy and industry should hold a summit to discuss and agree upon a DD(X) acquisition strategy that is fiscally responsible, retains an industrial base with two surface-combatant shipbuilders, and realistically charts a viable execution strategy for the DD(X) program.
- The Navy and industry should continue to review and adjust the program during the early stages of Phase IV to ensure risks remain manageable by giving the appropriate Navy acquisition managers the flexibility for selective delay of specific capability, if needed, to manage overall program risk and cost.
- The first shipbuilder should be allowed to start lead ship construction as soon as detailed design will support it.
- The second shipbuilder should start its first ship after the initial lessons learned from the early phases of the lead ship are incorporated, as has been a successful practice of previous programs.

Conclusion

I recommend the Navy and the Congress continue to take the necessary action to ensure that the DD(X) program proceeds in a manner that has acceptable risk while delivering this needed capability to the Nation. DD(X) already has opened the next chapter in the history of U.S. Navy surface combatants and the shipbuilders of BIW are committed to making this transformational ship a reality. Given the history of this program to date, if DD(X) is to survive it needs a stable acquisition strategy that leverages the collaborative talents of General Dynamics and Northrop Grumman.

Accordingly, I urge Congress to continue to enforce its view that the national security interest and the prospects for a successful and affordable DD(X) program are best served by sustaining the involvement of both major surface combatant shipyards. The Navy and our Nation need this valuable asset and through planning, collaboration, and ample yet carefully allocated resources, we can produce an affordable and capable platform to serve in the defense of our Nation.