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Navy LPD-17 Flight II and LHA Amphibious Ship Programs: Background and Issues for Congress

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Summary

The Navy is currently procuring two type of amphibious ships: LPD-17 Flight II class amphibious ships, and LHA-type amphibious assault ships. Both types are built by Huntington Ingalls Industries/Ingalls Shipbuilding (HII/Ingalls) of Pascagoula, MS.

The Navy's proposed FY2023 budget requests the procurement of LPD-32, which would be the third LPD-17 Flight II class ship. The Navy estimates the ship's procurement cost at \$1,924.0 million (i.e., about \$1.9 billion). The ship has received \$251.0 million in prior-year advance procurement (AP) funding. The Navy's proposed FY2023 budget requests the remaining \$1,673.0 million needed to complete the ship's estimated procurement cost.

Under the Navy's 355-ship force-level goal, which dates to 2016, a total of 13 LPD-17 Flight II class ships are to be procured. The Navy and DOD since 2019 have been working to develop a new force-level goal to replace the 355-ship goal. In addition to that effort, the Navy is finalizing a study on required numbers of amphibious ships. The Navy's FY2023 budget submission proposes truncating the LPD-17 Flight II program to three ships by making LPD-32 the final ship in the program. The Marine Corps' FY2023 unfunded priorities list (UPL), however, includes, as its top unfunded item, \$250.0 million in AP funding for a fourth LPD-17 Flight II class ship (LPD-33) to be procured in a future fiscal year.

The Navy's proposed FY2023 budget also requests continued procurement funding for LHA-9, an LHA-type amphibious assault ship. The Navy's FY2023 budget submission estimates the ship's procurement cost at \$3,539.2 million (i.e., about \$3.5 billion). The ship has received \$350.0 million in prior-year advance procurement (AP) funding and \$568.6 million in prior-year procurement funding. The Navy's proposed FY2023 budget requests a further \$1,085.5 million in procurement funding for the ship. Under the Navy's FY2023 budget submission, the final \$1,535.1 million needed to complete the ship's estimated procurement cost was to have been requested for FY2024. Following the submission of its proposed FY2023 budget, however, the Navy identified a shortfall of about \$293 million in required funding for LHA-9. The Navy states that it will program this additional \$293 million for FY2024 during the next budget cycle, increasing the amount to be requested for FY2024 to about \$1,828 million and the ship's total estimated procurement cost to about \$3,832 million.

The Navy's FY2023 budget submission presents LHA-9 as a ship being requested for procurement in FY2023. Consistent with both prior-year congressional authorization and appropriation action and Section 126 of the FY2021 National Defense Authorization Act (NDAA) (H.R. 6395/P.L. 116-283 of January 1, 2021), CRS reports on Navy shipbuilding programs, including this report, treat LHA-9 as a ship that Congress procured (i.e., authorized and provided procurement—not advance procurement [AP]—funding for) in FY2021. Navy officials have described the listing of LHA-9 in the Navy's FY2023 budget submission as a ship being requested for procurement in FY2023 as an oversight.

Section 124 of the FY2021 NDAA, as amended by Section 121 of the FY2022 NDAA (S. 1605/P.L. 117-821 of December 27, 2022), provides authority for the Navy to use a block buy contract for the procurement of three LPD-17 class ships and one LHA-type amphibious assault ship.

The Navy's LPD-17 Flight II and LHA shipbuilding programs pose multiple oversight issues for Congress. Congress's decisions on the LPD-17 Flight II and LHA programs could affect Navy capabilities and funding requirements and the shipbuilding industrial base.

Contents

Introduction	1
Background	1
U.S. Navy Amphibious Ships.....	1
Roles and Missions	1
Current Types of Amphibious Ships	2
Amphibious Ship Force at End of FY2021.....	2
Amphibious Ship Force-Level Goal Under 355-Plan of 2016.....	2
Emerging New Amphibious Ship Force-Level Goal	2
Existing LSD-41/49 Class Ships.....	3
Amphibious Warship Industrial Base.....	4
LPD-17 Flight II Program.....	4
Program Origin and Name	4
Design	5
Procurement Quantity	5
Procurement Schedule	5
Procurement Cost.....	6
LHA-9 Amphibious Assault Ship.....	6
FY2021 and FY2022 Legislation.....	7
Authority for LPD-LHA Block Buy Contract.....	7
Ship Procurement Dates.....	7
FY2023 Procurement Funding Request	8
Issues for Congress.....	9
Future Amphibious Ship Force-Level Goal	9
Proposed Truncation of LPD-17 Flight II Procurement.....	9
Advance Procurement (AP) Funding for LPD-33.....	11
Use of Block Buy Contract Authority	11
Acceleration of LHA-10 Procurement Date.....	12
Technical and Cost Risk in LPD-17 Flight II and LHA Programs.....	13
LPD-17 Flight II Program.....	13
LHA Program.....	14
Legislative Activity for FY2023.....	16
Summary of Congressional Action on FY2023 Funding Request	16
FY2023 National Defense Authorization Act (H.R. 7900/S. 4543).....	16
House	16
Senate.....	18
FY2023 DOD Appropriations Act (H.R. 8236)	21
House	21

Figures

Figure 1. LSD-41/49 Class Ship.....	4
Figure 2. LPD-17 Flight II Design	6
Figure 3. LHA-8 Amphibious Assault Ship.....	7

Tables

Table 1. Summary of Congressional Action on FY2023 Procurement Funding Request 16

Appendixes

Appendix. Procurement Dates of LPD-31 and LHA-9 22

Contacts

Author Information..... 25

Introduction

This report provides background information and issues for Congress on two types of amphibious ships being procured for the Navy: LPD-17 Flight II class amphibious ships and LHA-type amphibious assault ships. Both types are built by Huntington Ingalls Industries/Ingalls Shipbuilding (HII/Ingalls) of Pascagoula, MS.

The Navy's LPD-17 Flight II and LHA shipbuilding programs pose multiple oversight issues for Congress. Congress's decisions on the LPD-17 Flight II and LHA programs could affect Navy capabilities and funding requirements and the shipbuilding industrial base.

A separate CRS report discusses the Navy's new Light Amphibious Warship (LAW) program.¹

Background

U.S. Navy Amphibious Ships

Roles and Missions

Navy amphibious ships are operated by the Navy, with crews consisting of Navy personnel. They are battle force ships, meaning ships that count toward the quoted size of the Navy. The primary function of Navy amphibious ships is to lift (i.e., transport) embarked U.S. Marines and their weapons, equipment, and supplies to distant operating areas, and enable Marines to conduct expeditionary operations ashore in those areas. Although amphibious ships can be used to support Marine landings against opposing military forces, they are also used for operations in permissive or benign situations where there are no opposing forces. Due to their large storage spaces and their ability to use helicopters and landing craft to transfer people, equipment, and supplies from ship to shore without need for port facilities,² amphibious ships are potentially useful for a range of combat and noncombat operations.³

On any given day, some of the Navy's amphibious ships, like some of the Navy's other ships, are forward-deployed to various overseas operating areas in multiship formations called amphibious groups (ARGs). Amphibious ships are also sometimes forward-deployed on an individual basis, particularly for conducting peacetime engagement activities with foreign countries or for responding to smaller-scale or noncombat contingencies.

¹ CRS Report R46374, *Navy Light Amphibious Warship (LAW) Program: Background and Issues for Congress*, by Ronald O'Rourke.

² Amphibious ships have berthing spaces for Marines; storage space for their wheeled vehicles, their other combat equipment, and their supplies; flight decks and hangar decks for their helicopters and vertical take-off and landing (VTOL) fixed-wing aircraft; and in many cases well decks for storing and launching their landing craft. (A well deck is a large, garage-like space in the stern of the ship. It can be flooded with water so that landing craft can leave or return to the ship. Access to the well deck is protected by a large stern gate that is somewhat like a garage door.)

³ Amphibious ships and their embarked Marine forces can be used for launching and conducting humanitarian-assistance and disaster-response (HA/DR) operations; peacetime engagement and partnership-building activities, such as exercises; other nation-building operations, such as reconstruction operations; operations to train, advise, and assist foreign military forces; peace-enforcement operations; noncombatant evacuation operations (NEOs); maritime-security operations, such as anti-piracy operations; smaller-scale strike and counterterrorism operations; and larger-scale ground combat operations. Amphibious ships and their embarked Marine forces can also be used for maintaining forward-deployed naval presence for purposes of deterrence, reassurance, and maintaining regional stability.

Current Types of Amphibious Ships

The Navy's current amphibious ship force consists entirely of large amphibious ships, including the so-called "big-deck" amphibious assault ships, designated LHA and LHD, which look like medium-sized aircraft carriers, and the smaller (but still quite sizeable) amphibious ships, designated LPD or LSD, which are sometimes called "small-deck" amphibious ships.⁴ As mentioned earlier, a separate CRS report discusses the Navy's new Light Amphibious Warship (LAW) program, which is a program to build a new type of amphibious ship that would be much smaller than the Navy's current LHA/LHD- and LPD/LSD-type amphibious ships.⁵

Amphibious Ship Force at End of FY2021

The Navy's force of amphibious ships at the end of FY2021 included 31 ships, including 9 amphibious assault ships (2 LHAs and 7 LHDs), 11 LPD-17 Flight I ships, and 11 older LSD-41/49 class ships. The LSD-41/49 class ships are to be replaced by new LPD-17 Flight II class ships.

Amphibious Ship Force-Level Goal Under 355-Plan of 2016

The Navy's current force-level goal, released in December 2016, calls for achieving and maintaining a 355-ship fleet that includes 38 amphibious ships—12 LHA/LHD-type ships, 13 LPD-17 Flight I class ships, and 13 LPD-17 Flight II class ships (12+13+13).⁶ This 38-ship force-level goal predates the LAW program and consequently includes no LAWs.

Emerging New Amphibious Ship Force-Level Goal

The Navy and DOD since 2019 have been working to develop a new force-level goal to replace the Navy's current 355-ship force-level goal. The Navy's FY2023 30-year (FY2023-FY2052) shipbuilding plan, released on April 20, 2022, includes a table summarizing the results of studies that have been conducted on the successor force-level goal. These studies outline potential future fleets with 6 to 10 LHAs/LHDs and 30 to 54 other amphibious ships, including but not necessarily limited to LPDs and LAWs.⁷

Marine Corps officials state that, from their perspective, a minimum of 66 amphibious ships will be required in coming years, including a minimum of 31 larger amphibious ships (10 LHAs/LHDs and 21 LPDs) plus 35 LAWs (aka "31+35").⁸

⁴ U.S. Navy amphibious ships have designations starting with the letter L, as in amphibious *landing*. LHA can be translated as landing ship, helicopter-capable, assault; LHD can be translated as landing ship, helicopter-capable, well deck; LPD can be translated as landing ship, helicopter platform, well deck; and LSD can be translated as landing ship, well deck. Whether noted in the designation or not, almost all these ships have well decks. The exceptions are LHAs 6 and 7, which do not have well decks and instead have expanded aviation support capabilities. For an explanation of well decks, see footnote 2. The terms "large-deck" and "small-deck" refer to the size of the ship's flight deck.

⁵ CRS Report R46374, *Navy Light Amphibious Warship (LAW) Program: Background and Issues for Congress*, by Ronald O'Rourke.

⁶ For more on the Navy's 355-ship force-level goal, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke. For a more detailed review of the 38-ship force structure requirements, see Appendix A of archived CRS Report RL34476, *Navy LPD-17 Amphibious Ship Procurement: Background, Issues, and Options for Congress*, by Ronald O'Rourke.

⁷ For additional discussion, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress*, by Ronald O'Rourke.

⁸ See, for example, Todd South, "Back to Ship: Marines Need Ships to Fight. Will They Get Them?" *Military Times*,

At an April 26, 2022, hearing on Department of the Navy (DON) investment programs before the Seapower subcommittee of the Senate Armed Services Committee, the Department of the Navy testified that

In order to ensure the future naval expeditionary force is maximized for effective combat power, while reflecting and supporting the force structure changes addressed in USMC's Force Design, the Secretary of the Navy directed an amphibious requirement study that will inform refinement of amphibious ship procurement plans and shipbuilding profiles, as well as inform the ongoing overall Naval Force Structure Assessment.⁹

In January 2022, Navy officials reportedly anticipated that the above-mentioned study would be completed by the end of March 2022.¹⁰ At the end of March 2022, the study reportedly was expected to be completed shortly.¹¹ At the beginning of April 2022, the study reportedly was in its final stages.¹²

The Navy's FY2023 30-year (FY2023-FY2052) shipbuilding plan, released on April 20 2022, states that "the Navy will begin assessment of a next-generation amphibious ship (i.e., LPD(X)) in FY2023."¹³

Existing LSD-41/49 Class Ships

The Navy's 12 aging Whidbey Island/Harpers Ferry (LSD-41/49) class ships (**Figure 1**) were procured between FY1981 and FY1993 and entered service between 1985 and 1998.¹⁴ The LSD-41/49 class includes 12 ships because the class was built at a time when the Navy was planning a 36-ship (12+12+12) amphibious force. LD-41/49 class ships have an expected service life of 40 years; the first ship will reach that age in 2025.

March 24, 2022; Megan Eckstein, "Some Lawmakers Back Marines in Disagreement over Navy Amphib Force," *Defense News*, April 5, 2022; Caitlin M. Kenney, "Marines Push Light Amphib Warship While Navy Secretary Awaits Study," *Defense One*, April 5, 2022; Mallory Shelbourne, "Navy and Marines Divided Over the Amphibious Fleet's Future as Delays and Cancellations Mount in FY 2023 Budget Request," *USNI News*, April 3, 2022.

⁹ Statement of Frederick J. Stefany, Principal Civilian Deputy, Assistant Secretary of the Navy (Research, Development and Acquisition), Performing The Duties Of The Assistant Secretary of the Navy (Research, Development and Acquisition), and Vice Admiral Scott Conn, Deputy Chief of Naval Operations, Warfighting Requirements And Capabilities (OPNAV N9), and Lieutenant General Karsten S. Heckl, Deputy Commandant, Combat Development and Integration, Commanding General, Marine Corps Combat Development Command, before the Subcommittee on Seapower of the Senate Armed Services Committee on Department of the Navy Fiscal Year 2023 Budget Request for Seapower, April 26, 2022, PDF page 12 of 37.

¹⁰ See Megan Eckstein, "Amphib Ship Requirements Study Could Spell Bad News for Marines, Industry," *Defense News*, January 18, 2022.

¹¹ Megan Eckstein, "US Navy Seeks to End San Antonio-Class Ship Production, Reducing Fleet by 8 Amphibious Hulls," *Defense News*, March 28, 2022.

¹² Mallory Shelbourne, "Navy and Marines Divided Over the Amphibious Fleet's Future as Delays and Cancellations Mount in FY 2023 Budget Request," *USNI News*, April 3, 2022; Caitlin M. Kenney, "Marines Push Light Amphib Warship While Navy Secretary Awaits Study," *Defense One*, April 5, 2022.

¹³ U.S. Navy, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2023*, April 2022, p. 14.

¹⁴ The class was initially known as the Whidbey Island (LSD-41) class. The final four ships in the class, beginning with *Harpers Ferry* (LSD-49), were built to a modified version of the original LSD-41 design, prompting the name of the class to be changed to the Harpers Ferry/Whidbey Island (LSD-41/49) class. Some sources refer to these 12 ships as two separate classes.

Figure I. LSD-41/49 Class Ship



Source: Cropped version of U.S. Navy photo dated July 13, 2013, showing the *Pearl Harbor* (LSD-52).

Amphibious Warship Industrial Base

Huntington Ingalls Industries/Ingalls Shipbuilding (HII/Ingalls) of Pascagoula, MS, is the Navy's current builder of both LPDs and LHA-type ships, although other U.S. shipyards could also build amphibious ships.¹⁵ The amphibious warship industrial base also includes many supplier firms in numerous U.S. states that provide materials and components for Navy amphibious ships. HII states that the supplier base for its LHA production line, for example, includes 457 companies in 39 states.¹⁶

LPD-17 Flight II Program

Program Origin and Name

The Navy decided in 2014 that the LSD-41/49 replacement ships would be built to a variant of the design of the Navy's San Antonio (LPD-17) class amphibious ships. (A total of 13 LPD-17 class ships [LPDs 17 through 29] were procured between FY1996 and FY2017.) Reflecting that decision, the Navy announced on April 10, 2018, that the replacement ships would be known as the LPD-17 Flight II class ships.¹⁷ By implication, the Navy's original LPD-17 design became the LPD-17 Flight I design. The first LPD-17 Flight II class ship is designated LPD-30. Subsequent LPD-17 Flight II class ships are to be designated LPD-31, LPD-32, and so on.

¹⁵ Amphibious ships could also be built by U.S. shipyards such as HII/Newport News Shipbuilding (HII/NNS) of Newport News, VA; General Dynamics/National Steel and Shipbuilding Company (GD/NASSCO) of San Diego, CA; and (for LPDs at least) General Dynamics/Bath Iron Works (GD/BIW) of Bath, ME. The Navy over the years has from time to time conducted competitions among shipyards for contracts to build amphibious ships.

¹⁶ Source: HII statement as quoted in Frank Wolfe, "Navy Budget Plan Delays Buy of Amphibious Ships," *Defense Daily*, March 15, 2019.

¹⁷ Megan Eckstein, "Navy Designates Upcoming LX(R) Amphibs as San Antonio-Class LPD Flight II," *USNI News*, April 11, 2018. Within a program to build a class of Navy ships, the term *flight* refers to a group of ships within the class that are built to a particular version of the class design. The LPD-17 Flight II program was previously known as the LX(R) program and before that as the LSD(X) program.

Whether the LPD-17 Flight II class ships constitute their own shipbuilding program or an extension of the original LPD-17 shipbuilding program might be a matter of perspective. As a matter of convenience, this CRS report refers to the Flight II class shipbuilding effort as a separate program. Years from now, LPD-17 Flight I and Flight II class ships might come to be known collectively as either the LPD-17 class, the LPD-17/30 class, or the LPD-17 and LPD-30 classes.

On October 10, 2019, the Navy announced that LPD-30, the first LPD-17 Flight II class ship, will be named Harrisburg, for the city of Harrisburg, PA.¹⁸ As a consequence, LPD-17 Flight II, if treated as a separate class, would be referred to as Harrisburg (LPD-30) class ships.

Design

Compared to the LPD-17 Flight I design, the LPD-17 Flight II design (**Figure 2**) is somewhat less expensive to procure, and in some ways less capable—a reflection of how the Flight II design was developed to meet Navy and Marine Corps operational requirements while staying within a unit procurement cost target that had been established for the program.¹⁹ In many other respects, however, the LPD-17 Flight II design is similar in appearance and capabilities to the LPD-17 Flight I design. Of the 13 LPD-17 Flight I ships, the final two (LPDs 28 and 29) incorporate some design changes that make them transitional ships between the Flight I design and the Flight II design.

Procurement Quantity

Under the Navy’s current 38-ship amphibious force-level goal, the Navy would procure a total of 13 LPD-17 Flight II class ships. The Navy’s FY2023 budget submission proposes truncating the LPD-17 Flight II program to three ships by making LPD-32 the final ship in the program. The Marine Corps’ FY2023 unfunded priorities list (UPL), however, includes, as its top unfunded item, \$250.0 million in AP funding for a fourth LPD-17 Flight II class ship (LPD-33) to be procured in a future fiscal year.

Procurement Schedule

The first LPD-17 Flight II class ship, LPD-30, was procured in FY2018. The Navy’s FY2023 budget submission presents the second LPD-17 Flight II class amphibious ship, LPD-31, as a ship that was procured in FY2021. Consistent with congressional action on the Navy’s FY2020 budget, this CRS report treats LPD-31 as a ship that Congress procured (i.e., authorized and provided procurement—not advance procurement—funding for) in FY2020. (For additional discussion, see the **Appendix**.)

¹⁸ Secretary of the Navy Public Affairs, “SECNAV Names Future Amphibious Transport Dock Ship in Honor of the city of Harrisburg, Pennsylvania,” *Navy News Service*, October 10, 2019.

¹⁹ The Navy’s unit procurement cost targets for the LPD-17 Flight II program were \$1,643 million in constant FY2014 dollars for the lead ship, and an average of \$1,400 million in constant FY2014 dollars for ships 2 through 11. (Source: Navy briefing on LX(R) program to CRS and CBO, March 23, 2015.) The cost target for the lead ship was greater than the cost target for the subsequent ships primarily because the procurement cost of the lead ship incorporates much or all of the detail design and nonrecurring engineering (DD/NRE) costs for the program. Incorporating much or all of the DD/NRE costs of for a shipbuilding program into the procurement cost of the lead ship in the program is a traditional Navy shipbuilding budgeting practice.

Figure 2. LPD-17 Flight II Design

Artist's rendering



Source: Cropped version of Huntington Ingalls Industries rendering accessed March 2, 2021, at <https://newsroom.huntingtoningalls.com/file?fid=5c9a85ca2cfac22774673031>.

Procurement Cost

LPD-17 Flight II class ships have a current unit procurement cost of about \$1.9 billion.

LHA-9 Amphibious Assault Ship

LHA-type amphibious assault ships are procured once every few years. LHA-8 (**Figure 3**) was procured in FY2017. The Navy's FY2023 budget submission estimates the procurement cost of the next amphibious assault ship, LHA-9, at \$3,539.2 million (i.e., about \$3.5 billion). Following the submission of its proposed FY2023 budget, however, the Navy identified a shortfall of about \$293 million in required funding for LHA-9. The Navy states that it will program this additional \$293 million for FY2024 during the next budget cycle, increasing the ship's total estimated procurement cost to about \$3,832 million.

The Navy's FY2023 budget submission, like its FY2022 and FY2021 budget submission, presents LHA-9 as a ship projected for procurement in FY2023.²⁰ Consistent with congressional action on the Navy's FY2020 and FY2021 budgets, this CRS report treats LHA-9 as a ship that Congress procured (i.e., authorized and provided procurement—not advance procurement—funding for) in FY2021. Navy officials have described the listing of LHA-9 in the Navy's FY2023 budget submission as a ship being requested for procurement in FY2023 as an oversight.²¹ (For additional discussion, see the **Appendix**.)

²⁰ The Navy's FY2022 budget submission did not show an LHA as having been procured in FY2020 or FY2021, and referred to LHA-9 as an "FY23 ship." (*Department of Defense, Fiscal Year (FY) 2022 Budget Estimates, Navy, Justification Book Volume 1 of 1, Shipbuilding and Conversion, Navy, May 2021, p. 271 [PDF page 291 of 390].*)

²¹ Source: Navy briefing on Navy's proposed FY2023 budget for Congressional Budget Office and CRS, March 30, 2023.

Figure 3. LHA-8 Amphibious Assault Ship

Artist's rendering



Source: Rendering accompanying Tyler Rogoway, “The Next America Class Amphibious Assault Ship Will Almost Be In a Class of its Own,” *The Drive*, April 17, 2018. A note on the photo credits the photo to HII.

FY2021 and FY2022 Legislation

Authority for LPD-LHA Block Buy Contract

Section 124 of the FY2021 National Defense Authorization Act (NDAA) (H.R. 6395/P.L. 116-283 of January 1, 2021), as amended by Section 121 of the FY2022 NDAA (S. 1605/P.L. 117-821 of December 27, 2022), permits the Navy to enter into a block buy contract in FY2021 or FY2022 for the procurement of three LPD-17 class ships and one LHA-type amphibious assault ship. Such a contract would be the first block buy contract to cover the procurement of ships from two separate ship classes. Using block buy contracting could reduce the unit procurement costs of LPD-17 Flight II and LHA-type ships and affect Congress’s flexibility for making changes to Navy shipbuilding programs in response to potential changes in strategic or budgetary circumstances during the period covered by the block buy contract.²²

Ship Procurement Dates

The Department of Defense’s (DOD’s) decision to present LPD-31 and LHA-9 in its FY2021 budget submission as ships requested for procurement in FY2021 and FY2023, respectively, even though Congress procured the two ships in FY2020 and FY2021, respectively, posed an institutional issue for Congress regarding the preservation and use of Congress’s power of the purse under Article 1 of the Constitution, and for maintaining Congress as a coequal branch of

²² For more on block buy contracting, see CRS Report R41909, *Multiyear Procurement (MYP) and Block Buy Contracting in Defense Acquisition: Background and Issues for Congress*, by Ronald O’Rourke. See also Megan Eckstein, “Ingalls Eyeing LPD Cost Reductions, Capability Increases As Future Fleet Design Evolves,” *USNI News*, January 21, 2021.

government relative to the executive branch. Section 126 of the FY2021 National Defense Authorization Act (NDAA) (H.R. 6395/P.L. 116-283 of January 1, 2021) states

SEC. 126. TREATMENT IN FUTURE BUDGETS OF THE PRESIDENT OF SYSTEMS ADDED BY CONGRESS.

In the event the procurement quantity for a system authorized by Congress in a National Defense Authorization Act for a fiscal year, and for which funds for such procurement quantity are appropriated by Congress in the Shipbuilding and Conversion, Navy account for such fiscal year, exceeds the procurement quantity specified in the budget of the President, as submitted to Congress under section 1105 of title 31, United States Code, for such fiscal year, such excess procurement quantity shall not be specified as a new procurement quantity in any budget of the President, as so submitted, for any fiscal year after such fiscal year.

Regarding the original Senate version of this provision, the Senate Armed Services Committee's report (S.Rept. 116-236 of June 24, 2020) on the FY2021 National Defense Authorization Act (S. 4049) states

Treatment of weapon systems added by Congress in future President's budget requests (sec. 126)

The committee recommends a provision that would preclude the inclusion in future annual budget requests of a procurement quantity of a system previously authorized and appropriated by the Congress that was greater than the quantity of such system requested in the President's budget request.

The committee is concerned that by presenting CVN-81 as a ship that was procured in fiscal year 2020 (instead of as a ship that was procured in fiscal year 2019), LPD-31 as a ship requested for procurement in fiscal year 2021 (instead of as a ship that was procured in fiscal year 2020), and LHA-9 as a ship projected for procurement in fiscal year 2023 (instead of as a ship that was procured in fiscal year 2020), the Department of Defense, in its fiscal year 2021 budget submission, is disregarding or mischaracterizing the actions of Congress regarding the procurement dates of these three ships. (Page 11)

FY2023 Procurement Funding Request

The Navy's proposed FY2023 budget requests the procurement of LPD-32, which would be the third LPD-17 Flight II class ship. The Navy estimates the ship's procurement cost at \$1,924.0 million (i.e., about \$1.9 billion). The ship has received \$251.0 million in prior-year advance procurement (AP) funding. The Navy's proposed FY2023 budget requests the remaining \$1,673.0 million needed to complete the ship's estimated procurement cost.

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Navy identified a shortfall of about \$293 million in required funding for LHA-9. The Navy states that it will program this additional \$293 million for FY2024 during the next budget cycle, increasing the amount to be requested for FY2024 to about \$1,828 million and the ship's total estimated procurement cost to about \$3,832 million.

Issues for Congress

Future Amphibious Ship Force-Level Goal

One issue for Congress concerns the future amphibious ship force-level goal, which could affect future procurement quantities for LPD- and LHA-type amphibious ships. As noted earlier:

- The Navy's FY2023 30-year (FY2023-FY2052) shipbuilding plan, released on April 20, 2022, includes a table summarizing the results of studies that have been conducted on the successor force-level goal. These studies outline potential future fleets with 6 to 10 LHAs/LHDs and 30 to 54 other amphibious ships, including but not necessarily limited to LPDs and LAWs.
- Marine Corps officials state that, from their perspective, a minimum of 66 amphibious ships will be required in coming years, including a minimum of 31 larger amphibious ships (10 LHAs/LHDs and 21 LPDs) plus 35 LAWs (aka "31+35").

Potential oversight questions for Congress include the following:

- Has the Navy completed its study of amphibious ship force-level requirements? When does the Navy anticipate informing Congress of the results of the study?
- What are the comparative potential costs and operational risks associated with an amphibious force that includes
 - 6 LHAs/LHDs and 30 LPDs and LAWs?
 - 10 LHAs/LHDs and 54 LPDs and LAWs?
 - 10 LHAs/LHDs, 21 LPDs, and 35 LAWs?²³
- To what extent, if any, do the Navy and Marine Corps disagree regarding future required levels of LHA- and LPD-type amphibious ships?²⁴

Proposed Truncation of LPD-17 Flight II Procurement

Another issue for Congress concerns the Navy's proposal to truncate the LPD-17 Flight II program to three ships by making LPD-32 the final ship in the program. Truncating LPD-17 Flight II procurement to three ships would make for a total of 16 LPD-17 Flight I and Flight II ships (13 LPD-17 Flight I ships procured in earlier years, and 3 LPD-17 Flight II ships). As

²³ For press reports bearing on the issue of operational risks, see Rich Abott, "Heckl: Reduction Of 31 to 24 Amphibs Adds Risk, Mostly Outside Indo-Pacific Region," *Defense Daily*, May 19, 2022; Connor O'Brien, "Amphib Cut Heightens Risk in Europe and Mideast, General Warns," *Politico Pro*, May 18, 2022; Caitlin M. Kenney, "'We Should Have Been There': Marine General Laments the State of the Amphib Navy," *Defense One*, April 29, 2022; Mallory Shelbourne, "Marines Couldn't Meet Request to Surge to Europe Due to Strain on Amphibious Fleet," *USNI News*, April 26, 2022.

²⁴ For a press report on this question, see Mallory Shelbourne, "Navy and Marines Divided Over the Amphibious Fleet's Future as Delays and Cancellations Mount in FY 2023 Budget Request," *USNI News*, April 3, 2022.

discussed above, the Navy is currently studying requirements for amphibious ships. The Navy's FY2023 30-year shipbuilding plan states "The Navy will begin assessment of a next-generation amphibious ship (i.e., LPD(X)) in FY2023."²⁵

An April 22, 2022, press report states

Top Navy officials this week said the service's budget plan to buy only one more San Antonio-class (LPD-17) Flight II amphibious transport dock ship, LPD-32, and end the program buys time for long term assessments to decide on the future of the amphibious force....

"So the plan, as you see, adds an LPD in FY '23 and that, frankly, will buy time for the Force Structure Assessment...to go through its paces, to finish the amphibious study that [the Secretary of the Navy] asked to have done and to have that inform in [Program Objective memorandum (POM)] '24 or even POM '25 what the future of the amphibious ships will look like," Jay Stefany, Performing the Duties of Assistant Secretary of the Navy for Research, Development and Acquisition, told reporters during a media roundtable on April 20.

Stefany said the decision may ultimately call for a modified LPD[-17 design] or new hull [design] and when they would be needed, but the current budget plans allow time for that.

"If you look at the building profile, there would not need to be another LPD or some other amphib bought until [FY]'25 because we do have the [FY]'23 ship in the budget," he added.

Stefany said by FY '23 the Navy will have the Force Structure Assessment and that year the Navy will start the process that goes into starting a new program or continuing a modified version of the current LPD program.

"We may ultimately decide to do a modification, you know Block III [of the LPD-17 design] if you will, or Flight III for LPD, we don't know. But I think the idea was we would start the process in [FY]'22. When the actual ship might show up [in the shipbuilding plan] is pending the process happening," Stefany said.²⁶

Potential oversight questions for Congress include the following:

- If the Navy has not yet completed its study of amphibious-ship requirements, and has not yet released a new force-level goal to replace the 355-ship goal, how can the Navy know that the requirement for LPD-17s will be no more than 16 ships, particularly when some of the studies that have been done to support the development of the Navy's new force-level goal have included possible total numbers of LPDs that are greater than 16?
- How might the required number of LPDs be affected by the LPD(X) next-generation amphibious ship?
- The Marine Corps' FY2023 unfunded priorities list (UPL) includes, as its first item, an unfunded priority for \$250.0 million in advance procurement (AP) funding for the future procurement of a fourth LPD-17 Flight II class ship (LPD-33) in a future fiscal year. Is that consistent with the Navy's proposal to end

²⁵ U.S. Navy, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2023*, April 2022 (released April 20, 2022), p. 14.

²⁶ Rich Abott, "LPD-32 Buys Time For Navy To Decide On Next Amphibs, Navy Officials Say," *Defense Daily*, April 22, 2022. For an opinion piece opposing the truncation of LPD-17 Flight II procurement, see, for example, Bryan McGrath, "Ending Production of This Warship Is a Mistake," *Defense One*, May 16, 2022.

procurement of LPD-17 Flight II class ships with the procurement of a third and final LPD-17 Flight II ship in FY2023?

- What impact would the truncation of LPD-17 Flight II procurement to a total of three ships have on the shipyard that builds LPD-17 Flight IIs (HII/Ingalls—the Ingalls shipyard of Pascagoula, MS, which is part of Huntington Ingalls Industries) in terms of workloads, employment levels, and costs for building other Navy warships (including DDG-51 destroyers and LHA-type amphibious assault ships) that are built at that yard? What impact would the truncation of LPD-17 Flight II procurement have on supplier firms associated with construction of LPD-17 Flight II ships?

Advance Procurement (AP) Funding for LPD-33

A related issue for Congress is whether to provide advance procurement (AP) funding in FY2023 for the procurement of a fourth LPD-17 Flight II ship (LPD-33) in a future fiscal year. As noted earlier, the Marine Corps' FY2023 unfunded priorities list (UPL) includes, as its first item, an unfunded priority for \$250.0 million in advance procurement (AP) funding for the future procurement of a fourth LPD-17 Flight II class ship (LPD-33) in a future fiscal year. Potential oversight questions for this issue are broadly similar to those listed above for the previous issue concerning the proposed truncation of the LPD-17 Flight II program.

Use of Block Buy Contract Authority

Another issue for Congress is whether the Navy intends to use the LPD-LHA block buy contracting authority provided Congress in Section 124 of the FY2021 NDAA, as amended by Section 121 of the FY2022 NDAA (S. 1605/P.L. 117-821 of December 27, 2022), and if not, then what, if anything, Congress should do in response. In considering this issue, Congress may consider, among other things, how using a block buy contract might affect the procurement costs and funding profiles of the LPD-17 Flight II and LHA-type ships being procured, and how it might affect Congress's flexibility for making changes to Navy shipbuilding programs in response to potential changes in strategic or budgetary circumstances during the period covered by the block buy contract. Some supporters of amphibious ships argue that the Navy should make greater use of multi-ship procurement contracts (of which a block buy contract would be an example) in procuring amphibious ships.²⁷

At a June 22, 2021, hearing before the Senate Armed Services Committee on the Department of the Navy's proposed FY2022 budget, General David Berger, the Commandant of the Marine Corps, stated that using the block buy authority would reduce the combined cost of the four ships by \$722 million.²⁸ At a June 17, 2021, hearing before the Seapower and Projection Forces subcommittee of the House Armed Services Committee on seapower programs in the Department of the Navy's proposed FY2022 budget, Frederick J. Stefany, Acting Assistant Secretary of the Navy for Research, Development and Acquisition (ASN RDA) (i.e., the Navy's acting acquisition executive), stated that this would equate to a reduction of 7.1%.²⁹ At a June 8, 2021, hearing before the Seapower subcommittee of the Senate Armed Services Committee on Navy and

²⁷ See, for example, David Forster, "We Need More Amphibs, and We Need to Buy Them Smarter," *Defense One*, May 7, 2022.

²⁸ Richard R. Burgess, "Senators Hammer \$1 Billion Loss, Industrial Instability with Navy's Planned 2022 Shipbuilding," *Seapower*, June 22, 2021.

²⁹ Megan Eckstein, "Marines Explain Vision for Fewer Traditional Amphibious Warships," *Defense News*, June 21, 2021.

Marine Corps investment programs, the Department of Navy witnesses were asked about the Navy's intentions regarding the block buy contracting authority granted by Section 124. Stefany replied that

to update you on that authority that your—your committee provided last year, the Section 124 Authority, we have finished negotiating with HII Ingalls to document a ... contract structure that could be put in place to implement the four-ship procurement that you're referring to, that—that we just finished that up about a week ago.

And, so we had a—a handshake agreement [with HII Ingalls] on what that would look like if we were to actually enact it into a contract and we packaged that up and we're sending it to the department³⁰ leadership for—for a decision. But what—and—and get that in place before the authority that expires at the end of this year, that you provided us.

But—in—I'll just let you know the initial indications we're getting from the department is that they would like to defer this decision so that they can make an overall, as they do their overall [FY]'23 budget review this summer and fall, of the overall force structure, work with Admiral Kilby and General Smith on the right mix of ships of the future, the commitment of four ships at once, they would like to make—defer that commitment until they are able to make that force-structure assessment.

So, right now, indicators are that we are not gonna be able to execute that, but it's not a done deal. It's going through the process within the department for a final decision sir.³¹

Acceleration of LHA-10 Procurement Date

Another potential issue for Congress is whether to accelerate procurement of LHA-10—the next LHA-type amphibious assault ship so as to increase the number of LHA-typs more quickly and shorten the procurement interval between LHA-9 and LHA-10, which could reduce the procurement cost of LHA-10 in real (i.e., inflation-adjusted) terms. At a May 18, 2022 hearing on Navy acquisition programs before the Seapower and Projection Forces subcommittee of the House Armed Services Committee, the following exchange occurred:

REPRESNETATIVE ELAINE LURIA (continuing):

I also know in this budget request you've pushed [the procurement of] LHA 10 out to [FY]2031. Lieutenant General Heckl, can you comment on the impact of that specific prolongation between building LHA 9 and [LHA] 10 and then also, Mr. Stefany, because that has an impact on the industrial base, going back to some of the comments my colleagues have made.

So, General Heckl, first.

LIEUTENANT GENERAL KARSTEN HECKL, DEPUTY COMMANDANT, COMBAT DEVELOPMENT AND INTEGRATION, AND COMMANDING GENERAL, MARINE CORPS COMBAT DEVELOPMENT COMMAND:

Well, yes, ma'am, and to my comments earlier about the bigger number [of amphibious ships], obviously, LHA 10 would play vital, would prove vital in that. There's, right now, between LHA 9 and LHA 10, there's an 11-year gap [in procurement dates], depending on when you decide it was appropriated. And obviously, that large deck [amphibious ship],

³⁰ This is a reference to the Department of the Navy or the Department of Defense.

³¹ Transcript of hearing as posted by CQ.com. The passage as printed here includes some minor typographical corrections done by CRS for readability. See also Megan Eckstein, "Deal to Buy Four Amphibious Warships Losing Steam, as Navy Takes Another Look at Future Force Needs," *Defense News*, June 8, 2021; Mallory Shelbourne, "Navy Reaches 'Handshake' Deal on Four-Ship Amphib Buy, Pentagon Wants New Navy Force Structure Assessment," *USNI News*, June 8, 2021.

those—those [the Navy is now procuring] were returning to [a design with] well decks [as well as being equipped] with the flight deck.

It's a very capable platform, very important to what we're doing, very important to the—to the nation's crisis response force. And I would defer to Mr. Stefany on [the] industrial base.

FREDERICK J. STEFANY, PRINCIPAL CIVILIAN DEPUTY, ASSISTANT SECRETARY OF THE NAVY (RESEARCH, DEVELOPMENT AND ACQUISITION):

Yes ma'am, for the LHA type ship, we see about a five-year spacing between [procurement dates of] ships as ideal from a [production] learning [curve] perspective and the industrial base, the suppliers staying online and being able to produce. Anything more than that would be [a cause of] not just degradation of the—of the ability of the supply base to support [the production process] but increase the cost [of LHA-10], right?

As we see reversed learning or negative learning [i.e., loss of production curve learning between LHA-9 and LHA-10], what we call it. So, five years [between procurement dates] is ideal. As—as the General mentioned, the ship [LHA 10] now is at the—the nine or ten year spacing from LHA 9. So, we would see a cost increase and industrial base impact, both.³²

Technical and Cost Risk in LPD-17 Flight II and LHA Programs

Another potential issue for Congress is technical and cost risk in the LPD-17 Flight II and LHA programs.

LPD-17 Flight II Program

Regarding technical and cost risk in the LPD-17 Flight II program, a June 2022 Government Accountability Office (GAO) report—the 2022 edition of GAO's annual report surveying DOD major acquisition programs—states the following about the LPD-17 Flight II program:

Current Status

The LPD 17 Flight II designs are complete and include roughly 200 changes from the prior flight, according to the program. As we reported last year, the Navy is adding some planned Flight II enhancements to the last Flight I ships, LPD 28 and 29, to lower risk for Flight II ships. Navy officials told us that one key enhancement for LPD 29 and Flight II ships, the Enterprise Air Surveillance Radar, is on track to deliver as planned by summer 2022.

Program officials said that work on LPD 30 and 31 is underway, with keel-laying for LPD 30 in October 2020 and construction scheduled to begin on LPD 31 in April 2022. COVID-19 led the shipbuilder to draw workers from LPD 30 to mitigate shortages on LPD 28. As a result, construction of LPD 30 is delayed and the schedule is currently being reassessed. The LPD 30 workforce—which was about half of planned levels in mid-2020—is now approaching 70 percent of planned levels. Program officials told us they intend to assess COVID-19-related cost and schedule changes for LPD 30 in spring 2022.

The program plans to begin operational testing for LPD 30 in fiscal year 2024. Program officials told us that over the past year, the program's testing approach changed. They originally planned for some testing conducted on LPD 28 to count toward Flight II testing because this ship will have some Flight II equipment. However, the testing authority

³² Transcript of hearing as posted by CQ. See also Rich Abott, "Navy: Delay From LHA-9 To LHA-10 Will Increase Cost And Impact Industrial Base," *Defense Daily*, May 18, 2022; Audrey Decker, "Stefany: Gap in LHA Production Poses Cost Increase and Industrial Base Impact," *Inside Defense*, May 18, 2022; Megan Eckstein, "Navy Says It Will Lose Millions by Not Committing to 10 Destroyers in Upcoming Contract," *Defense News*, May 18, 2022.

clarified that LPD 28 testing could not replace testing on Flight II. Revisions to the test and evaluation master plan are underway, and several decisions regarding testing remain, such as a requirement for a Full Ship Shock Trial.

Program Office Comments

We provided a draft of this assessment to the program office for review and comment. The program office provided technical comments, which we incorporated where appropriate. The program office stated that Flight II will provide increased capability, including improved command and control capabilities, and ensure the Navy meets evolving missions using the new technologies. It added that the shipbuilder and Navy continue to identify and manage risks for all LPD 17 class ships currently under construction.³³

LHA Program

Regarding technical risk in the LHA program, a January 2022 report from DOD's Director, Operational Test and Evaluation (DOT&E)—DOT&E's annual report for FY2021—stated the following:

Test Adequacy

The Navy and Marine Corps conducted an operational assessment of the LHA 8 ship design between October 20 and November 19, 2020 in accordance with DOT&E-approved test plans. During the three, 3-day events, subject matter experts in operations and maintenance reviewed the LHA 8 design to identify risks that could affect operational effectiveness and suitability. The operational assessment also informed operational testers on the required FOT&E [Follow-on Operational Test and Evaluation] scope and design.

The Navy does not yet have a well-defined LFT&E [Live Fire Test and Evaluation] plan required to evaluate the survivability of the LHA 8 to air delivered or underwater kinetic threats.

Performance

Effectiveness

Not enough data are yet available to provide a preliminary assessment of the LHA 8 operational effectiveness due to the ship's stage of development. Operational assessment of the LHA 8 design indicated that the well deck adds needed capability to launch and recover surface connectors, but several design features could negatively affect operational effectiveness of the LHA Flight 1 ships. Additional details are summarized in the classified DOT&E LHA 6 Flight 1 Operational Assessment report published in September 2021.

Suitability

Not enough data are yet available to provide a preliminary assessment of the LHA 8 operational suitability due to the ship's stage of development. The LHA 8 operational assessment could not measure reliability, maintainability, or availability of LHA 8. Final assessment of LHA 8 operational suitability will be published after the completion of the LHA 8 FOT&E.

Survivability

The Navy has initiated the vulnerability modeling of the LHA Flight 1 design, but no relevant data are yet available to assess ship survivability either against kinetic or cyber threats.

³³ Government Accountability Office, *Weapon Systems Annual Assessment[:] Challenges to Fielding Capabilities Faster Persist*, GAO-22-105230, June 2022, p. 189

Recommendations

The Navy should:

1. Validate the sufficiency of modified ship-space following operational assessment to support Marine Corps Tier-2 equipment.
2. Conduct land-based operational testing of the LHA 8 combat system to ensure the system is mature enough for at-sea operational test of the platform, and test EASR's electronic protection capability.
3. Continue to fund the maintenance availability for the current Self-Defense Test Ship (e.g., Paul F. Foster) to ensure its readiness to support LHA 8 combat system testing.
4. Continue to fund the procurement and installation of the necessary LHA 8 combat system elements on Self-Defense Test Ship.
5. Develop FOT&E test plans informed by the LHA 8 operational assessment.
6. Evaluate all recommendations in the DOT&E Operational Assessment report published in September 2021.
7. Develop an adequate LFT&E strategy to assess ship survivability of the LHA 6 Flight 1 ships, including the survivability of the ship to lethal, underwater threat-induced shock effects.³⁴

The June 2022 GAO report stated the following about the LHA program:

Current Status

LHA 8 construction progress is 37 percent complete as of September 2021 and the ship is expected to be delivered in February 2025—about a year later than originally planned—per program officials. They said one of the main reasons for the delay was due to a 14- to 18-month delay in receiving the ship's main reduction gears after manufacturing defects required correction. They added that the shipbuilder continues to prioritize completing ships with earlier delivery dates, leaving LHA 8 construction understaffed. Program officials said they can do little to address the issue beyond delaying LHA 8's delivery by about a year. According to the program, changes to the ship to accommodate integration of the Enterprise Air Surveillance Radar (EASR)—a new radar system based on the preexisting Air and Missile Defense Radar assessed separately in this report—is another contributor to LHA 8's schedule delay. Officials told us they expect LHA 8's final price to exceed the original target cost by \$68 million due to the delays. Costs above the target cost but below the contract's price ceiling will be shared by the shipbuilder and the Navy.

The planned timing of LHA 9's detailed design and construction contract was accelerated from fiscal year 2024 to late fiscal year 2021 after Congress provided fiscal year 2019 advanced procurement funding. However, program officials said the contract was not awarded in late fiscal year 2021 as planned. They do not expect to delay construction start, currently planned for fiscal year 2023.

Program Office Comments

We provided a draft of this assessment to the program office for review and comment. The program office provided technical comments, which we incorporated where appropriate. The program office stated that, as of mid-December 2021, LHA 8 is roughly 42 percent complete. The program office added that the shipbuilder and the Navy continue to identify and manage risks where appropriate and that LHA 8 is on track for delivery in 2025.³⁵

³⁴ Department of Defense, Director, Operational Test & Evaluation, *FY2021 Annual Report*, January 2022, p. 158.

³⁵ Government Accountability Office, *Weapon Systems Annual Assessment[:] Challenges to Fielding Capabilities Faster Persist*, GAO-22-105230, June 2022, p. 188

Legislative Activity for FY2023

Summary of Congressional Action on FY2023 Funding Request

The Navy's proposed FY2023 budget requests the procurement of LPD-32, which would be the third LPD-17 Flight II class ship. The Navy estimates the ship's procurement cost at \$1,924.0 million (i.e., about \$1.9 billion). The ship has received \$251.0 million in prior-year advance procurement (AP) funding. The Navy's proposed FY2023 budget requests the remaining \$1,673.0 million needed to complete the ship's estimated procurement cost.

The Marine Corps' FY2023 unfunded priorities list (UPL), however, includes, as its top unfunded item, \$250.0 million in AP funding for a fourth LPD-17 Flight II class ship (LPD-33) to be procured in a future fiscal year.

The Navy's proposed FY2023 budget also requests continued procurement funding for LHA-9, an LHA-type amphibious assault ship. The Navy estimates the ship's procurement cost at \$3,539.2 million (i.e., about \$3.5 billion). The ship has received \$350.0 million in prior-year advance procurement (AP) funding and \$568.6 million in prior-year procurement funding. The Navy's proposed FY2023 budget requests a further \$1,085.5 million in procurement funding for the ship. Under the Navy's FY2023 budget submission, the final \$1,535.1 million needed to complete the ship's estimated procurement cost is to be requested for FY2024.

Table 1 summarizes congressional action on the Navy's FY2023 procurement and advance procurement (AP) funding request for the LPD-17 Flight II and LHA-9 programs.

Table 1. Summary of Congressional Action on FY2023 Procurement Funding Request

Millions of dollars, rounded to nearest tenth

	Request	Authorization			Appropriation		
		HASC	SASC	Enacted	HAC	SAC	Enacted
LPD-32 procurement funding	1,673.0	1,673.0	1,673.0		1,673.0		
LPD-33 advance procurement (AP) funding	0	250.0	250.0		0		
LHA procurement funding	1,085.5	1,374.5*	1,085.5		1,085.5		
LHA advance procurement (AP) funding for LHA-10	0	*	0		0		

Source: Table prepared by CRS based on Navy's FY2023 budget submission, committee and conference reports, and explanatory statements on FY2023 National Defense Authorization Act and FY2023 DOD Appropriations Act.

Notes: **HASC** is House Armed Services Committee; **SASC** is Senate Armed Services Committee; **HAC** is House Appropriations Committee; **SAC** is Senate Appropriations Committee. *The HASC-recommended increase of \$289.0 million above the amount requested for LHA procurement funding is for "LHA 10 advance procurement."

FY2023 National Defense Authorization Act (H.R. 7900/S. 4543)

House

The House Armed Services Committee, in its report (H.Rept. 117-397 of July 1, 2022) on H.R. 7900, recommended the funding levels shown in the HASC column of **Table 1**. The

recommended increase of \$289.0 million for LHA procurement funding is for “LHA 10 advance procurement.” (Page 432)

Section 1021 of H.R. 7900 as reported by the committee states

SEC. 1021. NAVY CONSULTATION WITH MARINE CORPS ON MAJOR DECISIONS DIRECTLY CONCERNING MARINE CORPS AMPHIBIOUS FORCE STRUCTURE AND CAPABILITY.

(a) IN GENERAL.—Section 8026 of title 10, United States Code, is amended by inserting “or amphibious force structure and capability” after “Marine Corps aviation”.

(b) CLERICAL AMENDMENTS.—

(1) SECTION HEADING.—The heading of such section is amended by inserting “or amphibious force structure and capability”.

(2) TABLE OF SECTIONS.—The table of sections at the beginning of chapter 803 of such title is amended by striking the item relating to section 8026 and inserting the following new item:

“8026. Consultation with Commandant of the Marine Corps on major decisions directly concerning Marine Corps aviation or amphibious force structure and capability.”.

Section 1022 of H.R. 7900 as reported by the committee states

SEC. 1022. NUMBER OF NAVY OPERATIONAL AMPHIBIOUS SHIPS.

Section 8062 of title 10, United States Code, is amended by adding at the end the following new subsection:

“(g) The naval combat forces of the Navy shall include not less than 31 operational amphibious ships, comprised of LSD-41 class ships, LSD-49 class ships, LPD-17 class ships, LPD-17 Flight II class ships, LHD-1 class ships, LHA-6 Flight 0 class ships, and LHA-6 Flight I class ships. For purposes of this subsection, an operational amphibious ship includes an amphibious ship that is temporarily unavailable for worldwide deployment due to routine or scheduled maintenance or repair.”.

Section 1023 of H.R. 7900 as reported by the committee states

SEC. 1023. AVAILABILITY OF FUNDS FOR RETIREMENT OR INACTIVATION OF LANDING DOCK SHIPS.

None of the funds authorized to be appropriated by this Act or otherwise made available for fiscal year 2023 for the Department of Defense may be obligated or expended to retire, prepare to retire, inactivate, or place in storage any of the following ships:

- (1) USS Germantown (LSD-42).
- (2) USS Gunston Hall (LSD-44).
- (3) USS Tortuga (LSD-46).
- (4) USS Ashland (LSD-48).

H.Rept. 117-397 states

Assessment of the Navy’s amphibious warfare fleet

The Navy and Marine Corps have identified amphibious capabilities as an area of emphasis in future conflicts and are reviewing the requirements and acquisition of the fleet of assets dedicated to this mission. The committee is concerned about the potential impacts this has for the acquisition of amphibious ships that are best suited for prosecuting a future amphibious invasion. Further, the committee is also concerned about the broader

implications of the importance of amphibious warfare capabilities, the probability of such a conflict, and the cost of building and maintaining a fleet that can prosecute such a conflict. The committee is interested to learn more about the analysis, decision-making processes, and the frequency with which the Navy and Marine Corps review requirements for amphibious warfare and align these requirements with acquisition programs. Specifically, the committee seeks to understand how the potential changes to requirements would impact the acquisition plans identified in the most recent 30-year shipbuilding plan.

Therefore, the committee directs the Comptroller General of the United States to review the Navy's plans for the future amphibious warfare fleet. At a minimum, the review shall address the following elements:

- (1) analysis of the current amphibious warfare fleet;
- (2) Navy and Marine Corps future plans for the fleet and how it will be positioned to evolve as technology changes;
- (3) an assessment of the costs of building and maintaining a fleet whose primary mission is amphibious conflict, such as the light amphibious warship, large deck amphibious ships, and LPD-class ships; and
- (4) other items the Comptroller General determines appropriate.

The committee further directs the Comptroller General to provide a briefing to the House Committee on Armed Services not later than March 1, 2023, on the Comptroller General's preliminary findings and to present final results in a format and timeframe agreed to at the time of the briefing. (Page 15)

Senate

The Senate Armed Services Committee, in its report (S.Rept. 117-130 of July 18, 2022) on S. 4543, recommended the funding levels shown in the SASC column of **Table 1**.

Section 1022 of S. 4543 as reported by the committee states:

SEC. 1022. AMPHIBIOUS WARSHIP FORCE STRUCTURE.

Section 8062 of title 10, United States Code, is amended—

(1) in subsection (b)—

(A) in the first sentence, by inserting “and not less than 31 operational amphibious warfare ships, of which not less than 10 shall be amphibious assault ships” before the period; and

(B) in the second sentence—

(i) by inserting “or amphibious warfare ship” before “includes”; and

(ii) by inserting “or amphibious warfare ship” before “that is temporarily unavailable”;

(2) in subsection (e)—

(A) in paragraph (2) by striking “; and” and inserting a semicolon;

(B) in paragraph (3) by striking the period at the end and inserting “; and”; and

(C) by adding at the end the following new paragraph:

“(4) the Navy adjusts scheduled maintenance and repair actions to maintain a minimum of 24 amphibious warfare ships operationally available for worldwide deployment.”; and

(3) by adding at the end the following new subsection:

“(g) In this section, the term ‘amphibious warfare ship’ means a ship that is classified as an amphibious assault ship (general purpose) (LHA), an amphibious assault ship (multi-purpose) (LHD), an amphibious transport dock (LPD), or a dock landing ship (LSD).”.

Regarding Section 1022, S.Rept. 117-130 states:

Amphibious warship force structure (sec. 1022)

The committee recommends a provision that would amend section 8062 of title 10, United States Code, to require that the naval combat force should include not less than 31 operational amphibious warfare ships, of which not less than 10 should be amphibious assault ships, and make other related changes. (Page 222)

Section 1025 of S. 4543 as reported by the committee states:

SEC. 1025. PROHIBITION ON RETIREMENT OF CERTAIN NAVAL VESSELS.

None of the funds authorized to be appropriated by this Act for fiscal year 2023 may be obligated or expended to retire, prepare to retire, or place in storage any of the following naval vessels:

- (1) USS Vicksburg (CG 69).
- (2) USS Sioux City (LCS 11).
- (3) USS Wichita (LCS 13).
- (4) USS Billings (LCS 15).
- (5) USS Indianapolis (LCS 17).
- (6) USS St. Louis (LCS 19).
- (7) USS Germantown (LSD 42).
- (8) USS Gunston Hall (LSD 44).
- (9) USS Tortuga (LSD 46).
- (10) USS Ashland (LSD 48).
- (11) USNS Montford Point (T-ESD 1).
- (12) USNS John Glenn (T-ESD 2).

Regarding Section 1025, S.Rept. 117-130 states:

Prohibition on retirement of certain naval vessels (sec. 1025)

The committee recommends a provision that would prohibit the retirement of certain naval vessels in fiscal year 2023.

The committee notes the budget request proposed to decommission 24 battle force ships in fiscal year 2023, which represents 8 percent of the Navy’s 298 ship battle force. Of these 24 ships, 8 ships are at or beyond their expected service life (ESL) and 16 ships would be retired prior to ESL. The average service life remaining in the early retirements is 16 years.

The committee is concerned that retiring battle force ships prior to ESL would result in unacceptable risk to meeting fleet commanders’ near- and mid-term requirements. Furthermore, the committee believes replacing these vessels would not occur quickly or affordably with the average replacement unit cost for these 16 vessels exceeding \$1.0 billion.

The budget request proposed retiring five Ticonderoga-class cruisers over the next 5 years, including one cruiser in fiscal year 2023, which will complete extended modernization periods in fiscal year 2023 or 2024. The committee finds this unacceptable. The committee

understands each of these ships has received in excess of \$500.0 million to complete the current modernization period, with a total of \$3.0 billion obligated on these ships through September 30, 2021. Work completed on these modernizations ranges from 57 percent to 93 percent. The Navy estimates that \$407.0 million in total additional funding is required to complete the modernization of these ships and return all five to the fleet. The committee also notes previous Navy officials have testified that this extended modernization program would result in some of the most capable surface combatants in the Navy, with an extended 40-year service life.

Accordingly, consistent with several years of Navy plans and budget requests, as well as congressional authorizations and appropriations, the committee believes the Navy should complete the extended modernization program on each of these five cruisers, return the ships to service and achieve a 40-year service life. Moreover, it is unclear to the committee how the Navy's more ambitious near-term modernization plans for destroyers, including back fitting a SPY-6 radar and installing a larger electronic warfare system, could succeed if the Navy cannot manage the cruiser phased modernization program.

Overall, the committee recommends retaining 12 of the 16 ships proposed for divestment prior to ESL to better support the National Defense Strategy, enable additional capability development and experimentation, and be better positioned to realize the policy of the United States to achieve a 355-ship Navy as soon as practicable.

The committee urges the Secretary of the Navy to pursue Excess Defense Article transfers to allies and partners, as well as other actions he may deem appropriate, to continue use of any appropriate vessels retired prior to or after ESL. (Pages 222-223)

S.Rept. 117-130 also states:

LHA-9 quantity adjustment

The budget request included \$1.1 billion in line number 20 of Shipbuilding and Conversion, Navy (SCN) for LHA Replacement. The budget documentation also includes a quantity of one for LHA-9.

This is in direct violation of section 126 of the William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021 (Public Law 116-283), which stated that the quantity shown for Navy vessels would be shown in the year that the Congress authorizes and appropriates funding to buy a vessel. The Congress authorized construction and appropriated funds for construction of LHA-9 in fiscal year 2020.

Therefore, the funding tables have been adjusted to reflect that the Navy budget documentation incorrectly included a "one" in the quantity column. (Page 14)

Regarding certain funding lines (e.g., line 1B1B) in the Operations and Maintenance, Navy (OMN) appropriation account, S.Rept. 117-130 states:

Continued ship operations

The budget request included a Navy proposal to decommission 24 battle force ships in fiscal year 2023, which represents 8 percent of the Navy's 298 ship battle force. Of these 24 ships, only eight ships are at or beyond their expected service life (ESL), and 16 ships would be retired prior to ESL.

Consistent with provisions elsewhere in this Act that would establish a floor of not fewer than 31 operational amphibious warfare ships and would prevent early retirement of other retiring battle force ships prior to ESL, the committee recommends increases in Operation and Maintenance, Navy (OMN) to restore funding for 12 ships:

- (1) OMN (1B1B)—\$153.0 million;
- (2) OMN (1B4B)—\$115.8 million; and

(3) OMN (1B5B)—\$446.4 million. (Pages 102-103)

FY2023 DOD Appropriations Act (H.R. 8236)

House

The House Appropriations Committee, in its report (H.Rept. 117-397 of July 1, 2022) on H.R. 8236, recommended the funding levels shown in the HAC column of **Table 1**.

Appendix. Procurement Dates of LPD-31 and LHA-9

This appendix presents background information regarding the procurement dates of LPD-31 and LHA-9. In reviewing the bullet points presented below, it can be noted that procurement funding is funding for a ship that is either being procured in that fiscal year or has been procured in a prior fiscal year, while advance procurement (AP) funding is funding for a ship that is to be procured in a future fiscal year.³⁶

An institutional issue for Congress in FY2021 concerned the treatment in the Navy's proposed FY2021 budget of the procurement dates of LPD-31 and LHA-9. The Navy's FY2021 budget submission presented LPD-31 as a ship requested for procurement in FY2021 and LHA-9 as a ship projected for procurement in FY2023. Consistent with congressional action on the Navy's FY2020 and FY2021 budgets regarding the procurement of LPD-31 and LHA-9, this CRS report treats LPD-31 and LHA-9 as ships that Congress procured (i.e., authorized and provided procurement funding for) in FY2020 and FY2021, respectively. Potential oversight issues for Congress included the following:

- By presenting LPD-31 as a ship requested for procurement in FY2021 (instead of a ship that was procured in FY2020) and LHA-9 as a ship projected for procurement in FY2023 (instead of a ship that was procured in FY2021), was DOD, in its FY2021 budget submission, disregarding or mischaracterizing the actions of Congress regarding the procurement dates of these three ships? If so:
 - Was DOD doing this to inflate the apparent number of ships requested for procurement in FY2021 and the apparent number of ships included in the five-year (FY2021-FY2025) shipbuilding plan?
 - Could this establish a precedent for DOD or other parts of the executive branch in the future to disregard or mischaracterize the actions of Congress regarding the procurement or program-initiation dates for other Navy ships, other Navy programs, other DOD programs, or other federal programs? If so, what implications might that have for the preservation and use of Congress's power of the purse under Article 1 of the Constitution, and for maintaining Congress as a coequal branch of government relative to the executive branch?

The Navy's FY2023 budget submission, like its FY2022 and FY2021 budget submissions, treats LHA-9 as a ship to be procured in FY2023. Navy officials have described the listing of LHA-9 in the Navy's FY2023 budget submission as a ship being requested for procurement in FY2023 as an oversight.

LPD-31—an LPD-17 Flight II Class Amphibious Ship

The Navy's FY2021 budget submission presented LPD-31, an LPD-17 Flight II class amphibious ship, as a ship requested for procurement in FY2021. This CRS report treats LPD-31 as a ship that Congress procured (i.e., authorized and provided procurement funding for) in FY2020, consistent with the following congressional action on the Navy's FY2020 budget regarding the procurement of LPD-31:

³⁶ For additional discussion, see CRS Report RL31404, *Defense Procurement: Full Funding Policy—Background, Issues, and Options for Congress*, by Ronald O'Rourke and Stephen Daggett.

- The House Armed Services Committee’s report (H.Rept. 116-120 of June 19, 2019) on H.R. 2500, the FY2020 National Defense Authorization Act, recommended authorizing the procurement of an LPD-17 Flight II class ship in FY2020, showing a quantity increase of one ship above the Navy’s request and recommending procurement (not just AP) funding for the program.³⁷
- The Senate Armed Services Committee’s report (S.Rept. 116-48 of June 11, 2019) on S. 1790, the FY2020 National Defense Authorization Act, recommended authorizing the procurement of an LPD-17 Flight II class ship in FY2020, showing a quantity increase of one ship above the Navy’s request and recommending procurement (rather than AP) funding for the program.³⁸
- The conference report (H.Rept. 116-333 of December 9, 2019) on S. 1790/P.L. 116-92 of December 20, 2019, the FY2020 National Defense Authorization Act, authorized the procurement of an LPD-17 Flight II class ship in FY2020, showing a quantity increase of one ship above the Navy’s request and recommending procurement (rather than AP) funding for the program.³⁹ Section 129 of S. 1790/P.L. 116-92 authorizes the Navy to enter into a contract, beginning in FY2020, for the procurement of LPD-31, and to use incremental funding to fund the contract.
- The Senate Appropriations Committee’s report (S.Rept. 116-103 of September 12, 2019) on S. 2474, the FY2020 DOD Appropriations Act, recommended funding for the procurement of an LPD-17 Flight II class ship in FY2020, showing a quantity increase of one ship above the Navy’s request and recommending procurement (rather than AP) funding for the program.⁴⁰
- The final version of the FY2020 DOD Appropriations Act (Division A of H.R. 1158/P.L. 116-93 of December 20, 2019) provided procurement (not AP) funding for an LPD-17 Flight II class ship. The paragraph in this act that appropriated funding for the Navy’s shipbuilding account, including this ship, includes a provision stating “*Provided further*, That an appropriation made under the heading ‘Shipbuilding and Conversion, Navy’ provided for the purpose of ‘Program increase—advance procurement for fiscal year 2020 LPD Flight II and/or multiyear procurement economic order quantity’ shall be considered to be for the purpose of ‘Program increase—advance procurement of LPD–31’.” This provision relates to funding appropriated in the FY2019 DOD Appropriations Act (Division A of H.R. 6157/P.L. 115-245 of September 28, 2018) for the procurement of an LPD-17 Flight II class ship in FY2020, as originally characterized in the explanatory statement accompanying that act.⁴¹

LHA-9 Amphibious Assault Ship

The Navy’s FY2023 budget submission, like its FY2022 and FY2021 budget submissions, presents the amphibious assault ship LHA-9 as a ship projected for procurement in FY2023. This CRS report treats LHA-9 as a ship that Congress procured (i.e., authorized and provided

³⁷ H.Rept. 116-120, p. 379, line 012.

³⁸ S.Rept. 116-48, p. 433, line 12. See also pp. 23-24 for associated report language.

³⁹ H.Rept. 116-333, p. 1566, line 012. See also p. 1144 for associated report language.

⁴⁰ S.Rept. 116-103, p. 118, line 12. See also p. 122 for associated report language.

⁴¹ See PDF page 176 of 559, line 12, of the explanatory statement for H.R. 6157/P.L. 115-245.

procurement funding for) in FY2021, consistent with the following congressional action on the Navy's FY2020 and FY2021 budgets regarding the procurement of LHA-9:

- The Senate Armed Services Committee's report (S.Rept. 116-48 of June 11, 2019) on S. 1790, the FY2020 National Defense Authorization Act, recommended authorizing the procurement of LHA-9 in FY2020, showing a quantity increase of one ship above the Navy's request and recommending procurement (rather than AP) funding for the program.⁴²
- The conference report (H.Rept. 116-333 of December 9, 2019) on S. 1790/P.L. 116-92 of December 20, 2019, the FY2020 National Defense Authorization Act, authorized the procurement of LHA-9 in FY2020, showing a quantity increase of one ship above the Navy's request and recommending procurement (rather than AP) funding for the program.⁴³ Section 127 of S. 1790/P.L. 116-92 authorizes the Navy to enter into a contract for the procurement of LHA-9 and to use incremental funding provided during the period FY2019-FY2025 to fund the contract.
- The Senate Appropriations Committee's report (S.Rept. 116-103 of September 12, 2019) on S. 2474, the FY2020 DOD Appropriations Act, recommended funding for the procurement of an LHA amphibious assault ship in FY2020, showing a quantity increase of one ship above the Navy's request and recommending procurement (rather than AP) funding for the program.⁴⁴
- The final version of the FY2020 DOD Appropriations Act (Division A of H.R. 1158/P.L. 116-93 of December 20, 2019) provided procurement (not AP) funding for an LHA amphibious assault ship. The explanatory statement for Division A of H.R. 1158/P.L. 116-93 stated that the funding was for LHA-9.⁴⁵
- The procurement (not AP) funding provided for LHA-9 in the FY2020 DOD Appropriations Act (see previous bullet point) was subsequently reprogrammed to provide support for counter-drug activities of the Department of Homeland Security (DHS) along the U.S. southern border.⁴⁶ The final version of the FY2021 DOD Appropriations Act (Division C of H.R. 133/P.L. 116-260 of December 27, 2020, the Consolidated Appropriations Act, 2021), however, once again provided procurement (not AP) funding for an LHA amphibious assault ship. The explanatory statement for Division C of H.R. 133/P.L. 116-260 stated that the funding is for "Program increase—LHA 9."⁴⁷ As a result of the FY2021 procurement (not AP) funding for LHA-9, the ship once again has an authorization (provided in the FY2020 National Defense Authorization Act), authority for using incremental funding in procuring it (provided by Section 127 of the FY2020 National Defense Authorization Act), and procurement (not AP) funding (provided in the FY2021 DOD Appropriations Act).

⁴² S.Rept. 116-48, p. 433, line 15.

⁴³ H.Rept. 116-333, p. 1566, line 015.

⁴⁴ S.Rept. 116-103, p. 118, line 15.

⁴⁵ Explanatory statement for Division A of H.R. 1158, PDF page 175 of 414, line 15.

⁴⁶ Reprogramming action (Form DD 1415) FY 20-01 RA, February 13, 2020, page 3 of 5.

⁴⁷ Explanatory statement for Division C of H.R. 133/P.L. 116-260, PDF page 204 of 469, line 17.

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