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Navy Ship Procurement Rate and the Planned Size of the Navy: Background and Issues for Congress

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Summary

There is currently no officially approved, consensus plan for the future size and structure of the Navy. The absence of such a plan could complicate Congress' ability to conduct oversight of the Navy's budget and individual Navy ship-acquisition programs. DOD is proposing to procure new Navy ships during most of its amended FY2004-FY2009 Future Years Defense Plan (FYDP) at an average rate less than what would be required, over the long run, to maintain a Navy of 310 or more ships over the long run. This report will be updated as events warrant.

Background

Historical and Current Size of the Navy. The Navy reached a late-Cold War peak of 568 battle force ships in FY1987 and has since been declining in size. The Navy fell below 300 battle force ships in August 2003 and included 297 battle force ships as of August 2, 2004. The Department of Defense's (DOD's) amended FY2004-FY2009 Future Years Defense Plan (FYDP) would reduce the Navy to 290 battle force ships by the end of FY2005, before building back to 309 battle force ships by the end of FY2009.

Planned Size and Structure of the Navy. DOD's 2001 Quadrennial Defense Review (QDR) approved a plan for a Navy of about 310 battle force ships. This plan, like the one approved in the 1997 QDR, included 12 aircraft carriers, 116 surface combatants, 55 nuclear-powered attack submarines (SSNs), and 36 amphibious ships organized into 12 amphibious ready groups (ARGs) with a combined capability to lift the assault echelons of 2.5 Marine Expeditionary Brigades (MEBs). The 2001 QDR report stated that as DOD's "transformation effort matures — and as it produces significantly higher output of military value from each element of the force — DOD will explore additional opportunities to restructure and reorganize the Armed Forces."

In February 2003, in submitting its proposed FY2004-FY2009 Future Years Defense Plan (FYDP) to Congress, DOD announced that it had initiated studies on undersea

warfare requirements and forcible entry options for the U.S. military. These studies could affect, among the other things, the required numbers of SSNs and amphibious ships, and therefore created uncertainty about DOD's commitment to the 310-ship plan.

Navy leaders in 2002 began to mention an alternative proposal for a 375-ship Navy. The 375-ship proposal includes several dozen smaller surface combatants, called Littoral Combat Ships (LCSs), that are not included in the 310-ship plan. The 375-ship plan includes 12 aircraft carriers, 55 SSNs, 4 converted Trident cruise-missile-carrying submarines (SSGNs), 160 surface combatants (including 104 cruisers, destroyers, frigates, and 56 LCSs), 37 amphibious ships, and additional mine warfare and support ships.

Although Navy leaders in 2002 and 2003 routinely referred to the 375-ship proposal, Secretary of Defense Donald Rumsfeld, at a February 5, 2003 hearing before the House Armed Services Committee, explicitly declined to endorse it as an official DOD goal. He has also declined to endorse any other plan for the future size and structure of the Navy. In recent months, Navy leaders have hedged their commitment to the 375-ship proposal, stating that 375 is an approximate figure, that the ships making up the total of 375 are subject to change, and that the 375-ship figure reflected traditional concepts for deploying Navy ships, rather than new concepts (such as the Sea Swap concept for long deployments with crew rotation) that could significantly reduce future requirements for Navy ships.[1] Navy and DOD officials, however, have not announced a new plan as a successor to the 310-ship plan or the 375-ship proposal, and have given little indication of when they might issue such a plan.

In summary, there appears to be no current, officially approved, consensus plan for the future size and structure of the Navy, and it is not clear when, or if, DOD intends to submit such a plan. Instances of uncertainty over the planned size and structure of the Navy occur from time to time; the last instance was during the first two years (1989-1990) of the former Bush Administration.[2]

Rate of Navy Ship Procurement. The rate of Navy ship procurement and its relationship to the planned size of the Navy has been a concern in Congress since the mid-1990s. Some Members of Congress have repeatedly expressed concern over what they view as a divergence between the required size of the Navy and the planned rate of Navy ship procurement. CRS has examined the issue in multiple reports and testimony since 1996.[3] The conference report (H.Rept. 107-772 of November 12, 2002) on the FY2003

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[1] For more on Sea Swap and other new approaches for deploying Navy ships, see CRS Report RS21338, Navy Ship Deployments: New Approaches — Background and Issues for Congress, by Ronald O'Rourke.

[2] The Reagan Administration (1981-1989) planned for a Navy of about 600 battle force ships. In late 1990, as part of its Base Force plan for the future of the military, the former Bush Administration announced a plan for a Navy of more than 400 battle force ships. In 1993, as part of its Bottom-Up Review (BUR) of U.S. defense programs, the Clinton Administration announced a plan for a Navy of 346 battle force ships. The Clinton Administration's 1997 QDR reduced this to about 305 ships, which was later amended to about 310 ships when the SSN goal was increased to 55 boats from 50.

[3] For a recent example, see CRS Report RL32382, *Navy Ship Acquisition in the FY2005 Budget:* (continued...)

defense authorization act (P.L. 107-314/H.R. 4546) strongly criticized the Navy for submitting shipbuilding plans in recent years with average rates of ship procurement that would not support the planned size of the Navy over the long run (see pages 448-451).

The Administration's proposed FY2005 defense budget and amended FY2004-FY2009 Future Years Defense Plan (FYDP) calls for authorizing 9 new Navy battle force ships in FY2005 and a total of 44 new Navy battle force ships in FY2005-FY2009, or an average of 8.8 new battle force ships per year. For the four-year period FY2004-FY2008, the plan would procure 30 new battle force ships, or an average of 7.5 per year.[4] Navy officials, in defending their proposed FY2005 budget, have drawn attention to how the budget, in their view, includes the acquisition of 9 new ships, an increase of 2 ships from the 7 acquired under the FY2004 budget. The 9-ship total, however, includes the first LCS, whose acquisition cost of $215.5 million is split evenly between FY2005 and FY2006, and the first DD(X) destroyer, for which the FY2005 budget requests only the first $221 million, or about 8%, of an estimated total design and construction cost of $2.8 billion. The remaining 92% of the cost of the first DD(X) is to be provided during the period FY2006-FY2011. On this basis, it might be more accurate to say that the proposed FY2005 budget requests funds for a total of 7.58 new battle force ships.

The average rate of Navy ship procurement that would need to be achieved over the long run to maintain a Navy of a certain planned size over the long run is called the steady-state replacement rate. This rate is equal to the planned force size divided by the average service life of a Navy ship. Navy plans assume an average 35-year life for Navy ships. Using this figure, the steady-state replacement rate would be about 8.9 new ships per year for a 310-ship fleet, and about 10.7 new ships per year for a 375-ship fleet. These are average rates that would need to be achieved over a 35-year period.

Table 1 on the next page shows past and projected rates of Navy ship procurement. As can be seen in the table, the rate of Navy ship procurement has been below the steady-state replacement rate for a 310-ship fleet since FY1993, and is programmed to remain below that rate through FY2008. The rate of Navy ship procurement since FY1993 has created a backlog of deferred Navy ship procurement relative to the steady-state replacement rate. As a result, maintaining a 310-ship fleet or building up to a 375-ship fleet will require a rate of Navy ship procurement in future years that is higher than what steady-state replacement rates would normally suggest. If the amended FY2004-FY2009 FYDP is implemented, then maintaining a 310-ship fleet could require a Navy ship procurement rate after FY2009 of about 11.2 ships per year, while building up to a 375-ship fleet could require a rate of about 14.8 ships per year.[5] Some observers consider the

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[3] (...continued)
Oversight Issues for Congress, by Ronald O'Rourke, pp. 5-11.

[4] The plan also includes 1 Maritime Prepositioning Force (Future) (MPF(F)) ship in FY2007, 2 more in FY2009, and 1 MPF(Aviation) (MPF(A)) ship in FY2009. MPF-type ships traditionally have not been classified as battle force ships and consequently have not counted toward the goal of a fleet of 310 or 375 battle force ships.

[5] As shown in Table 1, during the 12-year period FY1993-FY2004, a total of 64 new battle force ships were procured, or an average of about 5.3 ships per year. If the amended FY2004-FY2009 FYDP were implemented, another 44 new battle force ships would be procured through FY2009, (continued...)

average 35-year service life figure for Navy ships optimistic. If the figure turns out to be 30 years, as some observers believe, then for a 310-ship fleet, the steady-state replacement rate would be about 10.3 ships per year, and the procurement rate needed after FY2009 could be about 15.5 ships per year. For a 375-ship fleet, the steady-state rate would be about 12.5 ships per year, and the procurement rate needed after FY2009 could be about 20.5 ships per year.

Table 1. Battle force ships procured or proposed, FY1982-FY2009

1982	1983	1984	1985	1986	1987	1988	1989	1900	1991	1992	1993	1994	1995
17	14	16	19	20	17	15	19	15	11	11	7	4	4
1996	**1997**	**1998**	**1999**	**2000**	**2001**	**2002**	**2003**	**2004**	**2005**	**2006**	**2007**	**2008**	**2009**
5	4	5	5	6	6	6	5	7	9	6	7	8	14

Source: CRS compilation based on examination of defense authorization and appropriation committee and conference reports for each fiscal year. The table excludes non-battle force ships that do not count toward the 310- or 375- ship goal, such as sealift and prepositioning ships operated by the Military Sealift Command and oceanographic ships operated by agencies such as the National Oceanic and Atmospheric Administration (NOAA).

Issues for Congress

Planned Size and Structure of Navy. When asked about the current uncertainty regarding the planned size and structure of the fleet, Navy and DOD officials sometimes make reference to the concept of capabilities-base planning, and have argued

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[5] (...continued)
bringing the total for the 17-year period FY1993-FY2009 to 108 new battle force ships, or an average of about 6.4 new ships per year. Procuring ships at steady-state replacement rates of about 8.9 ships per year (for a 310-ship fleet) or 10.7 ships per year (for a 375-ship fleet) for these 17 years would result in a total procurement of about 151 or 182 ships, respectively. Procuring an average of 8.8 new ships per year during the period FY2005-FY2009 would thus result in a cumulative 17-year ship-procurement backlog since FY1993 of about 43 ships (for a 310-ship fleet) or about 74 ships (for a 375-ship fleet) relative to the steady-state ship-procurement requirement (151 or 182 ships minus 108 ships, respectively). This potential "deficit" in ship procurement would not be immediately apparent because of the relatively large numbers of ships built in the 1970s and 1980s. After 2010, and particularly after 2020, when the 1970s- and 1980s-era ships begin to retire, this potential backlog, if not by then redressed, would become apparent, and the size of the fleet would fall well short of 310 or 375 ships.

Eliminating this potential backlog over the remaining 18 years in a 35-year ship procurement period beginning in FY1993 would require increasing procurement rate after FY2009 to 11.2 ships per year for a 310-ship fleet or 14.8 ships per year for a 375-ship fleet. For a 310-ship fleet, if an average procurement rate of about 8.9 ships per year were to be achieved for the entire 35-year period FY1993-FY2027 (that is, if a total of 310 ships are to be procured in this period), then a total of 204 ships (310 minus the 106 procured through FY2009) would need to be procured for the 18-year period FY2010-FY2027, or an average of 11.3 ships per year. For a 375-ship fleet, if an average procurement rate of about 10.7 ships per year were to be achieved for the entire 35-year period FY1993-FY2027, then a total of 269 ships (375 minus the 106 procured through FY2009) would need to be procured for the 18-year period FY2010-FY2027, or an average of 14.9 new ships per year.

that numbers of ships and aircraft per se are not as important as the total amount of capability represented in the fleet. Capabilities-based planning offers certain potential advantages, particularly in a time of multiple and uncertain potential future threats to U.S. interests. It can be argued, however, that at any given time, it should be possible, given current and projected ship and aircraft designs, to translate the total collection of desired Navy capabilities into a plan for a certain number of Navy ships and aircraft of different types. Those numbers may change over time as threats and technologies change, but DOD's recent shift to capabilities-based planning, it can be argued, does not serve as a reason to set aside permanently the question of the planned size and structure of the fleet.

Although periods of uncertainty regarding the planned size and structure of the Navy occur from time to time, if these periods persist for an extended period of time, they can have potential significant implications for Congress' ability to conduct oversight of Navy budgets and programs. Three key potential oversight questions for Congress in examining the Navy's budgets and programs are the following:

- Has the Navy accurately identified, through capabilities-based planning, the kinds of capabilities it requires now and in the future?

- If so, would the Navy's planned force structure provide a Navy with these capabilities?

- If so, would the Navy's proposed procurement programs support a Navy with this force structure, and does the Navy's budget present a credible plan for adequately funding these procurement programs?

By examining these three oversight questions, Congress can, at the broadest level, reconcile stated Navy capability goals with required force structure, and required force structure with specific programs and available funding. If, however, there is no current, officially approved, consensus plan for the size and structure of the Navy, the middle element in this chain of three questions is missing, and Congress may find it difficult, if not impossible, to "close the oversight loop." In the absence of a current, officially approved, consensus plan, Navy and DOD officials are free to speak broadly about individual programs, and offer vague or changing total planned procurement quantities for various programs, without having to show Congress a detailed strategy for funding these programs in certain quantities within a certain amount of available funding.

Potential oversight questions for Congress regarding the planned size and structure of the Navy include the following:

- Are DOD and the Navy exploiting the current uncertainty over the planned size and structure of the Navy as an opportunity for responding to congressional oversight questions about Navy plans and programs with vague or changing answers?

- When does DOD plan to clarify the current uncertainty regarding the planned size and structure of the Navy? Is DOD deferring this issue until next year in part because it prefers to avoid announcing potentially controversial decisions on this issue during an election year?

- How, if at all, does uncertainty regarding the planned size and structure of the Navy affect shipbuilding firms that may face decisions on capital plant investments and workforce management?

- Should Congress direct DOD to issue a new officially approved plan for the future size and structure of the Navy by a date certain?

Ship Procurement Rate. Potential issues for Congress regarding the planned rate of Navy ship procurement include the following:

- Given the apparent difficulties that the Navy has experienced in recent years in finding resources to fully fund more than 6 or 7 battle force ships per year, will the Navy be able to increase the rate of Navy ship procurement to 11 or more battle force ships in FY2009 and beyond? Does DOD's budget planning place adequate emphasis on Navy ship procurement relative to other DOD priorities?

- Does DOD's plan to procure 7.5 battle force ships per year in FY2004-FY2008 reflect a potential DOD intent to reduce the Navy to less than 300 ships? Does DOD intend to use the planned below-300 period of FY2004-FY2007 to acclimate Congress to the idea of permanently reducing the Navy to less than 300 battle force ships?

Legislative Activity

H.R. 4613 (FY2005 Defense Appropriations Bill). The House Appropriations Committee, in its report (H.Rept. 108-553 of June 18, 2004), stated:

> The Committee remains deeply troubled by the lack of stability in the Navy's shipbuilding program. Often both the current year and outyear ship construction profile is dramatically altered with the submission of the next budget request. Programs justified to Congress in terms of mission requirements in one year's budget are removed from the next. This continued shifting of the shipbuilding program promotes confusion and frustration throughout both the public and private sectors. Moreover, the Committee is concerned that this continual shifting of priorities within the Navy's shipbuilding account indicates uncertainty with respect to the validity of requirements and budget requests in support of shipbuilding proposals. (Page 164)

H.R. 1588 (FY2004 Defense Authorization Bill). The conference report (H.Rept. 108-354 of November 7, 2003) on the FY2004 defense authorization bill (H.R. 1588) contains a provision calling for two independently performed studies on potential future fleet platform architectures for the Navy. The two studies are to be submitted to Congress by January 15, 2005. (See pages 287-29 and 612-613 of H.Rept. 108-354.)

H.R. 375/S. 902 (National Naval Force Structure Policy Act). These identical bills would establish it as "the policy of the United States to rebuild as soon as possible the size of the fleet of the United States Navy to no fewer than 375 vessels in active service, to include 15 aircraft carrier battle groups and 15 amphibious ready groups...." This 375-ship fleet would differ in structure from the Navy's proposed 375-ship fleet, which includes 12 carriers and about 12 amphibious ready groups.