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Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress

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Summary

The Navy's proposed FY2015 budget requests funding for the procurement of seven new battle force ships (i.e., ships that count against the Navy's goal for achieving and maintaining a fleet of 306 ships). The seven ships include two Virginia-class attack submarines, two DDG-51 class Aegis destroyers, and three Littoral Combat Ships (LCSs). The Navy's proposed FY2015-FY2019 five-year shipbuilding plan includes a total of 44 ships, compared to a total of 41 ships in the FY2014-FY2018 five-year shipbuilding plan.

The planned size of the Navy, the rate of Navy ship procurement, and the prospective affordability of the Navy's shipbuilding plans have been matters of concern for the congressional defense committees for the past several years. The Navy's FY2015 30-year (FY2014-FY2044) shipbuilding plan, like many previous Navy 30-year shipbuilding plans, does not include enough ships to fully support all elements of the Navy's 306-ship goal over the entire 30-year period. In particular, the Navy projects that the fleet would experience a shortfall in amphibious ships from FY2015 through FY2017, a shortfall in small surface combatants from FY2015 through FY2027, and a shortfall in attack submarines from FY2025 through FY2034.

The Navy delivered its narrative report on the FY2015 30-year shipbuilding plan to CRS on July 3, 2014. The Navy estimates in the report that the plan would cost an average of about \$16.7 billion per year in constant FY2014 dollars to implement. The Congressional Budget Office (CBO) is now preparing its own estimate of the cost to implement the plan; this estimate will be made available later this year. CBO's estimates of the cost to implement past annual versions of the Navy's 30-year shipbuilding plan have been higher than the Navy's estimates. Some of the difference between CBO's estimate and the Navy's estimate, particularly in the latter years of the plan, has been due to a difference between CBO and the Navy in how to treat inflation in Navy shipbuilding.

Potential issues for Congress in reviewing the Navy's proposed FY2015 shipbuilding budget, its proposed FY2015-FY2019 five-year shipbuilding plan, and its FY2015 30-year (FY2015-FY2044) shipbuilding plan include the following:

- the Navy's proposal to defer until FY2016 a decision on whether to proceed with the mid-life nuclear refueling overhaul of the aircraft carrier *George Washington* (CVN-73);
- the Navy's proposal to put 11 of its 22 Aegis cruisers into some form of reduced operating status starting in FY2015, and then return them to service years from now;
- the Navy's proposal to retire all 10 of its remaining Oliver Hazard Perry (FFG-7) class frigates in FY2015;
- the Navy's proposal to modify the rules for what ships to include in the count of the number of battle force ships in the Navy;
- the potential impact on the size of the Navy of limiting DOD spending in FY2013-FY2021 to the levels set forth in the Budget Control Act of 2011, as amended;
- the appropriate future size and structure of the Navy in light of budgetary and strategic considerations; and

- the affordability of the 30-year shipbuilding plan.

Funding levels and legislative activity on individual Navy shipbuilding programs are tracked in detail in other CRS reports.

Contents

Introduction.....	1
Background.....	1
Navy’s Ship Force Structure Goal	1
January 2013 Goal for Fleet of 306 Ships.....	1
306-Ship Goal Reflects 2012 Strategic Guidance and Projected DOD Spending Shown in FY2013 and FY2014 Budget Submissions.....	1
Goal for Fleet of 306 Ships Compared to Earlier Goals	1
Navy’s Five-Year and 30-Year Shipbuilding Plans	3
Five-Year (FY2015-FY2019) Shipbuilding Plan	3
30-Year (FY2015-FY2044) Shipbuilding Plan	5
Navy’s Projected Force Levels Under 30-Year Shipbuilding Plan.....	6
Comparison of First 10 Years of 30-Year Plans.....	9
Oversight Issues for Congress for FY2015.....	13
Mid-Life Refueling Overhaul of Aircraft Carrier <i>George Washington</i> (CVN-73).....	13
Proposal to Put 11 Cruisers into Reduced Operating Status.....	15
Proposal to Retire All 10 Remaining FFG-7 Frigates in FY2015	17
Proposal to Modify What Ships Are Included in the Count of Battle Force Ships	17
Potential Impact on Size of Navy of Limiting DOD Spending to BCA Caps Through FY2021.....	18
Appropriate Future Size and Structure of Navy in Light of Strategic and Budgetary Changes	22
Affordability of 30-Year Shipbuilding Plan	31
Estimated Ship Procurement Costs	31
Future Shipbuilding Funding Levels.....	33
Legislative Activity for FY2015	34
FY2015 Funding Request.....	34
CRS Reports Tracking Legislation on Specific Navy Shipbuilding Programs	35
FY2015 National Defense Authorization Act (H.R. 4435/S. 2410)	35
House (Committee Report)	35
House (Floor Action).....	40
Senate	40
FY2015 DOD Appropriations Act (H.R. 4870).....	45
House.....	45
Senate	46

Tables

Table 1. Current 306 Ship Force Structure Goal Compared to Earlier Goals.....	2
Table 2. Navy FY2014 Five-Year (FY2015-FY2019) Shipbuilding Plan	3
Table 3. Navy FY2015 30-Year (FY2015-FY2044) Shipbuilding Plan	5
Table 4. Projected Force Levels Resulting from FY2015 30-Year (FY2015-FY2044) Shipbuilding Plan	7
Table 5. Ship Procurement Quantities in First 10 Years of 30-Year Shipbuilding Plans	10

Appropriate Future Size and Structure of Navy in Light of Strategic and Budgetary Changes

Another potential oversight issue for Congress concerns the appropriate future size and structure of the Navy. Changes in strategic and budgetary circumstances have led to a broad debate over the future size and structure of the military, including the Navy. Changes in strategic circumstances include, among other things, the end of U.S. combat operations in Iraq, the winding down of U.S. combat operations in Afghanistan, China's military (including naval) modernization effort,¹⁶ maritime territorial disputes involving China,¹⁷ and Russia's seizure and annexation of Crimea.

On January 5, 2012, the Administration announced that, in light of the end of U.S. combat operations in Iraq, the winding down of such operations in Afghanistan, and developments in the Asia-Pacific region, U.S. defense strategy in coming years will include a stronger focus on the Asia-Pacific region.¹⁸ Since the Asia-Pacific region is primarily a maritime and aerospace theater for the DOD, this shift in strategic focus is expected by many observers to result in a shift in the allocation of DOD resources toward the Navy and Air Force. DOD officials have indicated that if planned levels of DOD spending in future years are reduced as a result of the BCA or other legislative action, they will seek to protect efforts supporting a stronger focus on the Asia-Pacific region.

The Navy's current goal for a fleet of 306 ships reflects a number of judgments and planning factors (some of which the Navy receives from the Office of the Secretary of Defense), including but not limited to the following:

- U.S. interests and the U.S. role in the world, and the U.S. military strategy for supporting those interests and that role;
- current and projected Navy missions in support of U.S. military strategy, including both wartime operations and day-to-day forward-deployed operations;
- current and projected capabilities of potential adversaries, including their anti-access/area-denial (A2/AD) capabilities;
- regional combatant commander (COCOM) requests for forward-deployed Navy forces;
- the individual and networked capabilities of current and future Navy ships and aircraft;

¹⁶ For more on the modernization of China's military (particularly naval) capabilities and its potential implications for required U.S. Navy capabilities, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

¹⁷ For a discussion of these disputes, see CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress*, by Ronald O'Rourke. See also CRS Report R42930, *Maritime Territorial Disputes in East Asia: Issues for Congress*, by Ben Dolven, Mark E. Manyin, and Shirley A. Kan.

¹⁸ Department of Defense, *Sustaining U.S. Global Leadership: Priorities for 21st Century Defense*, January 2012, 8 pp. For more on this document, see CRS Report R42146, *Assessing the January 2012 Defense Strategic Guidance (DSG): In Brief*, by Catherine Dale and Pat Towell. See also CRS Report R42448, *Pivot to the Pacific? The Obama Administration's "Rebalancing" Toward Asia*, coordinated by Mark E. Manyin.

- basing arrangements for Navy ships, including numbers and locations of ships homeported in foreign countries;
- maintenance and deployment cycles for Navy ships; and
- fiscal constraints.

With regard to the fourth point above, Navy officials testified in March 2014 that a Navy of 450 ships would be required to fully meet COCOM requests for forward-deployed Navy forces.¹⁹ The difference between a fleet of 450 ships and the current goal for a fleet of 306 ships can be viewed as one measure of the operational risk associated with the goal of a fleet of 306 ships. A goal for a fleet of 450 ships might be viewed as a fiscally unconstrained goal.

Actions by China starting in November 2013 that appear aimed at achieving a greater degree of control over China's near-seas region,²⁰ followed by Russia's seizure and annexation of Crimea in March 2014, have led to a discussion among observers about whether we are currently shifting from the familiar post-Cold War era of the last 20 to 25 years to a new and different strategic era characterized by, among other things, renewed great power competition and challenges to key aspects of the U.S.-led international order that has operated since World War II.²¹ Some observers in this discussion have used the term "post-Crimea era" or "post-Crimea world."²²

¹⁹ Spoken testimony of Admiral Jonathan Greenert at a March 12, 2014, hearing before the House Armed Services Committee on the Department of the Navy's proposed FY2015 budget, as shown in transcript of hearing.

²⁰ For a summary of these actions, see CRS Report R42784, *Maritime Territorial and Exclusive Economic Zone (EEZ) Disputes Involving China: Issues for Congress*, by Ronald O'Rourke.

²¹ See, for example, Anna Applebaum, "China and Russia Bring Back Cold War Tactics," *Washington Post* (www.washingtonpost.com), December 25, 2013; Paul Miller, "China, the United States, and Great Power Diplomacy," *Foreign Policy* (<http://shadow.foreignpolicy.com>), December 26 2013; Zachary Keck, "America's Relative Decline: Should We Panic? The End of the Unipolar Era Will Create New Dangers That the World Mustn't Overlook," *The Diplomat* (<http://thediplomat.com>), January 24, 2013; Dan Blumenthal and Michael Mazza, "China Is Like Russia," *The Weekly Standard* (www.weeklystandard.com), March 18, 2014; Paul D. Miller, "Crimea Proves that Great Power Rivalry Never Left Us," *New York Times* (www.nytimes.com), March 21, 2014; March Chad Pillai, "The Return of Great Power Politics: Re-Examining the Nixon Doctrine," *War on the Rocks* (<http://warontherocks.com>), March 27, 2014; Robert Killebrew, "Containing Russia and Restoring American Power," *War on the Rocks* (<http://warontherocks.com>), March 27, 2014; David Roche, "West Stumbles as Autocratic Force Trumps Economics," *Reuters* (www.reuters.com), April 1, 2014; David B. Rivkin Jr. and Lee A. Casey, "The Outlaw Vladimir Putin," *Wall Street Journal* (<http://online.wsj.com>), April 8, 2014; Debidatta Aurobinda Mahapatra, "The Post-Crimea World Order," *Russia and India Report* (<http://in.rbth.com>), April 14, 2014; Tom Rotnem, "10 Days That Shook the (Post-Cold War) World," *Marietta Daily Journal* (<http://mdjonline.com>), April 22, 2014; Walter Russell Mead, "The Return of Geopolitics," *Foreign Affairs* (www.foreignaffairs.com), May/June 2014; Eric A. Posner, "Sorry, America, the New World Order Is Dead," *Foreign Policy* (www.foreignpolicy.com), May 6, 2014; Dan Blumenthal and Michael Mazza, "China and The Age of Contempt," *Foreign Policy* (<http://shadow.foreignpolicy.com>), May 15, 2014; Robert Kagan, "Superpowers Don't Get to Retire," *New Republic* (www.newrepublic.com), May 26, 2014; Walter Russell Mead, "Putin Did Americans a Favor," *Wall Street Journal* (<http://online.wsj.com>), June 1, 2014; James R. Holmes, "5 Ways Europe Can Help the US Pivot," *The Diplomat* (<http://thediplomat.com>), June 2, 2014; Walter Russell Mead, "For the U.S., a Disappointing World," *Wall Street Journal* (<http://online.wsj.com>), June 13, 2014; James Kitfield, "The New Great Power Triangle Tilt: China, Russia Vs. U.S.," *Breaking Defense* (<http://breakingdefense.com>), June 19, 2014; Frank Hoffman, "No Strategic Success Without 21st Century Seapower: Forward Partnering," *War on the Rocks* (<http://warontherocks.com>), July 1, 2014; David Hodges, "The Only Defense," *Commentary* (www.commentarymagazine.com), July 1, 2014; Marc M. Wall, "The Great Eurasian Rebalancing Act," *PacNet (Pacific Forum CSIS)*, Number 52, July 7, 2014.

²² See, for example, Jim Thomas, "How to Put Military Pressure on Russia," *Wall Street Journal* (<http://online.wsj.com>), March 9, 2014; Debidatta Aurobinda Mahapatra, "The Post-Crimea World Order," *Russia and India Report* (<http://in.rbth.com>), April 14, 2014; Tom Rotnem, "10 Days That Shook the (Post-Cold War) World," *Marietta Daily Journal* (<http://mdjonline.com>), April 22, 2014; "Reshaping Transatlantic Defense and Security for a (continued...)"

A shift in strategic eras can lead to a reassessment of assumptions and frameworks of analysis relating to defense funding levels, strategy, missions, plans, and programs. The shift from the Cold War to the post-Cold War era led to such a reassessment in the early 1990s. This reassessment led to numerous substantial changes in U.S. defense plans and programs.²³ Numerous other defense programs were changed to lesser degrees or were not changed.

A shift from the post-Cold War era to a new strategic era could lead to a new reassessment of assumptions and frameworks of analysis relating to defense funding levels, strategy, missions, plans, and programs. There are some indications that elements of such a reassessment may have begun. For example, some observers, including General Philip Breedlove, the Commander of U.S. European Command, have raised the issue of whether the United States should consider halting the U.S. military drawdown in Europe, so as to respond to a more assertive Russia.²⁴ As another possible example, Secretary of Defense Chuck Hagel, in his February 2014 announcement regarding the Littoral Combat Ship (LCS) program, stated in part:

The LCS was designed to perform certain missions—such as mine sweeping and anti-submarine warfare—in a relatively permissive environment. But we need to closely examine whether the LCS has the independent protection and firepower to operate and survive against

(...continued)

Post-Crimea World,” Panel remarks by NATO Deputy Secretary General Ambassador Alexander Vershbow at the Wrocław Global Forum (Poland), accessed July 2, 2014, at http://www.nato.int/cps/en/natolive/opinions_110902.htm?selectedLocale=en; Lilia Shevtsova, “Crowning a Winner in the Post-Crimea World,” *American Interest* (www.the-american-interest.com), June 16, 2014; Evan Braden Montgomery, “China’s Missile Forces Are Growing: Is It Time to Modify the INF Treaty?” *The National Interest* (<http://nationalinterest.org>), July 2, 2014.

²³ The shift from the Cold War to the post-Cold War era led to a shift in the Navy’s formal planning emphasis away from the scenario of mid-ocean operations against Soviet naval forces during a NATO-Warsaw Pact conflict and toward operations in littoral waters against the land- and sea-based forces of countries other than Russia. This shift was formalized in a Navy/Marine Corps strategy document entitled *...From the Sea* (the ellipse is part of the title), which was first issued in late 1992. (The text of this document is available at <http://www.au.af.mil/au/awc/awogate/navy/fromsea/fromsea.txt>.) The shift in strategic eras and in the Navy’s formal planning emphasis led to numerous changes in Navy plans and programs. In terms of overall Navy force structure, the planned size of the fleet was reduced considerably. In undersea warfare, changes included the truncation of the Seawolf (SSN-21) submarine program, the initiation of the successor Virginia-class submarine program, an increased emphasis on shallow-water antisubmarine warfare (ASW) operations (including torpedoes with improved shallow-water performance), and a reduced emphasis on blue-water ASW operations. In surface warfare, the shift in planning emphasis led to the initiation of a program for a multimission destroyer (now known as the DDG-1000) with an emphasis on operations in littoral waters and land-attack operations, the initiation years later of the Littoral Combat Ship (LCS) program for addressing identified capability gaps for countering mines, small boats, and diesel-electric submarines in littoral waters. In naval aviation, changes in projected mission demands, defense spending levels and (in the case of the A-12 program) development challenges led to a broad restructuring of naval aviation acquisition programs, including the termination of the A-12 program, the halting of plans or proposals for procuring other types of carrier-based aircraft, the termination of a program to develop a new long-range air-to-air missile for carrier-based fighters, and the initiation of the F/A-18E/F program. For additional discussion of the then-emerging impact on Navy plans and programs resulting from the shift from the Cold War to the post-Cold War era, see Ronald O’Rourke, “The Future of the U.S. Navy,” in Joel J. Sokolsky and Joseph T. Jockel, editors, *Fifty Years of Canada-United States Defense Cooperation, The Road From Ogdensburg*, Edwin Mellen Press, 1992 (papers delivered at “The Road from Ogdensburg: Fifty Years of Canada-U.S. Defense Cooperation,” a conference held August 16-17, 1990, at St. Lawrence University, Canton, New York), pp. 289-331.

²⁴ Philip Ewing, “General: U.S. Should Stop European Drawdown,” *Politico Pro Defense*, July 1, 2014. See also Steven Erlanger, “Europe Begins to Rethink Cuts to Military Spending,” *New York Times* (www.nytimes.com), March 26, 2014; Andrew Tilghman, “Spotlight Back on U.S. European Command,” *Military Times* (www.militarytimes.com), March 27, 2014; Peter Apps and Adrian Croft, “Crimean Pushes NATO Back to Russian Focus,” *Reuters* (www.reuters.com), March 19, 2014; Karen DeYoung, “As U.S. Ponders Next Moves on Crimea, Experts Rethink NATO’s Defense Posture,” *Washington Post* (www.washingtonpost.com), March 18, 2014; Steven Erlanger, “Russia’s Aggression in Crimea Brings NATO Into Renewed Focus,” *New York Times* (www.nytimes.com), March 18, 2014.

a more advanced military adversary and emerging new technologies, especially in the Asia Pacific. If we were to build out the LCS program to 52 ships, as previously planned, it would represent one-sixth of our future 300-ship Navy. Given continued fiscal restraints, we must direct shipbuilding resources toward platforms that can operate in every region and along the full spectrum of conflict.²⁵

For additional discussion of the relationship between U.S. strategy and the size and structure of U.S. naval forces that can form part of the context for assessing the 30-year shipbuilding plan, see **Appendix C**.

Some study groups have made their own proposals for Navy ship force structure that reflect their own perspectives on the points listed above (particularly the first three and the final one) shows some of these proposals. For purposes of comparison, **Table 7** also shows the Navy's 306-ship goal of January 2013.

²⁵ Remarks by Secretary Hagel and Gen. Dempsey on the fiscal year 2015 budget preview in the Pentagon Briefing Room, February 24, 2014, accessed July 1, 2016, at <http://www.defense.gov/transcripts/transcript.aspx?transcriptid=5377>.

Table 7. Recent Study Group Proposals for Navy Ship Force Structure

Ship type	Navy's 206-ship goal of January 2013	Project on Defense Alternatives (PDA) (November 2012)	Heritage Foundation (April 2011)	Cato Institute (September 2010) ^a	Independent Panel Assessment of 2010 QDR (July 2010)	Sustainable Defense Task Force (June 2010)	Center for a New American Security (CNAS) (November 2008)	Center for Strategic and Budgetary Assessments (CSBA) (2008) ^b
<i>Submarines</i>								
SSBN	12	7	14 ^c	6	14	7	14	12
SSGN	0	6-7	4	0	4	4	0	2
SSN	48	42	55	40	55	37	40	41
<i>Aircraft carriers</i>								
CVN	11	9	11	8	11	9	8	11
CVE	0	0	0	0	0	0	0	4
<i>Surface combatants</i>								
Cruiser	88	72-74	88	22	n/a	85	18	14
Destroyer	0	2-7 ⁱ	28 ^d	14	n/a	0	0	9 ^e
Frigate	52	12 ^j	0	4	n/a	25	48	55
LCS	0	1	0	0	n/a	0	40	0 ^f
<i>Amphibious and Maritime Prepositioning Force (Future) (MPF[F]) ships</i>								
Amphibious ships	33	≥23	37	23	n/a	27	36	33
MPF[F] ships	0	n/a	0	0	n/a	n/a	0	3 ^g
LSD station ships	0	0	0	0	0	0	0	7 ^h
<i>Other: Mine warfare (MIW) ships; Combat Logistics Force (CLF) ships (i.e., at-sea resupply ships), and support ships</i>								
MIW	0	14 ⁱ	14	11	0	0	0	0
CLF ships	29	n/a	33	21	n/a	36	40	31
Support ships	33	n/a	25	27	n/a	0	0	31
TOTAL battle force ships	306	230	309	241	346	230	300	326ⁱ

Source: Table prepared by CRS based on the following sources: **For Heritage Foundation:** *A Strong National Defense[;] The Armed Forces America Needs and What They Will Cost*, Heritage Foundation, April 5, 2011, pp. 25-26. **For Cato Institute:** Benjamin H. Friedman and Christopher Preble, *Budgetary Savings from Military Restraint*, Washington, Cato Institute, September 23, 2010 (Policy Analysis No. 667), pp. 6, 8-10, and additional information provided by Cato Institute to CRS by email on September 22, 2010. **For Independent Panel Assessment:** Stephen J. Hadley and William J. Perry, co-chairmen, et al., *The QDR in Perspective: Meeting America's National Security Needs in the 21st Century, The Final Report of the Quadrennial Defense Review Independent Panel*, Washington, 2010, Figure 3-2 on pages 58-59. **For Sustainable Defense Task Force:** *Debt, Deficits, and Defense, A Way Forward[;] Report of the Sustainable Defense Task Force*, June 11, 2010, pp. 19-20. **For CNAS:** Frank Hoffman, *From Preponderance to Partnership: American Maritime Power in the 21st Century*, Washington, Center for a New American Security, November 2008, p. 19 (Table 2). **For CSBA:** Robert O. Work, *The US Navy[;] Charting a Course for Tomorrow's Fleet*, Washington, Center for Strategic and Budgetary Assessments, 2008, p. 81 (Figure 5). **For PDA:** Carl Conetta, *Reasonable Defense*, Project on Defense Alternatives, November 14, 2012, 31 pp.

Notes: *n/a* is not addressed in the report. **SSBN** is nuclear-powered ballistic missile submarine; **SSGN** is nuclear-powered cruise missile and special operations forces submarine; **SSN** is nuclear-powered attack submarine; **CVN** is large nuclear-powered aircraft carrier; **CVE** is medium-sized aircraft carrier; **LCS** is Littoral Combat Ship; **SSC** (an acronym created by CRS for this table) is small surface combatant of 1,000+ tons displacement—a ship similar to late-1990s Streetfighter concept; **MPF(F)** is Maritime Prepositioning Force (Future) ship; **LSD** is LSD-41/49 class amphibious ship operating as a station ship for a formation like a Global Fleet Station (GFS); **MIW** is mine warfare ship; **CLF** is combat logistics force (i.e., resupply) ship.

- a. Figures shown are for the year 2020; for subsequent years, reductions from these figures would be considered.
- b. Figures shown are for the year 2028.
- c. The report calls for a force of 280 SLBMs, which appears to equate to a force of 14 SSBNs, each with 20 SLBM tubes.
- d. The report calls for a force of 28 small surface combatants, and appears to use the term small surface combatants the same way that the Navy does in the 30-year shipbuilding plan—as a way of collectively referring to frigates and LCSs. The small surface combatants (SSCs) called for in the November 2008 CNAS report are separate from and smaller than the LCS.
- e. Maritime Security Frigates.
- f. Plan includes 28 patrol craft (PCs) of a few hundred tons displacement each, as well as 29 boat detachments and seven riverine squadrons.
- g. Plan shows three Mobile Landing Platform (MLP) ships that the Navy currently plans for the MPF(F) squadron, plus 16 existing current-generation maritime prepositioning force (MPF) ships and 17 existing prepositioning ships for Army and other service/agency equipment. Plan also shows 67 other DOD sealift ships.
- h. T-LSDs, meaning LSDs operated by the Military Sealift Command (MSC) with a partly civilian crew.
- i. The CSBA report shows a total of 488 units by including 162 additional force units that do not count toward the 306-ship goal under the battle force ships counting method that has been used since the early 1980s for public policy discussions of the size of the Navy. These 162 additional force units include 16 existing current-generation maritime prepositioning force (MPF) ships and 17 existing prepositioning ships for Army and other service/agency equipment, 67 other DOD sealift ships, 28 PCs, 29 boat detachments, and certain other small-scale units. The CSBA report proposes a new counting method for naval/maritime forces that includes units such as these in the total count.
- j. The report “prescribes ending procurement of the LCS with the 12 already purchased. The *Reasonable Defense* model foresees a future cohort of 28 to 33 small surface combatants, including a mix of the 12 LCS that have already been procured, 14 Mine Counter Measure (MCM) ships already in the fleet, and small frigates or ocean-going corvettes. As the MCM ships age and leave the fleet, the LCS should assume their role. The would leave a post-MCM requirement for 16 to 21 additional small surface combatants. For this, the Navy needs a simpler, less expensive alternative to the LCS.”

A potential key question for Congress concerns whether the U.S. Navy in coming years will be large enough to adequately counter improved Chinese maritime A2/AD forces while also adequately performing other missions of interest to U.S. policy makers around the world. Some observers are concerned that a combination of growing Chinese naval capabilities and budget-driven reductions in the size of the U.S. Navy could encourage Chinese military overconfidence and demoralize U.S. allies and partners in the Pacific, and thereby make it harder for the United States to defend its interests in the region.²⁶ Potential oversight questions for Congress include the following:

²⁶ See, for example, Dan Blumenthal and Michael Mazza, “Asia Needs a Larger U.S. Defense Budget,” *Wall Street Journal*, July 5, 2011; J. Randy Forbes, “Defence Cuts Imperil US Asia Role,” *The Diplomat* (<http://the-diplomat.com>), October 26, 2011. See also Andrew Krepinevich, “Panetta’s Challenge,” *Washington Post*, July 15, 2011: 15; Dean Cheng, *Sea Power and the Chinese State: China’s Maritime Ambitions*, Heritage Foundation Background No. 2576, (continued...)

- Under the Administration’s plans, will the Navy in coming years be large enough to adequately counter improved Chinese maritime A2/AD forces while also adequately performing other missions of interest to U.S. policy makers around the world?
- What might be the political and security implications in the Asia-Pacific region of a combination of growing Chinese naval capabilities and budget-driven reductions in the size of the U.S. Navy?
- If the Navy is reduced in size and priority is given to maintaining Navy forces in the Pacific, what will be the impact on Navy force levels in other parts of the world, such as the Persian Gulf/Indian Ocean region or the Mediterranean Sea, and consequently on the Navy’s ability to adequately perform its missions in those parts of the world?
- To what extent could the operational impacts of a reduction in Navy ship numbers be mitigated through increased use of forward homeporting, multiple crewing, and long-duration deployments with crew rotation (i.e., “Sea Swap”)? How feasible are these options, and what would be their potential costs and benefits?²⁷
- Particularly in a situation of constrained DOD resources, if enough funding is allocated to the Navy to permit the Navy in coming years to maintain a fleet of 306 ships including 11 aircraft carriers, how much would other DOD programs need to be reduced, and what would be the operational implications of those program reductions in terms of DOD’s overall ability to counter improved Chinese military forces and perform other missions?²⁸

One observer—the person who until recently was the Navy’s lead force-structure planner—stated the following regarding the Navy’s approach to fleet design:

It is time to rethink how we will design the future Fleet in a way that rebalances affordability, platform capability, and deployment processes. We must build it as a whole instead of continuing to “let it happen” one platform requirements decision at a time....

Today the Navy operates about 50 different types of ships and aircraft with individual design-service lives of 20 to 50 years. On average, about two classes of ship or aircraft annually come up for a decision on replacement at the end of their service lives. Each of these decisions, a multi-year joint bureaucratic process with dozens of participating organizations, is made individually. Typically, as a starting point, the new platform must do everything the old one did, except in the more challenging threat environment of the future. All of the decision-making organizations generally advocate for the next-generation platform to have the desired capabilities unmet by the old one—particularly since any additional unit cost is not their bill. It is no surprise that this process leads to steadily increasing platform and overall Fleet cost....

(...continued)

July 11, 2011, p. 10.

²⁷ For further discussion of these options, see CRS Report RS21338, *Navy Ship Deployments: New Approaches—Background and Issues for Congress*, by Ronald O’Rourke.

²⁸ For further discussion, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O’Rourke.

The future Fleet is being designed ad hoc, one platform at a time, and we cannot afford this. How can we change the trend toward an ever-smaller Fleet of ever-better platforms while maintaining the capability superiority needed to execute our missions? It will take a top-down design to provide a structure in which individual platform requirements can be shaped and disciplined despite all of the pressures. We will have to consider distributing capabilities to a greater extent across a force that is securely networked, at least within line of sight, rather than putting as many as possible on each individual platform and continuing to drive up its size and cost.

We will have to consider separating weapon magazines from the sensors that direct the weapons rather than putting both on the same platform. Another option is increasing reliance on deep-magazine directed energy systems, and on force-wide coordinated soft-kill and counter-targeting techniques, rather than on engaging each threat with ever-larger and more expensive kinetic weapons. We can also think about increasing reliance on penetrating high-threat areas with longer-range weapons or with preprogrammed unmanned systems rather than with manned platforms. Few of these options would rise to the top in the requirements decision-making process for any individual platform. They only start to make sense when considered and competed at a Fleet-wide level.

Developing an overall fleet design to structure and discipline individual platform requirements is no small task. Simply constraining platform cost without dealing with how capabilities might be delivered differently is not sufficient. This is not a once-and-done process, as changes in threat and in our own technology options will never stop. But neither can it be a process that changes the design in some fundamental way every year or two—it will have to influence platform requirements for a long period of time to affect a significant number of new platform designs.

We cannot afford to retire legacy platforms prematurely simply because they are not optimized within our new Fleet design, which will take time to implement and have to be done incrementally. Real and fundamental change in the roles, missions, and interdependencies among platform types, and in the balance between manned and unmanned and between platform and payload, is an inevitable outcome of a Fleet design process. That is the point. Change is hard, and it will have to be authorized and directed by the Navy's leadership or risk not happening.

A number of ideas for a new Fleet design have been offered recently from outside the Navy's decision-making mainstream. However, all have had significant flaws, so they have not received serious consideration. They have assumed things such as beyond line-of-sight networking that has no survivable future in the face of adversary counter-space capability; autonomy of unmanned vehicles in executing lethal missions that is beyond the projected capability of software and U.S. rules of engagement to support; and the use of platforms too small to be capable of global deployment and sustained sea-based operations, which is how the U.S. Navy must deliver global naval power. The future Fleet design must be grounded in technical and operational reality, and it has to come from inside the Navy system....

Developing a rich list of operationally-realistic options supported by rigorous analysis of cost and feasibility is foundational. It could include:

- The use of a common large aviation-ship hull for Navy sea-control/power-projection air wings and for Marine Corps vertical-raid/assault-air wings, reconfigurable between the two missions between the deployments;
- Surface combatants with smaller vertical-launch magazines that can reload at sea from logistic ships or remotely fire weapons carried in supplementary magazines on logistic ships;

- Separate classes of surface combatants optimized for air defense or antisubmarine warfare within a common hull type that can self-defend in peacetime but aggregate to fight offensively in wartime;
- Tactical-combat aircraft that are optimized for endurance and carriage of long-range weapons rather than for penetrating sophisticated defenses carrying short-range weapons;
- Large shore-launched unmanned undersea vehicles that take the place of submarines for preprogrammed missions such as covert surveillance or mine-laying;
- Use of a common hull type for all of the large non-combatant ship missions such as command ships, tenders, hospital ships, ground vehicle delivery, and logistics; and
- Elimination of support models that are based on wartime reliance on reach-back access to unclassified cyber networks connected by vulnerable communications satellites or to an indefensible global internet....

The Navy's long-term force structure requirement is a 306-ship Fleet of the currently-planned designs, of which about 120 (or 40 percent of the force) would be deployed day-to-day. It would also be able to surge an additional 75 ships (another 25 percent) within two months to meet warfighting capacity requirements. In other words, about 65 percent is employed or rapidly employable.

This sounds good, but the reality is that 30 of these 120 deployed ships would be permanently homeported overseas; 26 would be LCSs that use the rotation of their small military crews to keep 50 percent of that class forward deployed; and 40 would be Military Sealift Command support ships that use rotational civilian mariner crewing to keep the ships deployed 75 percent of the time. The remaining 25 of the forward-deployed force will be large and complex multibillion dollar warships with all-military crews, supported out of a rotation base of 140 such ships.

In other words, we plan to buy and operate five of our most expensive ships to keep one deployed. This is not an efficient way to operate. In times of reduced funding our design must address ways to meet our deployment goals with a smaller rotation base while preserving wartime surge capacity.

Many studies and trials have been done over the years on options for reducing the total number of ships needed to sustain the Navy's robust peacetime forward-deployed posture. Increasing forward homeporting in other nations always comes up as the first choice. While it is a good one, few countries beyond those that currently support this (Japan, Spain, Italy, and Bahrain) are willing to tolerate a permanent new U.S. shore footprint. Building new shore-support infrastructure in foreign countries to back this results in a large bill for construction jobs outside the United States, which Congress normally finds unappetizing.

Using rotational crews to keep ships forward for extended periods without long deployments for their sailors is an efficient option that works for ships with small crews like LCSs, legacy mine-warfare ships, or Military Sealift Command support ships. Experiments in which this has been done with military crews on large complex warships have not turned out well. This was due both to the logistics of moving large crews overseas for turnovers and the difficulty of maintaining exact configuration commonality within ships of a class so that a crew arriving on a ship overseas has trained before deployment on an identical ship (or simulator) at home. Conversions of ships from military manning to Military Sealift Command civilian mariner crews that routinely rotate individual crewmembers to sustain ships forward are limited by the law of war concerning what military actions civilians can perform, and there are few legal options left for further expansion of this approach.

What is left in the force-generation model of our current Fleet is a force of our most complex warships—aircraft carriers, submarines, destroyers, and amphibious ships—operating with permanently-assigned military crews in the “Fleet Readiness Program” cycle of maintain-train-deploy with a deployed output of one in five. Future designs must address this model and find ways to get more deployed time out of these expensive ships and crews—without exceeding the current objective of having military crewmembers spend no more than 50 percent of their time away from homeport over a complete multi-year operating cycle. The current limiting factor is the period required to train the crew as a team before deployment following the inactivity and crew turnover of the shipyard maintenance period.

Naval aviation is steadily moving toward the increased use of high-fidelity single and multi-aircraft simulation as a means of developing and sustaining operational proficiency with reduced use of expensive live flying. These simulators are funded as part of the overall fielding plan for the aircraft and were also built for the ballistic-missile submarine force to support its Blue-Gold crew manning concept. There is no equivalent model or set of off-ship simulators for major sections of the crews of conventional surface warships (other than the LCS) for nuclear-aircraft carriers or for attack submarines. A Fleet design that bought such simulation capability as part of its ship production programs—the way that aircraft programs do—would have significant potential for improving operational output by reducing the time to train for deployment after maintenance periods.

Today’s Fleet design is the product of many separate and disconnected decisions about the required capabilities of 50 different types of ships and aircraft. While not ineffective, it is definitely too expensive. The budget constraints facing the Navy for the next 20 years are not matched by a projected reduction in the quantity or capability of forces that must be delivered forward every day or surged forward in wartime.

The only way to meet these demands within available resources is to develop a design that provides a structure within which the capabilities of future platforms can be shaped to meet the Fleet’s missions efficiently as an overall force. Doing this will require a systems-level approach to defining what it must be able to do, and will mean abandoning some cherished traditions of what each type of platform should do. The alternative is a Navy no longer large or capable enough to do the nation’s business.²⁹

Affordability of 30-Year Shipbuilding Plan

Another potential oversight issue for Congress concerns the prospective affordability of the Navy’s 30-year shipbuilding plan. In assessing the prospective affordability of the 30-year plan, key factors that Congress may consider include estimated ship procurement costs and future shipbuilding funding levels. Each of these is discussed below.

Estimated Ship Procurement Costs

If one or more Navy ship designs turn out to be more expensive to build than the Navy estimates, then the projected funding levels shown in the 30-year shipbuilding plan will not be sufficient to procure all the ships shown in the plan. Ship designs that can be viewed as posing a risk of being more expensive to build than the Navy estimates include Gerald R. Ford (CVN-78) class aircraft carriers, Ohio-replacement (SSBNX) class ballistic missile submarines, the Flight III version of the DDG-51 destroyer, the TAO(X) oiler, and the LX(R) amphibious ship.

²⁹ Arthur H. Barber, “Rethinking The Future Fleet,” *U.S. Naval Institute Proceedings*, May 2014: 48-52.

In recent years, the Congressional Budget Office (CBO) has estimated that certain Navy ships would be more expensive to procure than the Navy estimates, and consequently that the Navy's 30-year shipbuilding plan would cost more to implement than the Navy has estimated. In its October 2013 report on the cost of the FY2014 30-year shipbuilding plan, the CBO estimated that the plan would cost an average of \$19.3 billion per year in constant FY2013 dollars to implement, or about 15% more than the Navy estimated. CBO's estimate is about 6% higher than the Navy's estimate for the first 10 years of the plan, about 14% higher than the Navy's estimate for the second 10 years of the plan, and about 26% higher than the Navy's estimate for the final 10 years of the plan.³⁰ Some of the difference between CBO's estimate and the Navy's estimate, particularly in the latter years of the plan, is due to a difference between CBO and the Navy in how to treat inflation in Navy shipbuilding.

The Navy delivered its narrative report on the FY2015 30-year shipbuilding plan to CRS on July 3, 2014. The Navy estimates in the report that the plan would cost an average of about \$16.7 billion per year in constant FY2014 dollars to implement. The Congressional Budget Office (CBO) is now preparing its own estimate of the cost to implement the plan; this estimate will be made available later this year. CBO's estimates of the cost to implement past annual versions of the Navy's 30-year shipbuilding plan have been higher than the Navy's estimates. **Table 8** summarizes the Navy and CBO estimates of the FY2014 and FY2015 30-year shipbuilding plans.

Table 8. Navy and CBO Estimates of Cost of FY2014 and FY2015 30-Year Shipbuilding Plans

Funding for new-construction ships, in billions of constant FY2013 or FY2014 dollars

	First 10 years of the plan	Middle 10 years of the plan	Final 10 years of the plan	Entire 30 years of the plan
FY2014 30-year (FY2014-FY2043) plan (in constant FY2013 dollars)				
Navy estimate	15.4	19.8	15.2	16.8
CBO estimate	16.3	22.6	19.1	19.3
% difference between Navy and CBO estimates	6%	14%	26%	15%
FY2015 30-year (FY2015-FY2044) plan (in constant FY2014 dollars)				
Navy estimate	~15.7	~19.7	~14.6	~16.7
CBO estimate		Not yet available—CBO is preparing its estimate		
% difference between Navy and CBO estimates		Not yet available—CBO is preparing its estimate		

Source: For FY2014 30-year plan: Congressional Budget Office, *An Analysis of the Navy's Fiscal Year 2014 Shipbuilding Plan*, October 2013, Table 3 (page 13). For FY2015 30-year plan: *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for FY2015*, p. 8.

³⁰ Congressional Budget Office, *An Analysis of the Navy's Fiscal Year 2014 Shipbuilding Plan*, October 2013, Table 3 (page 13).

Future Shipbuilding Funding Levels

It has been known for some time that implementing the 30-year shipbuilding plan would require shipbuilding budgets in coming years that are considerably greater than those of recent years, and that funding requirements for the Ohio-replacement (SSBN[X]) ballistic missile submarine program will put particular pressure on the shipbuilding budget during the middle years of the 30-year plan. The Navy's report on the FY2015 30-year plan states:

Beginning in FY2020 and running through the end of the 30-year plan horizon, the plan requires an average annual investment of about \$17.2B [billion] (FY14\$) [i.e., in constant FY2014 dollars] to finance, which is ~\$4B/year more than our historical average annual investment of ~\$13B/yr. In particular, for the period while we are procuring the OHIO Replacement (OR) SSBN (essentially FY[20]25-FY[20]34), the Navy will have to provide an average of \$19.7B annually with the peak year in FY[20]32 at slightly more than \$24B. Even if the OHIO Replacement Program (ORP) is removed from the [required] resource total [by funding the program through a different part of the defense budget], the average funding required beginning in FY2020 is ~\$14-15B/yr to build the FSA [Force Structure Assessment] force [i.e., the planned 306-ship fleet]....

While the force structure presented [in this report] describes a battle force that meets the requirements of the National Security Strategy and the 2014 QDR [Quadrennial Defense Review]; it requires funding at an unsustainable level, particularly between FY[20]25 and FY[20]34... The average cost of this plan during the period in which the DON [Department of the Navy] is procuring OR SSBN[s] (~\$19.7B/year [during] FY2025-[FY]2034) cannot be accommodated by the Navy from existing resources—particularly if DOD is required to be funded at the BCA [Budget Control Act] levels....

The DON can only afford the SSBN procurement costs with significant increases in our [budget] top-line or by having the SSBN funded from sources that do not result in any reductions to the DON's current resourcing level....

If the DON is unable to sustain the average annual shipbuilding budgets of \$19.7 billion over the course of the mid-term planning period, which is unlikely to be the case,³¹ the battle force will fall far short of meeting the QDR requirements.³²

In assessing the Navy's ability to reach the higher annual shipbuilding funding levels described above, one perspective is to note that doing so would require the shipbuilding budget to be increased by 30% to 50% from levels in recent years. In a context of constraints on defense spending and competing demands for defense dollars, this perspective can make the goal of increasing the shipbuilding budget to these levels appear daunting.

Another perspective is to note that the additional annual funding needed (roughly \$4 billion to \$6.7 billion) equates to roughly 0.8% to 1.3% of a defense budget of \$521 billion per year (the Budget Control Act figure for defense spending FY2015). Some observers, noting the U.S. strategic rebalancing toward the Asia-Pacific region, have advocated shifting a greater share of the DOD budget to the Navy and Air Force, on the grounds that the Asia-Pacific region is

³¹ This can be read as a double negative—that it is *unlikely* the Navy will be *unable* to sustain average annual shipbuilding budgets at this level. The Navy's intent appears to be to state that it is *unlikely* the Navy will be *able* to do this.

³² *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for FY2015*, June 2014, pp. 5, 6, 7, 9.

primarily a maritime and aerospace theater for DOD. In discussing the idea of shifting a greater share of the DOD budget to the Navy and Air Force, some of these observers refer to breaking the so-called “one-third, one-third, one-third” division of resources among the three military departments—a shorthand term sometimes used to refer to the more-or-less stable division of resources between the three military departments that existed for the three decades between the end of U.S. participation in the Vietnam War in 1973 and the start of the Iraq War in 2003.³³ In a context of breaking the “one-third, one-third, one-third” allocation with an aim of better aligning defense spending with the strategic rebalancing, shifting 0.8% to 1.3% of the defense budget into the Navy’s shipbuilding account would appear to be quite feasible.

More broadly, if defense spending were to remain constrained to the revised cap levels in the Budget Control Act, then fully funding the Department of the Navy’s total budget at the levels shown in the current Future Years Defense Plan (FYDP) would require increasing the Department of the Navy’s share of the non-Defense-Wide part of the DOD budget to about 41%, compared to about 36% in the FY2014 budget and an average of about 37% for the three-decade period between the Vietnam and Iraq wars.³⁴ While shifting 4% or 5% of DOD’s budget to the Department of the Navy would be a more ambitious reallocation than shifting 0.8% to 1.3% of the DOD budget to the Navy’s shipbuilding account, similarly large reallocations have occurred in the past.³⁵

Legislative Activity for FY2015

FY2015 Funding Request

The Navy’s proposed FY2015 budget requests funding for the procurement of seven new battle force ships (i.e., ships that count against the Navy’s goal for achieving and maintaining a fleet of

³³ The “one-third, one-third, one-third” terminology, though convenient, is not entirely accurate—the military departments’ shares of the DOD budget, while more or less stable during this period, were not exactly one-third each: the average share for the Department of the Army was about 26%, the average share for the Department of the Navy (which includes both the Navy and Marine Corps) was about 32%, the average share for the Department of the Air Force was about 30%, and the average share for Defense-Wide (the fourth major category of DOD spending) was about 12%. Excluding the Defense-Wide category, which has grown over time, the shares for the three military departments of the remainder of DOD’s budget during this period become about 29% for the Department of the Army, about 37% for the Department of the Navy, and about 34% for the Department of the Air Force.

³⁴ Since the Defense-Wide portion of the budget has grown from just a few percent in the 1950s and 1960s to about 15% in more recent years, including the Defense-Wide category of spending in the calculation can lead to military department shares of the budget in the 1950s and 1960s that are somewhat more elevated compared to those in more recent years, making it more complex to compare the military departments’ shares across the entire period of time since the end of the World War II. For this reason, military department shares of the DOD budget cited in this statement are calculated after excluding the Defense-Wide category. The points made in this statement, however, can still be made on the basis of a calculation that includes the Defense-Wide category.

³⁵ For example, from the mid-1950s to the mid-1960s, reflecting a U.S. defense strategy at the time that placed a strong reliance on the deterrent value of nuclear weapons, the Department of the Air Force’s share of the non-Defense-Wide DOD budget increased by several percentage points. The Department of the Air Force’s share averaged about 45% for the 10-year period FY1956-FY1965, and peaked at more than 47% in FY1957-FY1959. As another example, for the 11-year period FY2003-FY2013, as a consequence of combat operations in Iraq and Afghanistan, the Department of the Army’s share of the non-Defense-Wide DOD budget increased by roughly 10 percentage points. The Department of the Army’s share during this period averaged about 39%, and peaked at more than 43% in FY2008. U.S. combat operations in Iraq and Afghanistan during this period reflected the implementation of U.S. national strategy as interpreted by policy makers during those years.

306 ships). The seven ships include two Virginia-class attack submarines, two DDG-51 class Aegis destroyers, and three Littoral Combat Ships (LCSs). The Navy's proposed FY2015 shipbuilding budget also requests funding for ships that have been procured in prior fiscal years, and ships that are to be procured in future fiscal years.

CRS Reports Tracking Legislation on Specific Navy Shipbuilding Programs

Detailed coverage of legislative activity on certain Navy shipbuilding programs (including funding levels, legislative provisions, and report language) can be found in the following CRS reports:

- CRS Report RS20643, *Navy Ford (CVN-78) Class Aircraft Carrier Program: Background and Issues for Congress*, by Ronald O'Rourke.
 - This report also covers the issue of funding for a refueling complex overhaul (RCOH) for the aircraft carrier *George Washington* (CVN-73).
- CRS Report R41129, *Navy Ohio Replacement (SSBN[X]) Ballistic Missile Submarine Program: Background and Issues for Congress*, by Ronald O'Rourke.
- CRS Report RL32418, *Navy Virginia (SSN-774) Class Attack Submarine Procurement: Background and Issues for Congress*, by Ronald O'Rourke.
- CRS Report RL32109, *Navy DDG-51 and DDG-1000 Destroyer Programs: Background and Issues for Congress*, by Ronald O'Rourke.
- CRS Report RL33741, *Navy Littoral Combat Ship (LCS) Program: Background and Issues for Congress*, by Ronald O'Rourke.
- CRS Report R43543, *Navy LX(R) Amphibious Ship Program: Background and Issues for Congress*, by Ronald O'Rourke.
 - This report also covers the issue of whether to procure an additional San Antonio (LPD-17) class amphibious ship.
- CRS Report R43546, *Navy TAO(X) Oiler Shipbuilding Program: Background and Issues for Congress*, by Ronald O'Rourke.
 - This report also covers the Navy's proposal, made as part of its FY2015 budget submission, to disestablish the National Defense Sealift Fund (NDSF).

Individual Navy shipbuilding programs that are not covered in detail in the above reports are covered in detail below.

FY2015 National Defense Authorization Act (H.R. 4435/S. 2410)

House (Committee Report)

The House Armed Services Committee, in its report (H.Rept. 113-446 of May 13, 2014) on H.R. 4435, recommends the following changes to the Navy's proposed FY2015 shipbuilding programs:

Appendix C. U.S. Strategy and the Size and Structure of U.S. Naval Forces

This appendix presents some observations on the relationship between U.S. strategy and the size and structure of U.S. naval forces that can form part of the context for assessing Navy force structure goals and shipbuilding plans.⁴¹

Strategic considerations that can be considered in assessing Navy force structure goals and shipbuilding plans include, among other things, the U.S. strategic rebalancing toward the Asia-Pacific region,⁴² China's modernization of its maritime military capabilities,⁴³ and requests from U.S. regional combatant commanders (COCOMs) for forward-deployed U.S. naval forces that the Navy has testified would require a Navy of about 450 ships to fully meet.⁴⁴

More broadly, from a strategic perspective it can be noted that that U.S. naval forces, while not inexpensive, give the United States the ability to convert the world's oceans—a global commons that covers more than two-thirds of the planet's surface—into a medium of maneuver and operations for projecting U.S. power ashore and otherwise defending U.S. interests around the world. The ability to use the world's oceans in this manner—and to deny other countries the use of the world's oceans for taking actions against U.S. interests—constitutes an immense asymmetric advantage for the United States. This point would be less important if less of the world were covered by water, or if the oceans were carved into territorial blocks, like the land. Most of the world, however, is covered by water, and most of those waters are international waters, where naval forces can operate freely. The point, consequently, is not that U.S. naval forces are intrinsically special or privileged—it is that they have a certain value simply as a consequence of the physical and legal organization of the planet.

An additional point that can be noted in relating U.S. naval forces to U.S. national strategy is that most of the world's people, resources, and economic activity are located not in the Western Hemisphere, but in the other hemisphere, particularly Eurasia. In response to this basic feature of world geography, U.S. policymakers for the last several decades have chosen to pursue, as a key element of U.S. national strategy, a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another, on the grounds that such a hegemon could represent a concentration of power strong enough to threaten core U.S. interests by, for example, denying the United States access to some of the other hemisphere's resources and economic activity. Although U.S. policymakers do not often state this key national strategic goal explicitly in public, U.S.

⁴¹ This appendix adapts material originally presented in Statement of Ronald O'Rourke, Specialist in Naval Affairs, Congressional Research Service, Before the House Armed Services Committee Subcommittee on Seapower and Projection Forces on the Navy's FY2014 30-Year Shipbuilding Plan, October 23, 2013, pp. 1, 17-18.

⁴² For more on the strategic rebalancing, see CRS Report R42146, *Assessing the January 2012 Defense Strategic Guidance (DSG): In Brief*, by Catherine Dale and Pat Towell; and CRS Report R42448, *Pivot to the Pacific? The Obama Administration's "Rebalancing" Toward Asia*, coordinated by Mark E. Manyin.

⁴³ For more on China's modernization of its maritime military capabilities, see CRS Report RL33153, *China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress*, by Ronald O'Rourke.

⁴⁴ Navy officials testified in March 2014 that a Navy of 450 ships would be required to fully meet COCOM requests for forward-deployed Navy forces. (Spoken testimony of Admiral Jonathan Greenert at a March 12, 2014, hearing before the House Armed Services Committee on the Department of the Navy's proposed FY2015 budget, as shown in transcript of hearing.)

military operations in recent decades—both wartime operations and day-to-day operations—have been carried out in no small part in support of this key goal.

The U.S. goal of preventing the emergence of a regional hegemon in one part of Eurasia or another is a major reason why the U.S. military is structured with force elements that enable it to cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival. Force elements associated with this goal include, among other things, an Air Force with significant numbers of long-range bombers, long-range surveillance aircraft, long-range airlift aircraft, and aerial refueling tankers, and a Navy with significant numbers aircraft carriers, nuclear-powered attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships.

The United States is the only country in the world that designs its military to cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival. The other countries in the Western Hemisphere do not design their forces to do this because they cannot afford to, and because the United States is, in effect, doing it for them. Countries in the other hemisphere do not design their forces to do this for the very basic reason that they are already in the other hemisphere, and consequently instead spend their defense money on forces that are tailored largely for influencing events in their own local region.

The fact that the United States designs its military to do something that other countries do not design their forces to do—cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival—can be important to keep in mind when comparing the U.S. military to the militaries of other nations. For example, in observing that the U.S. Navy has 11 aircraft carriers while other countries have no more than one or two, it can be noted other countries do not need a significant number of aircraft carriers because, unlike the United States, they are not designing their forces to cross broad expanses of ocean and air space and then conduct sustained, large-scale military operations upon arrival.

As another example, it is sometimes noted, in assessing the adequacy of U.S. naval forces, that U.S. naval forces are equal in tonnage to the next dozen or more navies combined, and that most of those next dozen or more navies are the navies of U.S. allies. Those other fleets, however, are mostly of Eurasian countries, which do not design their forces to cross to the other side of the world and then conduct sustained, large-scale military operations upon arrival. The fact that the U.S. Navy is much bigger than allied navies does not necessarily prove that U.S. naval forces are either sufficient or excessive; it simply reflects the differing and generally more limited needs that U.S. allies have for naval forces. (It might also reflect an underinvestment by some of those allies to meet even their more limited naval needs.)

Countries have differing needs for naval and other military forces. The United States, as a country located in the Western Hemisphere with a goal of preventing the emergence of a regional hegemon in one part of Eurasia or another, has defined a need for naval and other military forces that is quite different from the needs of allies that are located in Eurasia. The sufficiency of U.S. naval and other military forces consequently is best assessed not through comparison to the militaries of other countries, but against U.S. strategic goals.