



**Congressional  
Research Service**

Informing the legislative debate since 1914

---

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

Updated March 31, 2023

**Congressional Research Service**

<https://crsreports.congress.gov>

R43543

## Summary

The Navy is currently building two types 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. Required numbers and types of amphibious ships are reportedly ongoing matters of discussion and debate between the Navy, the Marine Corps, and the Office of the Secretary of Defense (OSD). Projected numbers of amphibious ships, procurement of LPD-17 Flight II class ships, and proposed retirements of older amphibious ships have emerged as prominent items in Congress' review of the Navy's proposed FY2024 budget.

Although the Navy's 355-ship force-level goal, released in December 2016, calls for achieving and maintaining a 355-ship fleet with 38 larger amphibious ships, including 13 LPD-17 Flight II class ships, the Navy's FY2023 budget submission proposed truncating the LPD-17 Flight II program to three ships by making the third LPD-17 Flight II class ship—LPD-32—the final ship in the program. The Navy's proposed FY2023 budget submission requested funding for the procurement of LPD-32 in FY2023, but programmed no additional LPD-17 Flight II class ships or LPD-type ships of a follow-on design through FY2027. Congress, in acting on the Navy's proposed FY2023 budget, funded the procurement of LPD-32 in FY2023 and provided \$250.0 million in advance procurement (AP) funding for the procurement in a future fiscal year of LPD-33, which would be a fourth LPD-17 Flight II class ship.

The Navy's FY2024 budget submission, like its 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 Navy's FY2024 budget submission does not request any funding for the procurement of LPD-33 and programs no additional LPD-17 Flight II class ships or LPD-type ships of a follow-on design through FY2028. The Marine Corps' FY2024 unfunded priorities list (UPL) includes, as its top unfunded priority, \$1,712.5 million in procurement funding for procuring LPD-33 in FY2024.

The most recently procured LHA-type ship is LHA-9. The Navy's FY2024 budget submission estimates its procurement cost at \$3,834.3 million (i.e., about \$3.8 billion). The ship has received a total of \$2,004.1 million in prior year advance procurement (AP) and procurement funding. The Navy's proposed FY2024 budget requests the remaining \$1,830.1 million needed to complete the ship's procurement cost.

Section 129 of the FY2023 National Defense Authorization Act (NDAA) (H.R. 7776/P.L. 117-263 of December 23, 2022) permits the Navy to enter into a block buy contract for procuring up to five LPD-17 and LHA-type amphibious ships

The Navy and OSD have been working since 2019 to develop a new force-level goal to replace the Navy's 355-ship force-level goal, but have not been able to come to closure on a successor goal. Required numbers of amphibious ships are reportedly a major issue in the ongoing discussion. The Marine Corps supports a revised Navy ship force-level goal with 31 larger amphibious ships, including 10 LHA/LHD-type ships and 21 LPD-17s. Section 1023 of the FY2023 NDAA amends 10 U.S.C. 8062 to require the Navy to include not less than 31 operational larger amphibious ships, including 10 LHA/LHD-type ships and 21 LPD- or LSD-type amphibious ships. The Navy's FY2024 budget submission projects that the Navy at the end of FY2024 will include 29 larger amphibious ships, including 9 LHA/LHD-type ships and 20 LPDs and LSDs. Marine Corps officials have stated that a force with fewer than 31 larger amphibious ships would increase operational risks in meeting demands from U.S. regional combatant commanders for forward-deployed amphibious ships and for responding to contingencies.

# Contents

Introduction .....	1
Background .....	1
U.S. Navy Amphibious Ships.....	1
Roles and Missions .....	1
Current Types of Amphibious Ships .....	2
Amphibious Ship Force-Level Goal Under 355-Ship Plan of 2016 .....	2
Amphibious Ship Force at End of FY2022 and Projected for End of FY2024 .....	2
Emerging New Amphibious Ship Force-Level Goal .....	2
FY2023 NDAA Provisions Regarding Amphibious Ship Force-Level Goal.....	4
Existing LSD-41/49 Class Ships.....	5
Amphibious Warship Industrial Base.....	5
LPD-17 Flight II Program .....	6
Program Origin and Name .....	6
Design .....	6
Procurement Cost.....	7
Procurement Quantity and FY2024 Funding Request .....	7
LHA-9 Amphibious Assault Ship.....	8
Overview and FY2024 Funding Request.....	8
LHA-9 Procurement Date .....	8
FY2021 and FY2022 Legislation.....	9
FY2021 NDAA and FY2022 NDAA Authority for LPD-LHA Block Buy Contract.....	9
FY2023 NDAA Authority for LPD-LHA Block Buy Contract .....	10
Ship Procurement Dates.....	10
Issues for Congress.....	10
Future Amphibious Ship Force-Level Goal .....	10
Proposed Truncation of LPD-17 Flight II Procurement.....	12
FY2024 Procurement Funding for LPD-33 .....	12
Use of Block Buy Contract Authority .....	13
FY2024 Advance Procurement Funding for LHA-10.....	14
Technical and Cost Risk in LPD-17 Flight II and LHA Programs.....	14
LPD-17 Flight II Program.....	14
LHA Program.....	15
Legislative Activity for FY2024.....	16
Summary of Congressional Action on FY2024 Funding Request .....	16

# Figures

Figure 1. LSD-41/49 Class Ship.....	5
Figure 2. LPD-17 Flight II Design .....	7
Figure 3. LHA-8 Amphibious Assault Ship.....	8
Figure 4. LHA-7 Amphibious Assault Ship.....	9

## **Tables**

Table 1. Summary of Congressional Action on FY2024 Procurement Funding Request ..... 17

## **Appendixes**

Appendix. Procurement Dates of LPD-31 and LHA-9 ..... 18

## **Contacts**

Author Information..... 21

## Introduction

This report provides background information and issues for Congress on two types of amphibious ships being built 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 Medium Landing Ship (LSM) program, previously known as the Light Amphibious Warship (LAW) program.<sup>1</sup>

## 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,<sup>2</sup> amphibious ships are potentially useful for a range of combat and noncombat operations.<sup>3</sup>

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,

---

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

<sup>2</sup> 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.)

<sup>3</sup> 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.

particularly for conducting peacetime engagement activities with foreign countries or for responding to smaller-scale or noncombat contingencies.

## **Current Types of Amphibious Ships**

The Navy's current amphibious ship force consists entirely of larger 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.<sup>4</sup> As mentioned earlier, a separate CRS report discusses the Navy's Medium Landing Ship (LSM) program, previously known as the 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.<sup>5</sup>

## **Amphibious Ship Force-Level Goal Under 355-Ship 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 larger 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).<sup>6</sup> This 38-ship force-level goal predates the LSM program and consequently includes no LSMs.

## **Amphibious Ship Force at End of FY2022 and Projected for End of FY2024**

The Navy's force of amphibious ships at the end of FY2022 included 31 larger ships, including 9 amphibious assault ships (2 LHAs and 7 LHDs), 12 LPD-17 Flight I class ships, and 10 older LSD-41/49 class ships. The Navy's FY2024 budget submission projects that the Navy at the end of FY2024 will include 29 larger amphibious ships, including 9 LHA/LHD-type ships, 13 LPD Flight I class ships, and 7 LSD-41/49 class ships.

## **Emerging New Amphibious Ship Force-Level Goal**

The Navy and OSD have been working since 2019 to develop a new force-level goal to replace the Navy's 355-ship force-level goal, but have not been able to come to closure on a successor goal. Required numbers of amphibious ships are reportedly a major issue in the ongoing discussion. 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 LSMs.<sup>7</sup>

---

<sup>4</sup> 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.

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

<sup>6</sup> 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.

<sup>7</sup> For additional discussion, see CRS Report RL32665, *Navy Force Structure and Shipbuilding Plans: Background and*

Marine Corps officials state that, from their perspective, a minimum of 66 larger and smaller amphibious ships will be required in coming years, including a minimum of 31 larger amphibious ships (10 LHAs/LHDs and 21 LPD-17s) plus 35 LSMs (aka “31+35”).<sup>8</sup> Marine Corps officials have stated that a force with fewer than 31 larger amphibious ships would increase operational risks in meeting demands from U.S. regional combatant commanders for forward-deployed amphibious ships and for responding to contingencies.<sup>9</sup>

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.<sup>10</sup>

In January 2022, Navy officials reportedly anticipated that the above-mentioned study would be completed by the end of March 2022.<sup>11</sup> At the end of March 2022, the study reportedly was expected to be completed shortly.<sup>12</sup> At the beginning of April 2022, the study reportedly was in its final stages.<sup>13</sup>

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.”<sup>14</sup>

A January 20, 2023, press report states:

---

*Issues for Congress*, by Ronald O’Rourke.

<sup>8</sup> See, for example, Todd South, “Back to Ship: Marines Need Ships to Fight. Will They Get Them?” *Military Times*, 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.

<sup>9</sup> See, for example, Caitlin M. Kenney, “‘We Didn’t Have the Ships’ to Send ‘Best Option’ to Help Earthquake Victims, Commandant Says,” *Defense One*, February 15, 2023; Caitlin M. Kenney, “Marines Issue Warning on Amphib Fleet, The Assistant Commandant Says 31 Large Amphibious Warfare Ships Are Needed to Avoid Risk,” *Defense One*, February 14, 2023.

<sup>10</sup> 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.

<sup>11</sup> See Megan Eckstein, “Amphib Ship Requirements Study Could Spell Bad News for Marines, Industry,” *Defense News*, January 18, 2022.

<sup>12</sup> Megan Eckstein, “US Navy Seeks to End San Antonio-Class Ship Production, Reducing Fleet by 8 Amphibious Hulls,” *Defense News*, March 28, 2022.

<sup>13</sup> 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.

<sup>14</sup> 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.

The long-awaited Navy study to determine the future makeup of the U.S. amphibious warship fleet has finally made it to Congress, but don't hold your breath for the results: they're classified.

The Navy sent the Amphibious Force Requirements Study to the Congressional defense committees on Dec. 28. Lt. Gabrielle Dimaapi, a spokeswoman for the Navy secretary, said in an email statement Friday to *Defense One*.

The study was "closely coordinated with the Office of the Secretary of Defense Cost Analysis and Program Evaluation and Office of Management and Budget prior to providing it to Congress," Dimaapi said. It "assessed the risk associated with the size and composition of the future amphibious warship fleet. It focused on both traditional and planned amphibious warships and platforms."

Though the service "is not planning to release an unclassified summary of the report," the results "will be incorporated into an ongoing battle force ship assessment that will be published later this year," she said.

But it's unclear how much of the amphibious ship study results will be revealed in the battle force ship assessment. Last year's assessment was also classified, and only the top-level number of 373 ships was released, *U.S. Naval Institute News* reported.

Navy Secretary Carlos Del Toro has been promising for months that the amphibious ship study would be ready in a matter of weeks, even testifying to that during a May Senate Armed Services Committee hearing. When no study materialized, Sens. Tim Kaine, D-Va., and Roger Wicker, R-Miss., sent a letter in November to Del Toro asking for the study. In early December, the secretary told reporters the document was almost ready, but was still "being briefed to senior leadership."<sup>15</sup>

## **FY2023 NDAA Provisions Regarding Amphibious Ship Force-Level Goal**

The FY2023 National Defense Authorization Act (NDAA) (H.R. 7776/P.L. 117-263 of December 23, 2022) included the following provisions relating to the amphibious ship force-level goal:

- Section 1022 amended 10 U.S.C. 8026 to require the Secretary of the Navy to ensure that the views of the Commandant of the Marine Corps are given appropriate consideration before a major decision is made by an element of the Department of the Navy outside the Marine Corps on a matter that directly concerns amphibious force structure and capability.
- Section 1023, as noted earlier, amends 10 U.S.C. 8062 to require the Navy to include not less than 31 operational larger amphibious ships, including 10 LHA/LHD-type ships and 21 LPD or LSD type ships.
- Section 1025 amends 10 U.S.C. 8695 to state that, in preparing a periodic battle force ship assessment and requirement, the Commandant of the Marine Corps shall be specifically responsible for developing the requirements relating to amphibious warfare ships.

---

<sup>15</sup> Caitlin M. Kenney, "Navy Won't Publicly Release Results of Amphibious Ship Study, The Study, Which Had Been Delayed for Months, Has Been Sent to Lawmakers," *Defense One*, January 20, 2023.



## 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.<sup>16</sup> The LSD-41/49 class included 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. Two of the ships were retired in 2021 and 2022. The Navy's proposed FY2024 budget proposes retiring three more in FY2024 at ages of 34, 35, and 38 years, which would leave seven in service at the end of FY2024.

**Figure 1. 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.<sup>17</sup> 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.<sup>18</sup>

---

<sup>16</sup> 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.

<sup>17</sup> 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.

<sup>18</sup> Source: HII statement as quoted in Frank Wolfe, "Navy Budget Plan Delays Buy of Amphibious Ships," *Defense Daily*, March 15, 2019.

## 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.<sup>19</sup> 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.

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.<sup>20</sup> 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.<sup>21</sup> 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 class 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.

<sup>19</sup> 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.

<sup>20</sup> 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.

<sup>21</sup> 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.

### Procurement Quantity and FY2024 Funding Request

Although the Navy's 355-ship force-level goal, released in December 2016, calls for achieving and maintaining a 355-ship fleet with 38 larger amphibious ships, including 13 LPD-17 Flight II class ships, the Navy's FY2023 budget submission proposed truncating the LPD-17 Flight II program to three ships by making the third LPD-17 Flight II class ship—LPD-32—the final ship in the program. The Navy's proposed FY2023 budget submission requested funding for the procurement of LPD-32 in FY2023, but programmed no additional LPD-17 Flight II class ships or LPD-type ships of a follow-on design through FY2027. Congress, in acting on the Navy's proposed FY2023 budget, funded the procurement of LPD-32 in FY2023 and provided \$250.0 million in advance procurement (AP) funding for the procurement in a future fiscal year of LPD-33, which would be a fourth LPD-17 Flight II class ship.

The Navy's FY2024 budget submission, like its 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 Navy's FY2024 budget submission does not request any funding for the procurement of LPD-33 and programs no additional LPD-17 Flight II class ships or LPD-type ships of a follow-on design through FY2028. The Marine Corps' FY2024 unfunded priorities list (UPL) includes, as its top unfunded priority, \$1,712.5 million in procurement funding for procuring LPD-33 in FY2024.

## LHA-9 Amphibious Assault Ship

### Overview and FY2024 Funding Request

LHA-type amphibious assault ships (**Figure 3** and **Figure 4**) are procured once every few years. LHA-8 was procured in FY2017. The most recently procured LHA-type ship is LHA-9. The Navy's FY2024 budget submission estimates its procurement cost at \$3,834.3 million (i.e., about \$3.8 billion). The ship has received a total of \$2,004.1 million in prior year advance procurement (AP) and procurement funding. The Navy's proposed FY2024 budget requests the remaining \$1,830.1 million needed to complete the ship's procurement cost.

**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.

### LHA-9 Procurement Date

The Navy's FY2024 budget submission, similar to its FY2023, FY2022, and FY2021 budget submissions, presents LHA-9 as a ship procured or projected for procurement in FY2023.<sup>22</sup> 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 described the

<sup>22</sup> 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].*)

listing of LHA-9 in the Navy’s FY2023 budget submission as a ship being requested for procurement in FY2023 as an oversight.<sup>23</sup> (For additional discussion, see the **Appendix**.)

### **Figure 4. LHA-7 Amphibious Assault Ship**

Shown with 20 F-35B Joint Strike Fighters (JSFs) on Flight Deck



**Source:** Photograph accompanying Stavros Atlamazoglou, “The US’s Experimental ‘Lightning Carriers’ Are ‘Much More Capable’ than China’s Current Carriers, US Admiral Says,” *Business Insider*, December 6, 2022. The article credits the photograph to U.S. Marine Corps/Sgt. Samuel Ruiz.

## **FY2021 and FY2022 Legislation**

### **FY2021 NDAA and FY2022 NDAA Authority for LPD-LHA Block Buy Contract**

Section 124 of the FY2021 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, 2021), 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.<sup>24</sup>

<sup>23</sup> Source: Navy briefing on Navy’s proposed FY2023 budget for Congressional Budget Office and CRS, March 30, 2023.

<sup>24</sup> 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.

## **FY2023 NDAA Authority for LPD-LHA Block Buy Contract**

Section 129 of the FY2023 NDAA (H.R. 7776/P.L. 117-263 of December 23, 2022) permits the Navy to enter into a block buy contract for procuring up to five LPD-17 and LHA-type amphibious ships.

### **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 government relative to the executive branch. Section 126 of the FY2021 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)

## **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 LSMs.
- 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 LPD-17s) plus 35 LSMs (aka “31+35”).

Required numbers and types of amphibious ships are reportedly ongoing matters of discussion and debate between the Navy, the Marine Corps, and the Office of the Secretary of Defense (OSD).<sup>25</sup> Projected numbers of amphibious ships, procurement of LPD-17 Flight II class ships, and proposed retirements of older amphibious ships have emerged as prominent items in Congress’ review of the Navy’s proposed FY2024 budget.<sup>26</sup> Potential oversight questions for Congress include the following:

- Does the Navy’s FY2024 budget submission support achieving and maintaining the force of 31 larger amphibious ships required under 10 U.S.C. 8062? If not why not, and what, if anything, should Congress do in response? What changes to the Navy’s FY2024 budget submission would be needed to better align Navy plans with the amphibious ship force-level required by 10 U.S.C. 8062? What would be the cost of making these changes, and in a situation of finite defense funding, what impact might these changes have on funding for other Navy or DOD priorities?

<sup>25</sup> Laura Heckmann, “Navy, Marine Corps at Odds Over Fleet Requirements,” *National Defense*, March 29, 2020; Brent D. Sadler, “This Ugly Dispute Over Amphibious Warships Didn’t Have to Happen,” *Defense One*, March 23, 2023; Paul McLeary, “Marines Furious over the Navy’s Plan for Troop-Carrying Ships,” *Politico Pro*, March 17, 2023; Caitlin M. Kenney, “Is the LPD-17 Flight II Amphib Worth It? Depends Who You Ask,” *Defense One*, March 16, 2023; Rich Abott, “Pause in Procurement of LPDs is Mostly Due To Price, CNO Says,” *Defense Daily*, March 15, 2023; Megan Eckstein, “Naval Chief Says Rising Cost Spurred Amphib Production Pause,” *Defense News*, March 15, 2023; Justin Katz, “Both Citing Cost, Leaders of Navy, Marines Dig In on Amphib Ship Fight,” *Breaking Defense*, March 15, 2023; Mallory Shelbourne, “Navy and Marine Corps Debate Amphibious Ship Costs as Clash Over LPD-17 Flight II Line Continues,” *USNI News*, March 15 (updated March 16), 2023; Nick Wilson, “Berger: LSD Decommissioning Would Violate Amphib Requirement; Unfunded Priorities Coming Soon,” *Inside Defense*, March 15, 2023; Nick Wilson, “CNO: LPD Pause Is Cost-Driven, Budget Growth Will Not Last,” *Inside Defense*, March 15, 2023; Justin Katz, “‘Unacceptable’: Marines Are Ready to Fight Tonight—About the Amphib Budget,” *Breaking Defense*, March 13, 2023; Caitlin M. Kenney, “Navy On Path To Violate 31-Amphibious-Ship Requirement in 2024,” *Defense One*, March 13, 2023; Mallory Shelbourne, “Navy: OSD Directed Amphib Procurement Pause, Joint Staff Says Current Amphib Force ‘Sufficient,’” *USNI News*, March 13 (updated March 20), 2023; Megan Eckstein, “Commandant pushes amphibious warship funding as next budget emerges,” *Defense News*, March 9, 2023; Mallory Shelbourne, “FY2024 Budget: Navy Won’t Buy Any More San Antonio Amphibs in the Next Five Years,” *USNI News*, March 9 (updated March 15), 2023; Megan Eckstein, “US Navy Reviews Cost-Saving Design Changes Before Resuming Amphib Buys,” *Defense News*, February 28, 2023; Rich Abott, “Rivers: Navy Not Talking About ‘Walking Away’ From LPD Flight II,” *Defense Daily*, February 27, 2023; Megan Eckstein, “White House Steps in as Navy, Pentagon Feud over Amphibious Ship Study,” *Defense News*, December 8, 2022; Justin Katz, “Del Toro: Navy-Marine Corps Amphib Study in ‘Final Stages’, Being Briefed to Leadership,” *Breaking Defense*, December 6, 2022; Lee Hudson, “Senators Press Del Toro for Update on Amphib Study,” *Politico Pro*, November 14, 2022; Megan Eckstein, “US Marines Warn Against Navy’s FY24 Decommission Plans,” *Defense News*, October 4, 2022.

<sup>26</sup> See, for example, Megan Eckstein, “Lawmakers Secry US Navy’s Plan to Decommission Aging Amphibious Ships,” *Defense News*, March 30, 2023; Sam LaGrone, “CMC Berger to Senate: ‘There’s No Plan’ to Meet Amphib Warship Requirements,” *USNI News*, March 28, 2023.

- What are the comparative potential costs and operational risks associated with an amphibious force that includes
  - 6 LHAs/LHDs and 30 LPDs and LSMs?
  - 10 LHAs/LHDs and 54 LPDs and LSMs?
  - 10 LHAs/LHDs, 21 LPDs, and 35 LSMs?<sup>27</sup>
- To what extent, if any, do the Navy and Marine Corps disagree regarding future required levels of LHA- and LPD-type amphibious ships?<sup>28</sup>

## Proposed Truncation of LPD-17 Flight II Procurement

A related 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 class ships (13 LPD-17 Flight I ships procured in earlier years, and 3 LPD-17 Flight II class ships).

Potential oversight questions for Congress include the following:

- If the Navy, marine Corps, and OSD have not come to agreement on requirements for amphibious ships how can the Navy know that the combined requirement LPD-17s will be no more than 13 Flight I ships and 3 Flight II 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?
- 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 class ships?

## FY2024 Procurement Funding for LPD-33

Another related issue for Congress is whether to provide FY2024 procurement funding for LPD-33, and if so, how much. As noted earlier, the Navy's proposed FY2024 budget requests no procurement funding for LPD-33, and the Marine Corps' FY2024 unfunded priorities list (UPL) includes, as its top unfunded priority, \$1,712.5 million in procurement funding for procuring LPD-33 in FY2024.

---

<sup>27</sup> 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.

<sup>28</sup> 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.



## 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 by Congress in Section 129 of the FY2023 NDAA, and if not, then what, if anything, Congress should do in response. The Navy previously did not use the LPD-LHA block buy contracting authority provided in the FY2021 and FY2022 NDAs.

A March 9, 2023, press report stated that Marine Corps Commandant General David Berger

today doubled down on the need for 31 traditional amphibious warships and endorsed block buys and other contracting strategies to signal consistent demand to industry....

“We have bought these one at a time. That's not the way you do it,” Berger said at a Thursday [March 9] forum hosted by the Amphibious Warship Industrial Base Coalition. “We do block buys for other platforms—destroyers, submarines aircraft carriers—for all the right reasons. We need to do it also for amphibious ships.”<sup>29</sup>

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 in the FY2021 and FY2022 NDAs would reduce the combined cost of the four ships by \$722 million.<sup>30</sup> 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%.<sup>31</sup> At a June 8, 2021, hearing before the Seapower subcommittee of the Senate Armed Services Committee on Navy and 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 department<sup>32</sup> 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

---

<sup>29</sup> Nick Wilson, “Commandant Endorses Block Buys for Amphibious Warships,” *Inside Defense*, March 9, 2023. See also Mallory Shelbourne, “FY2024 Budget: Navy Won't Buy Any More San Antonio Amphibs in the Next Five Years,” *USNI News*, March 9 (updated March 15), 2023.

<sup>30</sup> Richard R. Burgess, “Senators Hammer \$1 Billion Loss, Industrial Instability with Navy's Planned 2022 Shipbuilding,” *Seapower*, June 22, 2021.

<sup>31</sup> Megan Eckstein, “Marines Explain Vision for Fewer Traditional Amphibious Warships,” *Defense News*, June 21, 2021.

<sup>32</sup> This is a reference to the Department of the Navy or the Department of Defense.

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.<sup>33</sup>

## FY2024 Advance Procurement Funding for LHA-10

Another potential issue for Congress is whether to provide FY2024 advance procurement (AP) funding for the next LHA-type ship, LHA-10. The Navy's FY2024 budget submission programs the procurement of LHA-10 for FY2027. Congress, as part of its action on the Navy's proposed FY2023 budget, provided \$289.0 million in advance procurement (AP) funding for LHA-10. The Navy's FY2024 budget submission does not request additional AP funding for the ship in FY2024; it does program additional AP funding for the ship in FY2025 and FY2026.

## 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 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.

<sup>33</sup> 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.

### 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.<sup>34</sup>

## LHA Program

Regarding technical risk in the LHA program, a January 2023 report from DOD’s Director, Operational Test and Evaluation (DOT&E)—DOT&E’s annual report for FY2022—stated the following:

### TEST ADEQUACY

Between March and April 2022, the Navy and Marine Corps tested the USS Tripoli (LHA 7) in the F-35B-heavy configuration consisting of 20 F-35B Joint Strike Fighter aircraft, 3 SH-60S Seahawk helicopters, a Marine Aviation Combat Element, and a Marine Command Element. Testing evaluated the ability to embark, operate, support and maintain the fixed and rotary wing aircraft in this configuration. The Navy conducted this FOT&E [follow-on operational test and evaluation] period of the LHA 6 Flight 0 in accordance with a DOT&E-approved test plan, and tests were observed by DOT&E. Testing was adequate for demonstration of capability. Additionally, the test will inform future F-35B-heavy operational concepts and tactics, techniques, and procedures.

In FY22, the Navy conducted no LFT&E [live fire test and evaluation] of LHA 6 Flight 0 or operational test of LHA 6 Flight 1. DOT&E and the Navy have yet to agree on a LFT&E strategy to evaluate the survivability of the LHA 6 Flight 1 to air delivered or underwater kinetic threats.

### PERFORMANCE

#### *Effectiveness*

Under the operational conditions imposed during FOT&E, the LHA 6 Flight 0 demonstrated capability to operate in the F-35B-heavy configuration consisting of 20 F-35B Joint Strike Fighter aircraft, 3 SH-60S Seahawk helicopters, a Marine Aviation Combat Element, and a Marine Command Element. However, no preliminary assessment of mission performance attributes can be made from this FOT&E event as analysis remains in progress. DOT&E expects to deliver an LHA 6 Flight 0 FOT&E report in 2QFY23.

#### *Suitability*

Insufficient data are available to determine operational suitability from the FOT&E, however LHA 6 Flight 0 suitability was evaluated as satisfactory during IOT&E. FOT&E suitability evaluation is limited to reliability, maintainability, logistics supportability, and availability of ship’s systems that directly supported F-35B operations. DOT&E observed no significant issues related to suitability, but analysis remains in progress. DOT&E expects to deliver an LHA 6 Flight 0 FOT&E report in 2QFY23.

#### *Survivability*

No data are available to change the lethality assessment of LHA 6 Flight 0 from IOT&E or assess survivability of LHA 6 Flight 1.

<sup>34</sup> Government Accountability Office, *Weapon Systems Annual Assessment[:] Challenges to Fielding Capabilities Faster Persist*, GAO-22-105230, June 2022, p. 189.

**RECOMMENDATION**

The Navy should:

1. Collaborate with DOT&E to deliver an LFT&E strategy that adequately evaluates the survivability of the LHA 6 Flight 1 with the update to the TEMP [test and evaluation master plan] in FY23.<sup>35</sup>

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.<sup>36</sup>

## Legislative Activity for FY2024

### Summary of Congressional Action on FY2024 Funding Request

**Table 1** summarizes congressional action on the Navy’s FY2024 procurement and advance procurement (AP) funding request for the LPD-17 Flight II and LHA-9 programs.

<sup>35</sup> *Director, Operational Test & Evaluation*, January 2023, pp. 190-191.

<sup>36</sup> Government Accountability Office, *Weapon Systems Annual Assessment[:] Challenges to Fielding Capabilities Faster Persist*, GAO-22-105230, June 2022, p. 188.

**Table I. Summary of Congressional Action on FY2024 Procurement Funding Request**

Millions of dollars, rounded to nearest tenth

	Request	Authorization			Appropriation		
		HASC	SASC	Final	HAC	SAC	Final
LPD-33 advance procurement (AP) funding	0						
LPD-33 procurement funding	0						
LHA-9 procurement funding	1,830.1						
LHA-10 advance procurement (AP) funding	0						

**Source:** Table prepared by CRS based on Navy’s FY2024 budget submission, committee and conference reports, and explanatory statements on FY2024 National Defense Authorization Act and FY2024 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.

## 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.<sup>37</sup>

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 FY2024 budget submission, similar to its FY2023, FY2022, and FY2021 budget submissions, presents LHA-9 as a ship procured or projected for procurement 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:

---

<sup>37</sup> 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.<sup>38</sup>
- 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.<sup>39</sup>
- 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.<sup>40</sup> 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.<sup>41</sup>
- 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.<sup>42</sup>

## LHA-9 Amphibious Assault Ship

The Navy’s FY2024 budget submission, similar to its FY2023, FY2022, and FY2021 budget submissions, presents LHA-9 as a ship procured or projected for procurement in FY2023. This CRS report treats LHA-9 as a ship that Congress procured (i.e., authorized and provided

<sup>38</sup> H.Rept. 116-120, p. 379, line 012.

<sup>39</sup> S.Rept. 116-48, p. 433, line 12. See also pp. 23-24 for associated report language.

<sup>40</sup> H.Rept. 116-333, p. 1566, line 012. See also p. 1144 for associated report language.

<sup>41</sup> S.Rept. 116-103, p. 118, line 12. See also p. 122 for associated report language.

<sup>42</sup> 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.<sup>43</sup>
- 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.<sup>44</sup> 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.<sup>45</sup>
- 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.<sup>46</sup>
- 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.<sup>47</sup> 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."<sup>48</sup> 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).

---

<sup>43</sup> S.Rept. 116-48, p. 433, line 15.

<sup>44</sup> H.Rept. 116-333, p. 1566, line 015.

<sup>45</sup> S.Rept. 116-103, p. 118, line 15.

<sup>46</sup> Explanatory statement for Division A of H.R. 1158, PDF page 175 of 414, line 15.

<sup>47</sup> Reprogramming action (Form DD 1415) FY 20-01 RA, February 13, 2020, page 3 of 5.

<sup>48</sup> Explanatory statement for Division C of H.R. 133/P.L. 116-260, PDF page 204 of 469, line 17.



## **Author Information**

Ronald O'Rourke  
Specialist in Naval Affairs

---

## **Disclaimer**

This document was prepared by the Congressional Research Service (CRS). CRS serves as nonpartisan shared staff to congressional committees and Members of Congress. It operates solely at the behest of and under the direction of Congress. Information in a CRS Report should not be relied upon for purposes other than public understanding of information that has been provided by CRS to Members of Congress in connection with CRS's institutional role. CRS Reports, as a work of the United States Government, are not subject to copyright protection in the United States. Any CRS Report may be reproduced and distributed in its entirety without permission from CRS. However, as a CRS Report may include copyrighted images or material from a third party, you may need to obtain the permission of the copyright holder if you wish to copy or otherwise use copyrighted material.