

Web Memo



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Congress Should Accelerate Submarine Procurement

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The Department of Defense must prepare to meet the wide variety of challenges of the long war against terrorism. As well, Congress must establish spending priorities for the military and allocate funds accordingly. In general, Congress should increase the portion of the defense budget spent on acquisition, allocate funds to reduce per-unit costs, and invest in platforms that provide the greatest range of capabilities. Soon, Congress will decide when to begin procuring Virginia class submarines at the rate of two per year. To make the best use of taxpayer dollars and ensure that the nation's submarine fleet doesn't fall short, it should authorize and appropriate funds to meet this target in fiscal year 2009.

Realigning the Defense Budget

The military's operational and support budgets have been outpacing the amounts invested in military modernization. The operations and support budget, which is the sum of the military personnel account and the operations and maintenance account, consumed almost 65 percent of the total Department of Defense (DOD) budget in fiscal year (FY) 2004. Meanwhile, the modernization budget, which is the sum of the account for researching and developing new weapons and equipment and the account for procuring new weapons and equipment, has fallen to roughly 31 percent of the total DOD budget. (See Chart 1.) This trend raises the question of

whether the nation is sacrificing future capabilities to pay for today's operations.

*Includes foreign contributions to cover the costs of Operation Desert Storm. Source: Heritage Foundation calculations based on data from U.S. Department of Defense, National Defense Budget Estimates for FY 2006, April 2005, pp. 131-133 at http://www.defenselink.mil/comptrollet/defbudget/fy2006/fy2006_greenbook.pdf.

Placing a greater emphasis on the procurement of platforms that will provide greater capabilities in the future would be a step in the right direction.

Greater Volumes Will Reduce Per-Unit Costs

One of the greatest problems facing defense spending is high unit costs for weapons. The source of this problem is the procurement holiday taken during the 1990s. By 1997, the overall modernization budget fell by over 50 percent in real terms from its 1985 level (see Chart 2).

The procurement budget, in particular, fell by roughly 65 percent. While there has been some recovery in the modernization budget since 1997,

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it has not been complete.

Given this history, it is not surprising that unit costs have risen. In 1985, the Department of Defense purchased 585 aircraft, 2,031 combat vehicles, 24 ships, and 32,714 missiles.¹ Currently, annual defense production is 188 aircraft, 190 combat vehicles, eight ships, and 5,072 missiles.² These low rates of production deprive the defense industry of the economies of scale it leveraged in the 1980s.

The same history has driven the industry to consolidate, primarily through mergers and acquisitions. In 1985, there were 20 prime defense contractors with broad expertise in defense systems.³ Today, there are just six.⁴ In the 1990s, it became a losing proposition for a prime defense contractor to carry excess production capacity. The rational alternative was to merge and strip away excess capacity in the process. This left the Department of Defense with a less competitive supply network, but the alternative was to allow a series of bankruptcies and liquidations in the contractor base, leading to an equally uncompetitive network.

Accelerating production of Virginia class attack submarines to two per year in 2009 will generate economies of scale—the economic condition when the per-unit cost of producing an item declines with the number of units made. Industry officials are confident they can meet the Navy’s goal of \$2 billion per submarine if two submarines are produced per year.

The Best Capabilities

Nuclear attack submarines (SSNs) provide a wide variety of capabilities, including “covert intelligence, surveillance, and reconnaissance (ISR); covert insertion and recovery of special operations forces; covert strikes against land targets with the Tomahawk cruise missiles; covert offensive and defensive mine warfare; anti-

submarine warfare (ASW); and anti-surface ship warfare.”⁵

Because of their unrivalled stealth and ability to spend much longer periods of time on station, submarines can perform ISR missions more effectively than any other platform. Satellite orbits, for example, are more predictable, allowing a potential adversary to mask its activities by hiding during periods when he is likely to be observed overhead. Nor can satellites and spy planes remain on station for the same length of time as submarines.

The current problem is that nearly 40 percent of combatant commanders’ requests for submarine missions go unfulfilled.⁶ That problem is bound to get worse.

In July 2005, the Navy conducted a study examining submarine force levels. It found 48 SSNs to be the minimum number of attack submarines needed to maintain an acceptable level of risk at an acceptable cost.⁷ If the Navy waits to begin procuring two Virginia class submarines per year until 2012, as it currently plans to do, the number of attack submarines will begin a steady decline in 2014 and will free-fall all the way to forty boats in 2028 and 2029. Furthermore, the attack submarine fleet will fall short of 48 boats—the minimum level necessary, according to the Navy’s study—for 16 of the years between 2007 and 2034.⁸ If the Navy begins to produce two Virginia class submarines per year in 2009, however, the number of attack submarines will bottom out at forty-three, three higher than the current plan allows. Perhaps more importantly, the number of attack submarines will only fall below the adequate level of forty-eight subs for eight years between 2007 and 2034.⁹ (See Chart 3).

Another concern is that operational requirements could grow in the future. China's submarine buildup continues to proceed with a sense of purpose. At a time when the United States has only three boats under construction, the Chinese are building two-and-a-half boats per year indigenously,¹⁰ in addition to the submarines being built at three Russian boatyards that are working to fulfill their requests.¹¹

A Sensible Plan

For four reasons, Congress should move up the procurement of Virginia class submarines at the rate of two per year to 2009:

1. The Defense budget leans too heavily in favor of the operations and support account, forcing a decline in the modernization budget. For this reason, Congress should increase the amount of money spent on procurement to balance priorities within the DOD budget.

2. Accelerating procurement will reduce per-unit costs, making it more likely that the Navy's goal of \$2 billion per submarine can be achieved.
3. The Virginia class submarine provides an array of capabilities that no other systems can match.
4. Without accelerating procurement of the Virginia class submarine, the Navy will fall below the 48 attack submarines, the minimum level needed, for 16 of the years between 2007 and 2034.

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¹ Defense Acquisition Performance Assessment Panel, "Executive Summary," December 2005, p. 6.

² *Ibid.*

³ *Ibid.*

⁴ *Ibid.*

⁵ Ronald O'Rourke. "Navy Attack Submarine Force-Level Goal and Procurement Rate: Background and Issues for Congress." Congressional Research Service, Report for Congress, updated January 18, 2006, p.3.

⁶ Statement by Admiral Charles L. Munns, Commander, Naval Submarine Forces, Department of the Navy. Hearing of the Projection Forces Subcommittee of the House Armed Services Committee, March 28, 2006.

⁷ Statement by Admiral Charles L. Munns, Commander, Naval Submarine Forces, Department of the Navy. Hearing of the Projection Forces Subcommittee of the House Armed Services Committee, March 28, 2006.

⁸ Ronald O'Rourke. "Navy Attack Submarine Force-Level Goal and Procurement Rate: Background and Issues for Congress." Congressional Research Service, Report for Congress, updated January 18, 2006, p.17.

⁹ Ronald O'Rourke. "Navy Attack Submarine Force-Level Goal and Procurement Rate: Background and Issues for Congress." Congressional Research Service, Report for Congress, updated January 18, 2006, p.17.

¹⁰ "Songji Gailiang Qianjian, Haijun Weilai Zhuli, Waigou Eluosi K ji Qianjian, Tianbu Changgui Zhanli Kongxi, Bing Jiji Yanshi Xinjian" [Improved Song Class Submarine is main force of Future Chinese Navy, with Russian Kilo Class, to buttress conventional force posture in region, actively develop new vessels], *New York World Journal*, June 1, 2005, p. A8.

¹¹ John Pomfret, "China to Buy 8 More Russian Submarines; \$1.6 Billion Deal Would Aid a Blockade of Taiwan, Challenge U.S. Power in Region," *The Washington Post*, June 25, 2002; p. A15. See also Lyle Goldstein and William Murray, "Undersea Dragons: China's Maturing Submarine Force," *International Security*, Vol. 28, Issue 4 - Spring 2004, pp. 161 – 196.

Chart I

The Imbalance Between Operations and Modernization

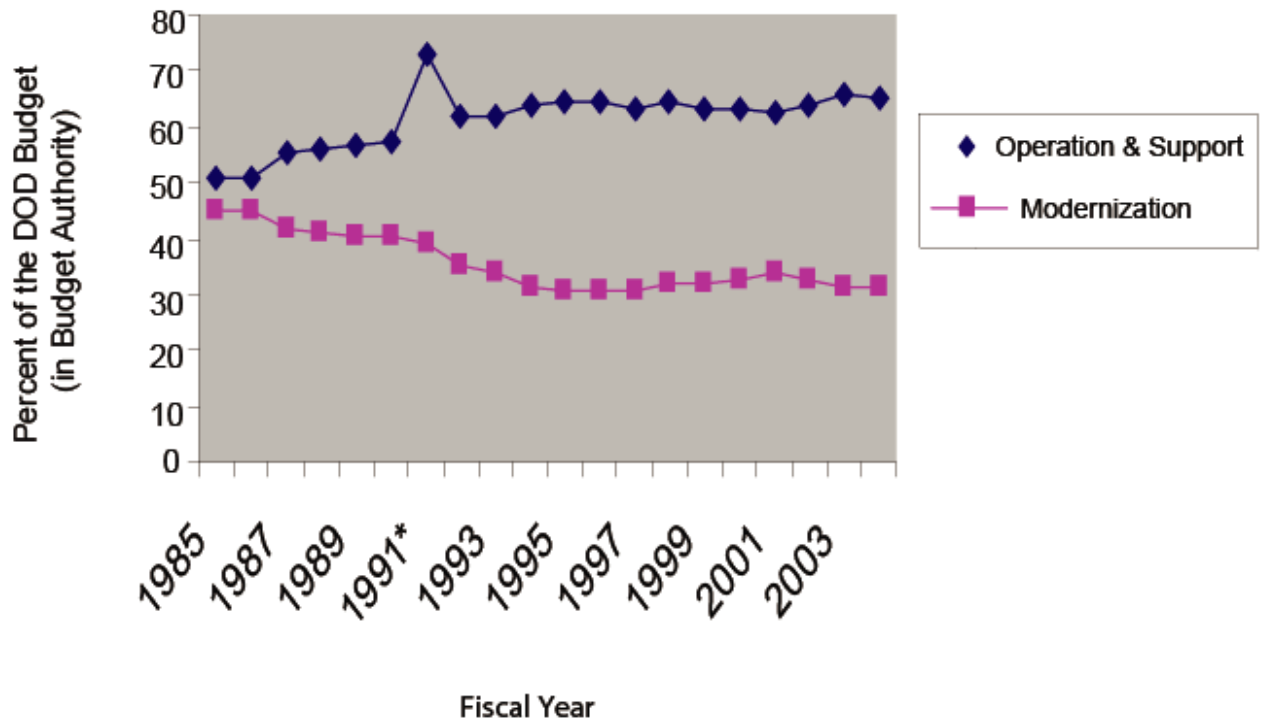
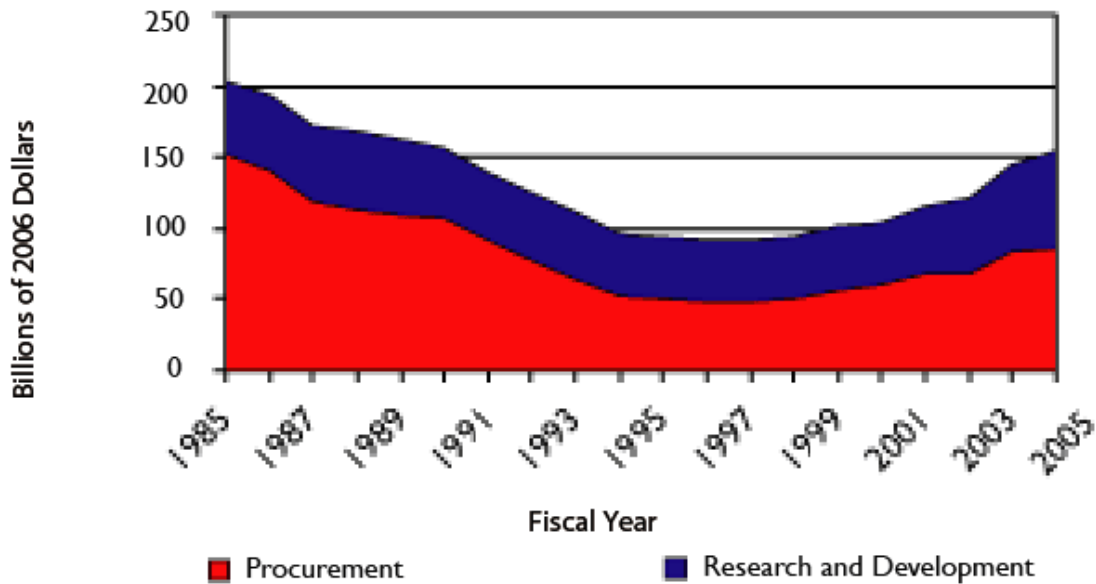


Chart 2

Modernization Funding Was Cut Dramatically in the 1990s and is Still Recovering



Source: Heritage calculation based on Department of Defense data

Chart 3

Procuring Two Subs per Year in FY 2009 vs. FY 2012

