

U.S. Navy

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Introduction

The U.S. Navy is not where the nation needs it to be, and President Donald Trump has signaled a break from past decades in his repeated commitment to revive the nation’s maritime power. Most notable was Congress’s commitment (with the President’s backing) to include a substantial \$8.4 billion increase in shipbuilding funding in the annual National Defense Authorization Act (NDAA)¹ and the one-time reconciliation bill known as the One Big Beautiful Bill Act (OBBA).² At the time of the *2024 Index*, the Navy’s fleet included 297 warships; now the number is 287 and shrinking well below what threats dictate. Compounding this is a growing deficit of 30,395 sailors and officers; closing this gap will require maintaining this year’s hugely successful recruitment into the next *Index*.

The Navy, as the foremost element of national power, cannot be allowed to degrade further if China is to be deterred. This year marks another sad assessment of the Navy’s capacity, capability, and readiness for winning a modern major war: Reversing this trend is a national imperative. The worldwide demand for warships has not slackened; it has increased as the world has grown more violent with active combat in the Red Sea and the Caribbean as of the time this edition of the *Index* was being prepared. Yet despite fewer warships and sailors, compared to the operational tempo (OPTEMPO) of the Cold War’s 600-ship Navy, the fleet has continued to operate by as much as 15 percent above the 17 percent historic levels.

This *Index* makes clear that conventional approaches have not worked in the past decade, as witnessed year after year in past assessments. There is no more time for modest modifications. Bold actions are needed to operate the fleet we have today

in new ways, expand the industrial capacity to build and sustain the larger fleet that we need, and invest in future capabilities.

Congress and naval leadership must never forget the lives lost in the 2017 collisions of the USS *John S. McCain* (DDG 56) and USS *Fitzgerald* (DDG 62). Findings of subsequent investigations revealed that overwork of green crews and overconfidence regarding operational risk were contributing factors—a lesson that remains relevant today. Incidents like the October 2021 grounding of the submarine *Connecticut* in the South China Sea and the September 2024 grounding of fleet oiler *Big Horn* make clear that life at sea is dangerous and requires vigilance and high competence even in peacetime. This *Index*, as have those since 2021, reminds readers of this reality and that success at sea is not cheap.

Being witness to increasingly aggressive Chinese military operations, it is clear that we are losing our ability to deter China—and with perilous consequences. This year’s *Index* reminds us again of where we stand and what we must do.

Service Overview

Navies exist to assure access to markets and influence events on land for political ends and to prevail in maritime combat when war occurs. To these ends, the U.S. Navy, Marine Corps, Coast Guard, and Merchant Marine (known collectively as the sea services) have enabled America to project power across the oceans, controlling activities on the seas whenever and wherever needed.

According to the Department of the Navy’s annual budget briefing for fiscal year (FY) 2026, the service’s “enduring priorities” have been updated by the Secretary of the Navy and include:

U.S. NAVY AT A GLANCE



EST. 1775

MOTTO
"Always Courageous"



John C. Phelan
Secretary of the Navy



Adm. Daryl Caudle
Chief of Naval Operations

MAJOR BASES



- 1 Naval Station Pearl Harbor
- 2 Naval Base San Diego
- 3 Naval Base Kitsap-Bremerton
- 4 Naval Station Norfolk
- 5 Naval Submarine Base King's Bay
- 6 Naval Support Mayport
- 7 Naval Support Activity Naples
- 8 Naval Support Bahrain
- 9 Commander Fleet Activities Yokosuka
- 10 Naval Base Guam

CURRENT BUDGET

IN BILLIONS FOR FY 2025

\$210.4

CURRENT PERSONNEL

ACTIVE-DUTY MILITARY

333,000

RESERVE MILITARY

58,000

CIVILIAN

202,000

KEY EQUIPMENT (estimated current inventory)



Nuclear Ballistic Missile Submarines (14)



Nuclear Attack Submarines (47)



Guided Missile Destroyers (74)



F-35C (100+)



F/A-18E/F (416)



P-8A Poseidon (118)



Aircraft Carriers (11)



Zumwalt (2)



Amphibious Warfare Assault Ship (9)



Ticonderoga Class Cruiser (7)



Littoral Combat Ship (28)

SOURCE: Heritage Foundation research.

heritage.org

- “Strengthen Shipbuilding and the Maritime Industrial Base,” which is a change from “Strengthening Maritime Dominance” used since FY 2024;
- “Foster an Adaptive, Accountable and Innovative Warfighter Culture,” which updates the Administration’s earlier “Building a Culture of Warfighting Excellence” that replaced the Biden-era “Taking Care of People through Building a Culture of Warfighting Excellence” and aligns more with the new Trump Administration’s focus on lethality; and
- “The Health, Welfare and Training of Our People and Their Families,” which emphasizes the well-being of the sailors and the quality of their readiness.³

The Biden-era “Enhancing Strategic Partnerships” has been removed.

Given the comprehensive threat from China, the Navy has introduced a new strategic framework for its operations and investment called maritime statecraft. This draws heavily from the book *U.S. Naval Power in the 21st Century* and a concept called naval statecraft. The concept was first introduced by the Secretary of the Navy Carlos Del Toro in a speech calling for a new statecraft founded on a strong naval force, backed by a robust commercial maritime industry, to execute a successful strategic comprehensive competition in today’s new cold war with China.⁴ The prioritization of rebuilding the nation’s maritime strength was amplified by President Donald Trump before Congress and the establishment of a new office dedicated to this end.⁵ Given the state of the nation’s navy and maritime services, this will be a herculean task.

All told, it will take years to recover from the past 36 years of naval decline. For the Navy, the so-called peace dividend after the collapse of the Soviet Union resulted in more than \$1.32 trillion in deferred investments and reduced spending from 1989–2025, antiquated infrastructure, and too many shuttered shipyards to build and sustain today’s too-small fleet. The flight of experienced naval architects who are needed to oversee design, building, and repair of warships has contributed to cost overruns and delays that the Navy cannot sustain.

To strengthen the nation’s maritime power, outgoing President Joseph Biden’s proposed \$257.6 billion Navy budget for FY 2025 was \$1.83 billion more than the FY 2024 enacted budget—an increase of 0.7 percent.⁶ This amount was relatively anemic in view of the need to recapitalize infrastructure, expand the supply base, recruit more sailors, and increase the number of warships necessary to deter a rapidly metastasizing threat from Communist China. However, this may be changing with the one-time reconciliation bill and a total increase of 11.1 percent over last year’s Navy budget.⁷ If these dollars are used to deliver the capacity, capability, and readiness outputs that are needed, the long, slow decline of the Navy’s ability to deter and win a major war should be reversed, but this will require years of increased resourcing matched with aggressive and smart execution of those funds.

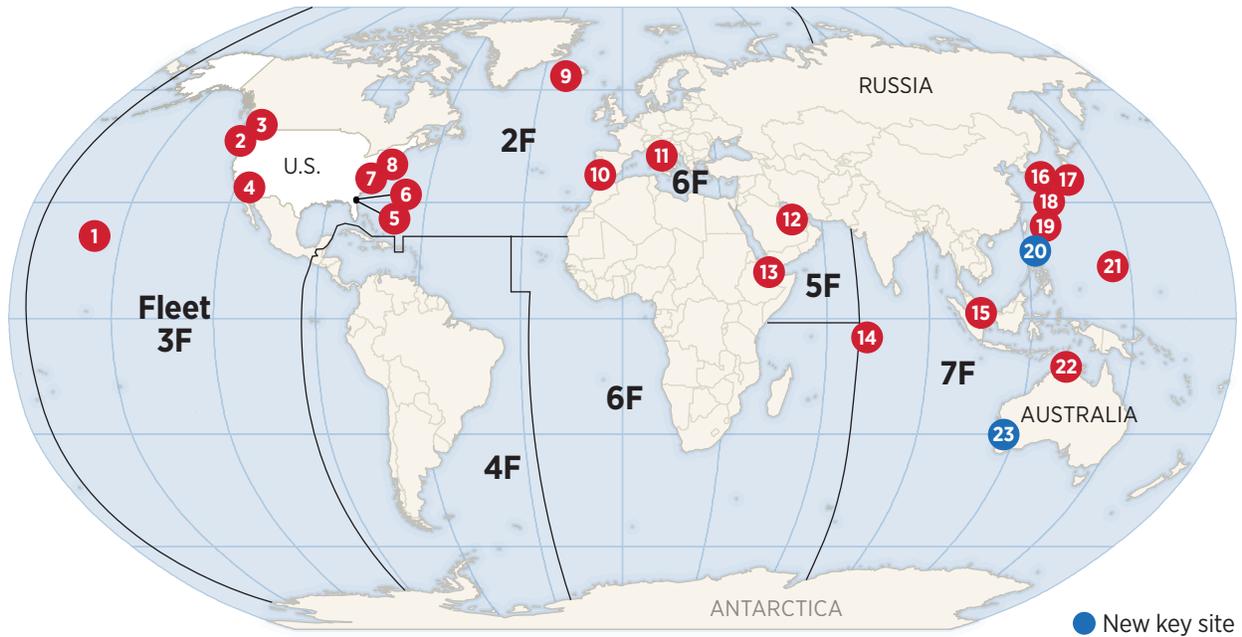
At the same time, investment in “wonder weapons” is not a solution to all of the Navy’s ills. Unmanned platforms, future-generation fighters, and long-range weapons are necessities, but their delivery and effectiveness remain in question until they can be proven in combat at-sea. Today’s fleet is needed to operate where required and as the training platform for crews. It must operate within range of the enemy’s weapons and continually refine concepts of operations for winning tomorrow’s wars.

The Navy therefore remains under immense strain to maintain readiness for combat while also conducting daily peacetime operations to counter the activities of China and Russia. Since publication of the *2024 Index of U.S. Military Strength*, there have been several significant developments that are important to the Navy. For example:

- In its first year, the Navy’s Maritime Industrial Base staff certified a cold spray welding technique avoiding the need to dry dock, used additive manufacturing techniques to produce and install three chill water valves on an operational warship, and helped to place more than 10,000 new maritime industrial workers.⁸
- During combined exercise Balikatan in April 2025, the U.S. Marine Corps deployed elements of the 3rd Marine Littoral Regiment with Navy-Marine Expeditionary Ship Interdiction System (NMESIS) to the Batanes island group in the Luzon Strait.⁹

Key U.S. Naval Installations

The U.S. Navy's global operation has been bolstered in recent years by the addition of key installations: 10 sites in the Philippines, most notably Naval Base Camilo Osias, and a nuclear submarine and support ship site in Perth, Australia.



- | | |
|--|--|
| <p>1 Joint Base Pearl Harbor-Hickham, HI
U.S. Pacific Fleet headquarters</p> <p>2 Naval Base Kitsap</p> <p>3 Naval Station Everett, WA</p> <p>4 Naval Base San Diego and Naval Base Coronado, CA
U.S. Third Fleet headquarters</p> <p>5 Naval Station Mayport, FL
U.S. Fourth Fleet headquarters</p> <p>6 Naval Submarine Base King's Bay, GA</p> <p>7 Naval Base Norfolk and Joint Expeditionary Base Little Creek, VA
U.S. Fleet Forces Command and U.S. Second Fleet headquarters</p> <p>8 Naval Submarine Base New London, CT</p> <p>9 Keflavik, Iceland—Expeditionary Maritime Operations Center</p> <p>10 Naval Station Rota, Spain</p> <p>11 Naval Support Activity Gaeta, Italy
U.S. Sixth Fleet headquarters</p> | <p>12 Naval Support Activity, Bahrain
U.S. Fifth Fleet headquarters</p> <p>13 Lemonnier, Djibouti—Camp Lemonnier</p> <p>14 Diego Garcia—Navy Support Facility Diego Garcia</p> <p>15 Singapore—Commander Logistics Group Western Pacific</p> <p>16 Buson, South Korea—Fleet Activities Chinhae Navy Base</p> <p>17 U.S. Fleet Activity Yokosuka, Japan
U.S. Seventh Fleet headquarters</p> <p>18 U.S. Fleet Activity Sasebo, Japan</p> <p>19 Okinawa, Japan—Naval Base White Beach</p> <p>20 Luzon Island, Philippines—Naval Base Camilo Osias</p> <p>21 Naval Base Guam—Navy Expeditionary Force Command Pacific headquarters</p> <p>22 Darwin, Australia—Marine Rotational Force Darwin</p> <p>23 Perth, Australia—Submarine Rotational Force West</p> |
|--|--|

NOTE: Fleet boundaries are approximate.

SOURCE: Heritage Foundation research.

 heritage.org

- Admiral Lisa Franchetti was relieved as Chief of Naval Operations (CNO) on February 21, 2025, and replaced by Admiral Daryl Caudle six months later, signaling a break with past conventions.
- In September 2024, the Navy oiler *Big Horn* ran aground, sustaining significant damage and ending its provisioning of fuel to sustain ongoing combat operations against the Houthis.¹⁰
- In July 2024, the Navy demonstrated an at-sea method to rearm warship vertical launch cells that are used to launch cruise missiles and air and missile defense munitions.¹¹ The method is called Transferrable Rearming Mechanism (TRAM) and is a limited means to mitigate a long-known deficiency in sustaining warships within striking distance of enemy forces without executing prolonged transits to rear-area ports to restock.
- On February 22, 2024, the Navy established the Robotics Warfare Specialist for enlisted ratings with the goal of developing deep expertise in the maintenance of autonomous platforms.¹²
- On January 16, 2024, the Navy completed its first Western Pacific deployment of a flotilla of four unmanned vessels that included the USV *Ranger*, which had launched a Standard Missile-6 at a target successfully in 2021.¹³
- In January 2024, following a series of reports of significant delays in numerous naval shipbuilding programs, the Secretary of the Navy ordered a 45-day review.¹⁴ This review determined that the top-priority strategic missile submarine *Columbia* is 12–16 months behind, the aircraft carrier *Enterprise* is 18–26 months behind schedule, *Virginia*-class submarines are 24 to 36 months late, and the new frigate *Constellation* is three years behind schedule.¹⁵
- On October 19, 2023, Iran’s proxy in Yemen, the Houthis, began attacks on shipping in the Red Sea in support of Hamas’s war against Israel, which had begun on October 7. Houthis

attacks on shipping continue into 2025. A mid-July 2024 report gave a rare insight into the scale of those combat operations: 155 standard missiles, 125 tomahawk cruise missiles, 60 air-to-air missiles expended.¹⁶

Strategic Framework. In December 2020, to address today’s maritime competition more effectively, the sea services released a naval strategy titled *Advantage at Sea*.¹⁷ It has not yet been fully executed, but there has been some progress regarding forward presence operations that challenge Chinese maritime coercion.¹⁸

The Navy also apparently continues to adjust its deployment patterns to meet new demands caused by the war in Ukraine and combat operations against the Houthis. Since June 2023, these demands have slowed the trend toward more presence in the Western Pacific and a reduced carrier and large amphibious force presence in the North Atlantic and the Eastern Mediterranean in order to fuel a return to the Indian Ocean.¹⁹

As the U.S. military’s primary maritime arm, the Navy is charged with providing the enduring forward global presence that this strategy requires while retaining war-winning forces. The Navy therefore continues to focus its investments on several functional areas: power projection, control of the seas, maritime security, strategic deterrence, and domain access. This approach is informed by several key documents. In addition to the Trump Administration’s 2025 National Security Strategy (NSS) and 2026 National Defense Strategy (NDS), they include:²⁰

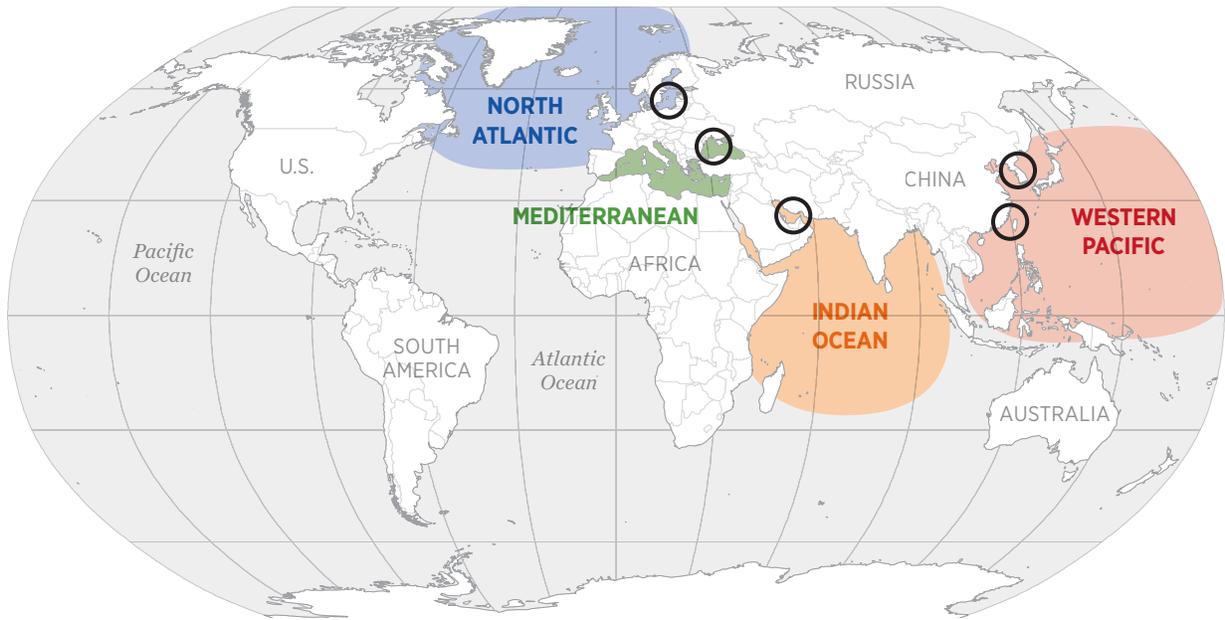
- The December 2020 *Advantage at Sea* naval strategy, and
- The Global Force Management Allocation Plan (GFMAP).²¹

In addition, in the summer of 2025, the Trump Administration issued an Interim National Defense Strategic Guidance that has been informing FY 2026 and reconciliation budgets. It provides that:

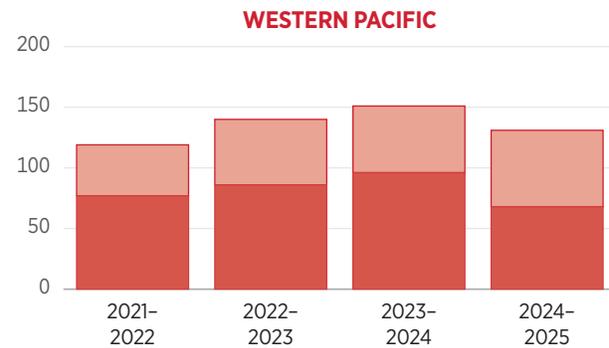
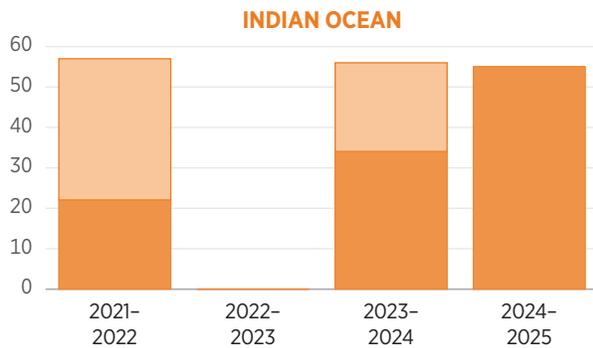
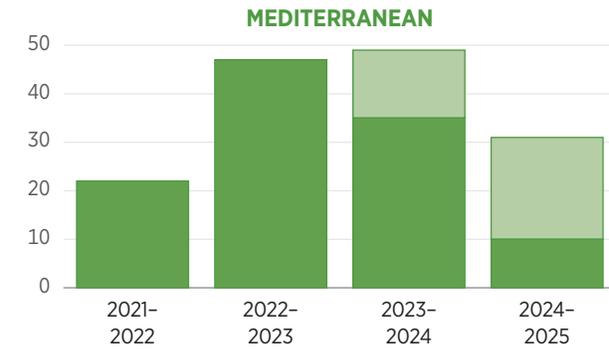
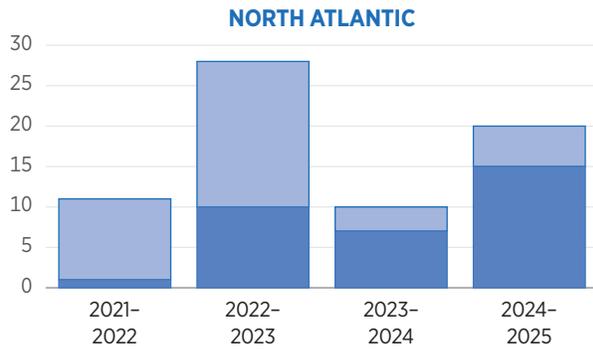
- The United States faces one of the most dangerous strategic environments in our Nation’s history characterized by:

U.S. Navy Global Presence

○ Potential sites for major war



Weeks present in region ■ CSG ■ ARG/ESG



NOTES: Time frames are June to June. CSG — Carrier Strike Group, ARG — Amphibious Ready Group, ESG — Expeditionary Strike Group.
SOURCE: Heritage Foundation research based on data from U.S. Naval Institute Staff, "Fleet Tracker," U.S. Naval Institute News, <https://news.usni.org/category/fleet-tracker> (accessed January 21, 2026).

- **A vulnerable homeland** arising from years of unsecured borders and increasingly capable air and missile threats;
- **China’s unprecedented military buildup** and the direct threat that it poses to America’s security and economy; and
- **A range of other threats**, including Russia, Iran, North Korea, and select terrorist organizations.
- **President Trump has charged the Department with supporting his America First defense policy agenda and achieving his vision of peace through strength.**
- To do so, the Strategic Guidance is built around **three priority lines of effort**:
 - **Defend the Homeland**
 - **Deter China in the Indo-Pacific**
 - **Empower allies and partners to do more**
- **Success demands clear prioritization, strategic discipline, and fiscal responsibility.**

U.S. official strategic guidance requires the Navy to act beyond the demands of conventional warfighting. China and Russia use their fleets to establish a physical presence in regions that are important to their economic and security interests in order to influence the policies of other countries. To counter their influence, the U.S. Navy similarly sails ships in these waters to reassure allies of U.S. commitments and signal to rivals that they do not have a free hand to impose their will. This means that the Navy must balance two key missions: ensuring that it has a fleet that is ready for war while also using that fleet for peacetime “presence” operations. Both missions require crews and ships that are materially ready for action and a fleet that is large enough to maintain presence and marshal enough combat power to win in battle.

On September 18, 2024, the Chief of Naval Operations released an update to Navigation Plan 2022 (NAVPLAN 2022).²² NAVPLAN provides guidance for the Navy’s contribution to the execution of the

National Defense Strategy. Today, the CNO continues to emphasize forward presence in the United States’ daily competition with rivals like China and prioritizes investments in key capabilities. New and notable in NAVPLAN 2024 is a goal to achieve 80 percent combat surge readiness by 2027; the current rate is approximately 67 percent.²³

All of this reflects a continuation of demands stemming from the Distributed Maritime Operations concept that has been deemed critical to defeating Chinese anti-access/area denial (A2/AD) capabilities. Prior NAVPLANs lacked a clear timeline; now the deadline for delivering capabilities and meeting readiness goals is set as no later than January 1, 2027.²⁴ This date is picked explicitly to meet China’s own goal of being ready to prevail in a war over Taiwan.²⁵ To pace this threat, NAVPLAN 2022 offered a plan calling for a fleet of 350 manned and 150 unmanned warships along with 3,000 naval aircraft. This was revised upwards in June 2023 to 381 battle-force manned ships and incorporated into NAVPLAN 2024. Seven goals called Project 33 include achieving 80 percent readiness, field operations centers for distributed combat operations, greater numbers of field unmanned platforms, and restoration of critical infrastructure like aging shipyards.²⁶ The new CNO, Admiral Daryl Caudle, so far has not signaled an intent to change direction.

Admiral Caudle’s first message to the fleet as CNO does indicate that several changes are coming. In this message, he signaled new potentially traditional naval uniforms, better living conditions during extended maintenance periods, and better facilities and platforms resourced to national needs, his mantra being “Built in the Foundry—Tempered in the Fleet—Forged to Fight.”²⁷ While little detail is given in his public statements since becoming CNO, past comments as Fleet Forces Commander indicate an awareness that nuclear maintenance capacity is inadequate and that we need additional public shipyards.²⁸

All told, NAVPLANs have neither galvanized political support nor delivered actionable long-range shipbuilding plans to Congress. Considering current trends, it seems unavoidable that the fleet will reach a nadir of 280 warships in 2027—exactly when a larger fleet is required.²⁹ Despite some progress in NAVPLAN 2024, the disconnect between strategy, plans, and resourcing persists with the latest Battle Force Ship Assessment and Requirement, which

indicates that the Navy is short 80 warships (rather than 50 per earlier plans) with which to execute the National Defense Strategy.³⁰ During the years since 2016's 355-fleet goal was memorialized in law by Congress, the threat from China has continued to grow, pressurizing the Navy to revise upward its assessed fleet composition and needs.

Numbers alone in warships do not capture the needed composition of various warship classes—the fleet design. Both the Secretary of the Navy and the CNO have indicated that a new fleet design is forthcoming.³¹ As of February 24, 2026, the annual congressionally mandated 30-year shipbuilding plan had not been released, and the congressionally mandated annual report on *Military and Security Developments Involving the People's Republic of China*, a critical resource for responsible officials charged with defining the threat as a rationale for the new fleet design and long-range build plan, was not released until December 2025.

This *Index* focuses on the following elements as the primary criteria by which to measure U.S. naval strength:

- **Sufficient capacity** to defeat enemies in major combat operations and provide a credible peacetime forward presence to maintain freedom of shipping lanes and deter aggression,
- **Sufficient technical capability** to ensure that the Navy is able to defeat potential adversaries, and
- **Sufficient readiness** to ensure that the fleet can “fight tonight” given proper material maintenance, personnel training, and physical well-being.

Capacity

Force Structure. The Navy is unique relative to the other services because its capacity requirements must meet two separate objectives:

1. During peacetime, the Navy must maintain a global presence in distant regions both to deter potential aggressors and to assure allies and security partners.
2. The Navy must be able to win wars. To this end, the Navy measures capacity by the size of its

battle force, which is composed of ships it considers directly connected to combat missions.³²

This *Index* continues the benchmark set in the *2019 Index*: 400 ships for combat operations against China, as well as adequate response to opportunistic adversaries with a 20 percent strategic reserve, and historical levels of 100 ships that are forward deployed in peacetime.³³ This 400-ship fleet is centered on providing:

- 13 Carrier Strike Groups (CSGs);
- 13 carrier air wings with a minimum of 624 strike fighter aircraft;³⁴ and
- 15 Expeditionary Strike Groups (ESGs).³⁵

Unmanned platforms are not included because they have not matured as a practical asset. They hold great potential and will likely be a significant capability, but until they are developed and fielded in larger numbers, their impact on the Navy's war-fighting potential remains speculative. The same holds true across the fleet when it comes to new classes of ships. The Navy is investing in research, modeling, war gaming, and intellectual exercises to improve its understanding of the potential utility of new ship and fleet designs, but until new ships are added to the fleet, it is hard to know how they will affect the Navy's ability to perform its missions. Consequently, this *Index* measures what is known and can be known in naval affairs, assessing the current Navy's size, modernity, and readiness to perform its most important missions today.

Relative to the above metric, the Navy's fleet of 287 warships as of October 1, 2025³⁶—10 ships less than the figure cited in the *2024 Index*—is inadequate and places greater strain on the ability of ships and crews to meet existing operational requirements. To alleviate the operational stress on an undersized fleet, the Navy has attempted since 2016 to build a larger fleet. However, for myriad reasons, it has been unable to achieve sustained growth and in fact has underdelivered by approximately 10 ships each year since 2016.³⁷ In the past, the Navy has had some success in meeting operational requirements with fewer ships by posturing ships forward as it has done in Rota, Spain; on Guam; and potentially as part of AUKUS (the trilateral

Australia–United Kingdom–United States security pact) in Australia.

At a February 2022 naval conference, the Chief of Naval Operations stated, “I’ve concluded—consistent with the analysis—that we need a naval force of over 500 ships.”³⁸ The Navy’s subsequent June 2023 Battle Force Ship Assessment and Requirement report specified that the fleet needed to include:

- 12 aircraft carriers (the Navy currently has 11);
- 87 large surface warships (CG, DDG) (the Navy currently has 85);
- 73 small warships (LCS) (the Navy currently has 27);
- 31 large amphibious warships (LSD, LPD, LHA, LHD) (the Navy currently has 32);
- 66 attack submarines (SSN) (the Navy currently has 47);
- 12 ballistic missile submarines (SSBN) (the Navy currently has 14);
- 46 combat logistics ships (T-AO, T-AOE, T-AKE, NGLS) (the Navy currently has 34); and
- 54 command and support ships (LCC, AS, T-ESD, T-EPF, T-ESB, LSM, ARS/ATF, and T-AGOS) (the Navy currently has 30).³⁹

Based on the CNO’s military advice and Heritage Foundation analysis, today’s fleet remains too small to meet today’s threats with maximum effectiveness.

Posture/Presence. Although the Navy remains committed to sustaining forward presence, it has struggled to meet the requests of regional Combatant Commanders. The result has been longer and more frequent deployments to meet a historical steady-state forward presence of 100 warships.⁴⁰ In 1985, at the height of the Cold War, less than 15 percent of the nation’s 571-ship fleet was deployed, and throughout the 1990s, deployments seldom exceeded the six-month norm: Only 4 percent to 7 percent of the fleet exceeded six-month deployments on an annual basis.⁴¹

Using the Navy’s aircraft carrier fleet—the most taxed platform—as a sample set, for the past 20

years, approximately 25 percent of the aircraft carrier fleet has been deployed. Following the 2017 deadly collisions involving USS *McCain* and USS *Fitzgerald*, overall fleet deployment dropped temporarily to less than 20 percent, but it surged again to almost 30 percent in 2020.⁴² High operational tempo (OPTEMPO) remains an issue as the Navy works to secure U.S. interests against China’s distant naval deployments and provocations, North Korea’s ballistic missile submarine, Iranian attacks on and interdiction of commercial shipping in the Persian Gulf, and an active Russian Navy.

The numbers reported by the Navy on September 8, 2025, are typical for a total battle force of 287 deployable ships with 105 warships at sea for an OPTEMPO of 36.1 percent, well above Cold War levels of approximately 20 percent.⁴³ Given Combatant Commanders’ requirements for naval presence, there is impetus to have as many ships forward deployed as possible by:

- **Homeporting.** The ships, crew, and their families are stationed at the port or based abroad (for example, a CSG in Yokosuka, Japan).
- **Forward Stationing.** Only the ships are based abroad, and crews are rotated out to the ship.⁴⁴ This deployment model is currently used for Littoral Combat Ships (LCS) and *Ohio*-class guided missile submarines (SSGNs) manned with rotating blue and gold crews, effectively doubling the normal forward deployment time (for example, LCS in Singapore).

These options allow one forward-based ship to provide a greater level of presence than four ships based in the continental United States (CONUS) can provide by offsetting the time needed to transit ships to and familiarize their crews with distant theaters.⁴⁵ This is captured in the Navy’s GFM planning assumptions: a forward-deployed presence rate of 19 percent for a CONUS-based ship compared to a 67 percent presence rate for an overseas-homeported ship.⁴⁶ To date, the Navy’s use of homeporting and forward stationing has not mitigated the reduction in overall fleet size’s effect on forward presence.

Shipbuilding Capacity. To meet stated goals for fleet size, the Navy must build faster and maintain more ships, exceeding its current capacity. However, significant shortfalls in both government and

commercial shipyards make it hard to accomplish either task—and inconsistent planning and inconsistent defense budgets make it even more difficult. Given the limited ability to build ships, the Navy will struggle to meet the congressionally mandated 355-ship goal,⁴⁷ to say nothing of the 400-ship goal advocated in this *Index*.

Congress overrode smaller shipbuilding plans for FY 2022 and FY 2023 that were submitted by the Biden Administration and added funding for new orders each year that exceeded 20 warships. Despite this, subsequent procurement and delivery rates have not kept pace with the threat from China. Nor have congressional mandates reversed this trend: The Navy last met a congressionally mandated goal of 12 aircraft carriers in 2006⁴⁸ and is meeting its mandated fleet of no fewer than 31 large amphibious warships only after strenuous protests by Senator Dan Sullivan (R-AK) in 2023.⁴⁹

World events demonstrated the danger of having inadequate amphibious forces in April 2023 when Americans were stranded amid factional war in Sudan.⁵⁰ Despite such consequences, the current long-range shipbuilding plan does not reverse downward trends in the fleet and will result in a drop to 280 manned ships by FY 2027.⁵¹

Meanwhile, a combination of misaligned congressional willingness to fund a larger fleet, a former Administration loath to resource it, and a Navy unable to control its requirements has resulted in shipbuilders that too often are unwilling to invest in needed workforce and delay capital investments. From 2005 to 2020, the Navy's procurement of new warships increased the size of the fleet from 291 to 296 warships; at the same time, China's navy grew from 216 to 360 warships.⁵² If the Navy is to build a larger fleet, more shipbuilders will have to be hired and trained—a lengthy process that precedes any expansion of the fleet. The Navy estimates that to meet its demand for nuclear submarines, it will need to hire an additional 100,000 new workers over the next 10 years.⁵³

Complicating matters is that, according to the most recent labor statistics, wages in the nation's shipbuilding sector have not consistently kept pace with inflation and wider labor wages. In 2021, wages in the shipbuilding and repair sector shrank by 2.7 percent; they then exceeded national averages for two years only to fall behind again in 2024.⁵⁴ As a consequence, the sector's labor pool shrank 1.5

percent in the third quarter of 2024.⁵⁵ This pattern does not appear to have abated in 2025.

A critical concern is the urgency of the need to increase production of nuclear-powered warships, most notably nuclear-powered submarines that would be vital in any conflict with China. Limited nuclear shipbuilding capacity⁵⁶ will constrain the Navy's plans to increase the build rate from two attack submarines per year to three while concurrently building one ballistic missile submarine.⁵⁷

To support a larger nuclear-powered fleet, the Navy has sought assistance for relevant public shipyards to increase their workforce, awarding a \$503 million contract to Blue Forge Alliance.⁵⁸ While this contract was supported by the Navy, a dubious \$2.4 billion contract was awarded to Deloitte Consulting to expand submarine industrial capacity.⁵⁹ So far, these efforts have yet to yield a return on the investment as the *Virginia*-class attack submarine program remains behind schedule and continues to contend with rising labor costs that resulted in a stopgap \$1.95 billion to cover the cost of keeping two boats under construction.⁶⁰

Moreover, since 2023, the Navy has reported *Virginia*-class labor deficits that have contributed to cost overruns and production delays, causing the Navy to miss its stated goal of a delivery rate of 1.5 boats a year by October 1, 2024, and raising concerns that it may not be able to meet its goal of two per year by 2028 if conditions do not change.⁶¹ This is exacerbating concerns about whether the AUKUS nuclear submarine production effort with Australia and the United Kingdom, which will require the delivery of 2.33 boats per year, will prove to be executable.⁶²

A key element of the AUKUS effort is the forward "rotational" basing of American nuclear submarines in HMAS Stirling, Australia. The first of these submarines are due to arrive per the so-called optimal pathway in 2027, which will have a multiplicative effect on U.S. submarine presence: Each forward-based warship is equivalent to four based in the continental U.S. Failing to deploy American nuclear submarines according to this plan would further degrade the capacity needed to deter China.

It still remains true that current funding will not build or maintain the larger fleet that both the Navy and this *Index* say is needed and that Congress has mandated. Nothing has changed to alter CNO Admiral Michael Gilday's 2021 assessment that

current budgets can only “sustain a Navy of about 300 to 305 ships.”⁶³ In addition, the Government Accountability Office (GAO) has noted that a brittle defense industrial base continues to drive up costs and create delays.⁶⁴

Manpower. In 2018, the Navy assessed that its manpower would need to grow by approximately 35,000 to achieve an end strength of 360,395 sailors to support a 355-ship Navy.⁶⁵ The last time the Navy had a similar number of ships was in 1997 when it had 359 ships and 398,847 personnel.⁶⁶ As of February 22, 2026, the Navy consisted of 340,000 active-duty officers and sailors,⁶⁷ up by 4,813 from the 335,187 reported in the *2024 Index* but still significantly below what is needed to meet its 2034 fleet goal.

After several negative years of recruiting and retention efforts, things are beginning to reverse course. Four months into the 2025 fiscal year, the Navy announced that it was already on track to meet recruiting goals for the second consecutive year.⁶⁸ Despite this good news, however, budgeted total end strength fell from 344,441 in FY 2022 to 332,300 in FY 2025, which might limit the Navy’s ability to take advantage of better recruiting.⁶⁹ Because authorized manning numbers should reflect the fleet needed rather than what can be recruited today, it remains to be seen whether retention rates can be sustained to meet long-range manning needs. According to statements made in late 2024 by the Secretary of the Navy and Chief of Naval Operations, the service’s retention rates have been at historic highs—perhaps an indication that the Navy has made a long-overdue course correction in its outreach to potential new recruits.⁷⁰

Despite recent improvement in recruitment, missed past recruitment goals and lackluster retention have left a legacy of overworked sailors at sea, as evidenced by unfilled billets aboard ship. This places greater demand on a smaller active-duty end strength, and the consequences will be seen in the fleet’s operational capabilities.

The GAO has reported persistent crew manning shortfalls. A GAO report published in May 2021 revealed that some ships had crew shortfalls as high as 15 percent, which compounded crew fatigue as smaller crews had to make up the workload. This was a contributing factor in several fatal collisions in 2017.⁷¹ The problem persists with the number of gapped billets rising to 22,000 for junior

enlisted sailors in 2023 on top of a persistent deficit of 10,000 stretching back as far as 2016.⁷² In January 2025, Navy leadership indicated that in order to fill the remaining 20,000 gapped at-sea billets, it will have to meet recruitment and retention goals for three consecutive years—and this would not guarantee meeting the 355-ship crew requirements.⁷³

Finally, the effort to attract people to join the Navy is made more difficult by wages that are not keeping up with inflated costs of living. In the battle for people, pay raises in recent years have consistently lagged behind inflation. In an effort to address this pay gap, a 14.5 percent pay raise for the most junior sailors went into effect on April 1, 2025.⁷⁴

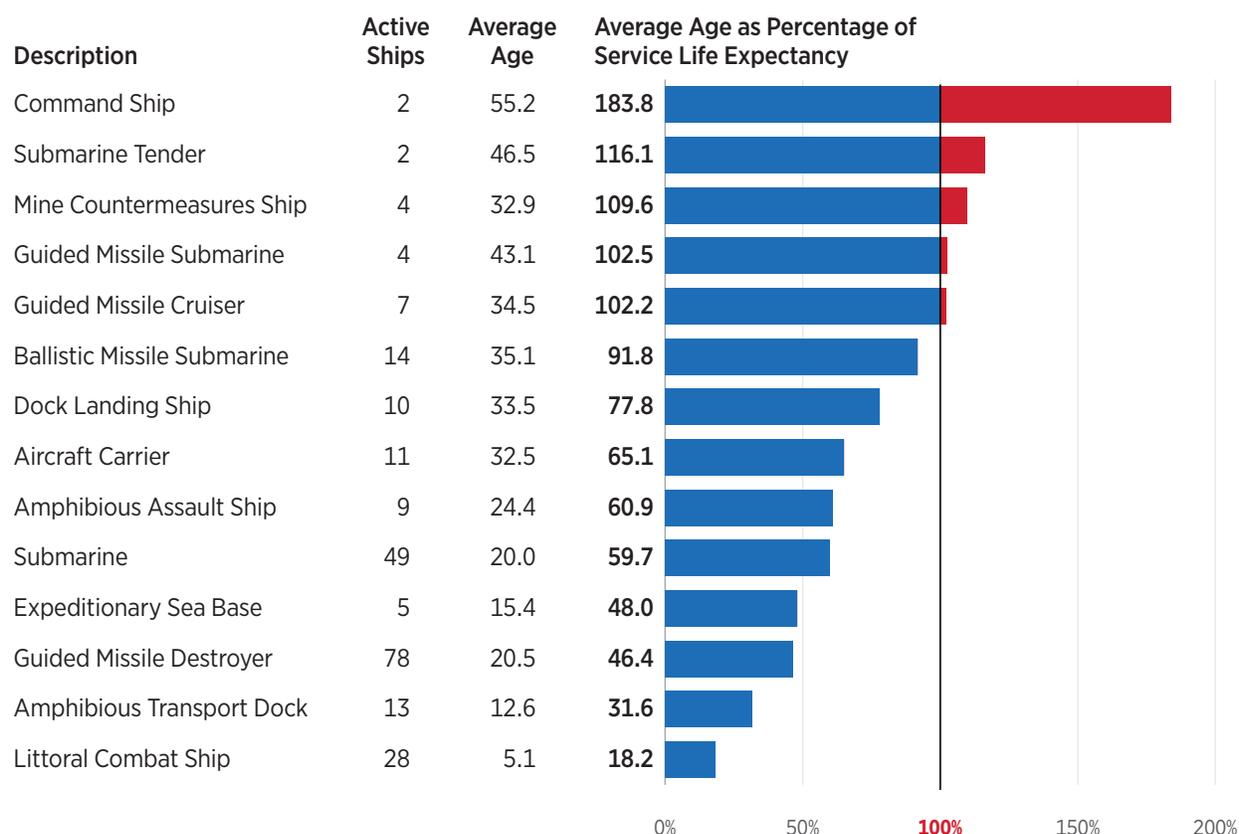
The U.S. Coast Guard. This year, the *Index of U.S. Military Strength* for the first time examines the contribution of the U.S. Coast Guard. In wartime, the Coast Guard would become part of the Navy and support specific combat roles. The Navy therefore expects the Coast Guard to be ready for nine specific wartime missions, which are detailed in a 2008 memorandum of agreement between the Department of Homeland Security (DHS) and the Department of Defense (DOD). These nine missions include “Maritime interception/interdiction operations,” “Military environmental response,” “Theater security cooperation,” “Coastal sea control operations,” “Rotary wing air intercept operations,” “Combatting terrorism operations,” “Maritime operational threat response,” “Military cyberspace operations,” and “Port operations, security and defense.”⁷⁵

A critical mission is escort of shipping that sustains military operations across the Pacific, which the current fleet of cutters is not designed to execute.⁷⁶ With appropriate modification, the current fleet of 20 National Security Cutters could be able to support this critical mission.⁷⁷ Overall, however, the wartime contribution and training routines for the U.S. Coast Guard today make it unlikely that it will contribute appreciably to combat operations.

Capability

A complete measure of naval capabilities requires an assessment of U.S. platforms against enemy weapons in plausible scenarios. The Navy routinely conducts war games, exercises, and simulations to assess this, but insight into its assessments is limited by their classified nature. This *Index* therefore assesses capability based on

Navy Ships Nearing—or Past—End of Service Life



NOTE: Figures are based on calculations through February 3, 2026.

SOURCE: U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, "Fleet Size," <http://www.nvr.navy.mil/NVRSHIPS/FLEETSIZE.HTML> (accessed February 3, 2026).

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remaining hull life, mission effectiveness, payloads, and the feasibility of maintaining the platform's technological edge.

Most of the Navy's fleet consists of older platforms: Of its 20 classes of ships, only eight are in series production.⁷⁸ The FY 2025 shipbuilding budget of \$32.4 billion was 0.7 percent higher than the FY 2024 budget: 12.6 percent of the Navy's budget of \$257.586 billion and a slackening of past increases that have been as high as 4.5 percent.⁷⁹ The current proposed FY 2026 budget plus the enacted reconciliation bill would represent a 22 percent increase over FY 2025 with new orders of 19 warships.⁸⁰ The following are highlights by platform.

Ballistic Missile Submarines (SSBN). The *Columbia*-class submarine will relieve the aging *Ohio*-class SSBN fleet. Because of the implications of this change for the nation's strategic nuclear deterrence, the *Columbia*-class SSBN remains the Navy's top acquisition priority. To ensure the continuity of this leg of the U.S. nuclear triad, the first *Columbia*-class SSBN must be delivered on time for its first deterrent patrol in 2031.⁸¹ In November 2020, the Navy signed a \$9.47 billion contract with General Dynamics Electric Boat for the first-in-class boat and advanced procurement for long-lead-time components of the second hull.⁸² The lead ship's keel-laying ceremony occurred on

June 4, 2022.⁸³ The FY 2025 budget completes the payments for procurement of the second boat, but anticipated delays of as many as 16 months stand to jeopardize the viability of the nation's assured second strike nuclear deterrent force.⁸⁴

However, concerns persist in Congress that the U.S. Department of War may not be fully utilizing special authorities granted to the Navy to ensure that this critical program is adequately resourced. Specifically, the National Sea-Based Deterrence Fund (NSBDF) established by Congress in 2024 has saved more than \$1.4 billion using flexible funding but “has yet to utilize the core function of the NSBDF—namely, to provide increased flexibility to repurpose funds into it to buy down the fiscal impact of the program on our other shipbuilding priorities.”⁸⁵ Because this priority program is currently facing extended delays, its utility must be reviewed and its full utilization must be ensured.

Nuclear Attack Submarines (SSN). SSNs are multi-mission platforms whose stealth enables clandestine intelligence collection; surveillance; anti-submarine warfare (ASW); anti-surface warfare (ASuW); insertion and extraction of special operations forces; land attack strikes; and offensive mine warfare. The newest SSN class, the Block V *Virginia* with the Virginia Payload Module (VPM) enhancement, is important to the Navy's overall strike capacity, enabling the employment of 28 more Tomahawk cruise missiles than were employed in earlier SSN variants.⁸⁶ Construction of Block V submarines began in September 2019 with the *Oklahoma* (SSN 802) to be delivered in May 2027 and three more boats to be delivered before the end of the decade.⁸⁷ As noted previously, a limited shipyard workforce is causing this program to be delayed by as many as two years.

Aircraft Carriers (CVN). The Navy has 11 nuclear-powered aircraft carriers: 10 *Nimitz*-class and one *Ford*-class. The Navy has been making progress in overcoming nagging issues involving several advanced systems, notably advanced weapons elevators, and stemming from the *Ford*'s first operational deployment in the fall of 2022 to the North Atlantic.⁸⁸ Further bolstering confidence in this new class, the *Ford* deployed to the Mediterranean in May 2023 to sustain a persistent carrier presence there following Russia's February 2022 invasion of Ukraine.⁸⁹ The *Ford* began a planned deployment cycle in June 2025 and has conducted allied naval operations in the high North Atlantic region.⁹⁰

The second ship in this class, the *John F. Kennedy* (CVN 79), was christened on December 7, 2019, but its scheduled delivery to the Indo-Pacific theater has slipped from 2022 to 2027 to support late modifications for fifth-generation fighters like the F-35; the Navy's carrier fleet will drop to 10 during 2026–2027.⁹¹ The most recent reporting indicates that the *Kennedy* will arrive at its new homeport, Naval Base Kitsap in Bremerton, Washington, no earlier than FY 2029.⁹² The *Kennedy* is to be followed by the *Enterprise* (CVN 80), which is in early construction with delivery planned for 2028.

The U.S. lead in this category of naval power may be waning as China completes construction of its first super carrier. As the U.S. Navy struggles to build, maintain, and crew a fleet of 11 aircraft carriers, China is rapidly catching up both in numbers and in platform capability. Its newest carrier, the Type-003, like the *Ford*-class, will utilize electromagnetic catapults that give its air wing greater range and sortie rates, thus significantly narrowing the capability gap.⁹³ The Type-003 is China's second indigenously built carrier and a significant engineering milestone. There had been renewed emphasis on having the ship delivered before the October 2022 Chinese Communist Party (CCP) Congress,⁹⁴ and after a sprint by the shipyard, the new 80,000-ton Type-003 aircraft carrier was launched in June 2022.⁹⁵ U.S. Department of Defense reporting indicated that the Type-003 would enter service in 2025; the first two carriers have engaged in routine deployments and intimidation operations against Taiwan.⁹⁶

In a further indication of the rising threat to American naval dominance, speculation has mounted over a new Type-004 super carrier spotted in satellite imagery under construction in Dalian shipyard, potentially nuclear powered, and with up to four electromagnetic catapults, matching the *Ford* class.⁹⁷ China's growing naval aviation and aircraft carrier capabilities place added stress on U.S. naval aviation and air defenses.

Large Surface Combatants. The Navy's large surface combatants consist of the *Ticonderoga*-class cruiser, the *Zumwalt*-class destroyer, and the *Arleigh Burke*-class destroyer. The President's FY 2024 budget decommissioned five aged *Ticonderoga*-class cruisers.⁹⁸ Current plans had the Navy decommissioning four more cruisers in FY 2025, decommissioning another three the next

year, and retiring the final two in 2027.⁹⁹ These decommissionings represent a significant decrement of the Navy's sea-launched firepower with the loss of a total of 1,342 vertical launch tubes. Attempts to repurpose or extend the life of the aging *Ticonderoga*-class cruisers has not progressed after years of deferred upgrades and past incomplete maintenance.¹⁰⁰

Since publication of the *2024 Index*, the Navy has added four *Arleigh Burke*-class DDG 51 destroyers, bringing the total on active duty in the fleet to 74. In 2008, the Navy declined to pursue a new cruiser to provide air and missile defense for carrier strike groups, choosing instead to pursue a final iteration of the *Arleigh Burke* class, Flight III.¹⁰¹ This will remain a stopgap measure until a more capable new destroyer, the DDG(X), joins the fleet, probably in the next decade. The DDG(X) will include the capability to launch long-range hypersonic strike missiles in new larger vertical launching system (VLS) cells.¹⁰²

The Navy's other modern destroyer, the *Zumwalt* class, was never intended as a cruiser replacement and continues operations and testing to employ it as a long-range strike platform. The *Zumwalt* class was envisioned as bringing advanced capabilities to the fleet, but the program has suffered technological problems and cost overruns, and the Navy has ended future procurement. The three that have already been purchased and are being built include the *Zumwalt* (DDG-1000) and *Michael Monsoor* (DDG-1001), which have been commissioned into service, and the *Lyndon B. Johnson* (DDG-1002), which is completing checks and installation of hypersonic missile capable-VLS.¹⁰³ In September 2022, the *Zumwalt* had conducted its first (albeit truncated) deployment to Seventh Fleet's Western Pacific area of operations.¹⁰⁴ The *Michael Monsoor* has completed combat system installation, and the Navy had been planning to deploy her to the Western Pacific by the end of 2025.¹⁰⁵

To reach 355 ships by 2034, the Navy plans several class-wide service life extensions, notably the extension of the DDG-51-class's service life from 35 to 40 years and modernization of older hulls. The FY 2020 budget included \$4 billion for modernization of 19 destroyers from FY 2021 through FY 2024.¹⁰⁶ Since publication of the *2024 Index*, the Navy has expanded this to a 20-ship \$17 billion modernization plan that includes a major electronic warfare

upgrade (AN/SLQ-32(V)7 Block III). The first destroyer undergoing this upgrade is the *Pinkney*, which was nearing completion in late 2024, to be followed by *James E. Williams* (DDG-95); *Chung Hoon* (DDG-93); and *Halsey*.¹⁰⁷ These electronics and sensor upgrades would be critical for combat operations in the Western Pacific against China's modern military.

Small Surface Combatants. The Navy's small surface combatants consist principally of the *Avenger*-class mine countermeasures (MCM) ship; the Littoral Combat Ship (LCS); and the *Constellation*-class frigate (FFG), which began production in 2021. In January 2021, the Navy halted production of the mono-hull LCS *Freedom* variant until issues involving the design of its propulsion system could be resolved. After that decision was made, in April 2023, the final *Freedom* variant was launched.¹⁰⁸ In the meantime, the top speed of affected ships (currently 40-plus knots) is reportedly limited to 34 knots.¹⁰⁹ Under the Navy's FY 2020 30-year shipbuilding plan, the fleet of 23 LCSs was expected to grow to 34 and be joined by 18 frigates by FY 2034.¹¹⁰ Since then, the Navy has reversed course and terminated the LCS anti-submarine mission module program (10 units originally planned) and plans to decommission the remaining nine *Freedom* mono-hull variants.¹¹¹

On August 20, 2020, the Navy decommissioned three of its aging *Avenger*-class MCM ships, leaving eight in service overseas in Sasebo, Japan, and Manama, Bahrain. These represent the only ship class dedicated to countering the mine threat.¹¹² The current long-range shipbuilding plan confirms that the Navy intends to operate four of these aged MCMs through FY 2027; four MCMs based in Bahrain are to be decommissioned in FY 2025.¹¹³

As the MCMs are retired, the Navy is relying on the development of LCS mine countermeasure mission packages to provide this capability. At an April 2022 webinar, the CNO indicated that these mission modules were on track to reach initial operational capability (IOC) by the end of 2022.¹¹⁴ Since then, the Navy has canceled its ASW mission modules because of insurmountable engineering challenges, and on May 1, 2023, it announced that the MCM modules had achieved IOC.¹¹⁵ In March 2025, two LCS (*Santa Barbara* and *Canberra*) deployed for the first time with operational ASW mission modules.¹¹⁶ In an unanticipated move, the

Navy began to arm LCS with the naval strike missile, giving these ships a long-range anti-ship capability that they had lacked despite notable operations by the class in the South China Sea.¹¹⁷ On December 9, 2021, the San Diego–based *Independence*-variant *Oakland* received this new capability.¹¹⁸

Installation and procurement of surface warfare modules and associated surface-to-surface missile modules (LCS SSMM) are progressing; the procurement of 18 LCS SSMM planned for FY 2024 included offensive and defense systems and associated munitions.¹¹⁹ In fall 2024, the Navy executed a rapid upgrade to the LCS SSMM capable of countering unmanned aircraft systems (C-UAS) drones. The Navy stated that “[r]ecent events in the U.S. 5th Fleet Area of Responsibility (AoR) underscore the importance of equipping our warships with up-to-date C-UAS systems to keep emerging threats at bay.”¹²⁰

Rather than procuring additional LCS, the Navy has been focused on a new frigate. On April 30, 2020, the Navy awarded Fincantieri a \$795 million contract to build the lead ship of the new *Constellation*-class frigate at its Marinette Marine shipyard in Wisconsin based on a proven design that is currently in service with the French and Italian navies.¹²¹ Plans are for the frigate to perform as a multi-mission warship with 32 VLS cells, as many as 16 containerized naval strike missiles (NSM), and one helicopter.¹²² In June 2023, 90 percent of functional design and 80 percent of detail design work had been completed despite construction having already begun, adding risk to the program that is now seen in delays and cost increases.¹²³

In May 2021, the Navy contracted for the second ship in the class, the USS *Congress* (FFG-63).¹²⁴ The Navy purchased a third ship in FY 2022 with a total of six procured through FY 2024. The plan is for 20 frigates built at two shipyards,¹²⁵ but the Navy has yet to decide on a second shipyard to begin construction of frigates that was supposed to begin in FY 2023.¹²⁶ Early in 2024, the Secretary of the Navy directed a 45-day shipbuilding review in large part because of reports of significant delays with the frigate program; the review confirmed a three-year delay with delivery likely in 2029.¹²⁷

Amphibious Ships. Then-Commandant of the Marine Corps General David Berger issued his “Commandant’s Planning Guidance” in July 2019 and “Force Design 2030” in March 2020. Both documents signaled a break with past Marine Corps

requests for amphibious lift, specifically moving away from the requirement for 38 amphibious ships to support an amphibious force of two Marine Expeditionary Brigades (MEB).¹²⁸ The Commandant envisioned a larger yet affordable fleet of smaller, low-signature amphibious ships—the Landing Ship Medium (LSM)¹²⁹—that enable littoral maneuver and associated logistics support in a contested theater.¹³⁰ As of February 2026, the Secretary of the Navy had indicated that he intends to cancel the *Constellation*-class frigate.

However, the amphibious fleet remains centered on fewer large ships, and the Commandant’s vision still remains years away from being realized with Congress holding the line at “not less than 31 operational amphibious warfare ships.”¹³¹ The Marine Corps did not provide an annual report in 2024 regarding the progress of Force Design 2030, but the Commandant of the Corps did commit to the effort on May 16, 2024, before Congress.¹³² The reconciliation bill passed on July 3, 2025, included orders for nine Medium Landing Ships (formerly known as the LSM), which are intended to meet Marine Corps requirements for littoral regiments operating in the first island chain.¹³³ Regardless of such commitments, however, until the Navy can provide the Marine Corps with needed sealift, whether Force Design will be fully implemented will remain an open question.

The Navy’s Future Naval Force Study (FNFS)¹³⁴ and December 2020 30-year shipbuilding plan acknowledged the growing importance of the LSM, which will have to be produced rapidly and in sufficient numbers to actualize the naval forces’ distributed concepts of operations (for example, Marine Littoral Regiments and Distributed Maritime Operations). The need for 18 LSM was further affirmed in June 2023 with the most recent Battle Force Ship Assessment and Requirement (BFSAR), also called Force Design 2045.¹³⁵

According to the most recent long-range shipbuilding plan, issued in March 2024, the Navy is developing the LSM. This is a change from plans referenced in the *2024 Index* to purchase the first LSM in FY 2025.¹³⁶ The Marine Corps had intended to have the ship under contract by the summer of 2022, but because of delays, it has begun to use alternative platforms to train and work out operational concepts so that it will be ready when the ship eventually is delivered.¹³⁷

As of October 1, 2025, the Navy had nine amphibious assault ships in the fleet (seven *Wasp*-class LHD and two *America*-class LHA); 13 amphibious transport docks (LPD); and 10 dock landing ships (LSD).¹³⁸ The FY 2021 budget included \$250 million in additional funds to accelerate construction of LHA-9 following the July 2020 catastrophic fire on *Bonhomme Richard* (LHD-6).¹³⁹ The decision to decommission the damaged ship further exposed limitations in shipyard capacity, as repairs would have had a negative effect on other planned shipbuilding and maintenance.¹⁴⁰

In December 2022, construction began on the USS *Fallujah* (LHA-9), which, like the *Bonhomme Richard*, is to be configured for F-35B joint strike fighters and MV-22 Osprey tilt-rotor aircraft at a cost of \$2.4 billion.¹⁴¹ The employment of advanced F-35B fighter jets is limited to two *America*-class amphibious warships (one homeported in Japan) and is a critical capability against Chinese advanced weapon systems.¹⁴²

The Navy's LSDs, the *Whidbey Island*-class and *Harpers Ferry*-class amphibious vessels, are scheduled to reach the end of their 40-year service lives beginning in 2025. The USS *Harrisburg* (LPD-30), Flight II of the *San Antonio*-class Landing Platform Dock amphibious ships, began construction in April 2020 and when delivered will be the first of 13 ships to replace the legacy LSD ships. The 12th Flight I *San Antonio*-class ship (LPD 28) was delivered six months later than reported in the *2022 Index*.¹⁴³ LPD-32 is the most recently purchased of the 13 originally envisioned *San Antonio*-class Flight IIs.

Decisions made in 2014 and 2018 committed the Navy to building less capable and cheaper Flight II LPDs to replace the aging *Harpers Ferry*-class and *Whidbey Island*-class amphibious warships.¹⁴⁴ The Marine Corps has sought procurement of LPD-33 and had kept it at the top of its unfunded requirements list.¹⁴⁵ A three-way dispute involving the then-Secretary of Defense's staff, the Navy, and the Marine Corps over the future of the large amphibious warship fleet remains contentious and unresolved,¹⁴⁶ but three of these Flight II two LPDs are nevertheless currently under contract.¹⁴⁷

Unmanned Systems. The Navy does not include unmanned ships when counting the size of its battle force. Previous long-range shipbuilding plans envisioned the purchase of 13 Large Unmanned Surface Vessels (LUSV); one Medium Unmanned

Surface Vessel (MUSV); and eight Extra Large Undersea Unmanned Vessels (XLUUV) by FY 2026.¹⁴⁸ That plan has been shelved, but the Navy continues to test and evaluate numerous prototype unmanned platforms.

The FY 2025 budget deferred procurement of LUSV for two years to FY 2027 with procurement increasing to three per year by FY 2029.¹⁴⁹ On May 18, 2021, an experimental LUSV, the *Nomad*, transited the Panama Canal on its way to Surface Development Squadron (SURFDESRON) 1 based in California.¹⁵⁰ SURFDESRON 1 operates MUSV *Sea Hunter* prototypes, LUSV, and the *Zumwalt* destroyer to advance the Navy's unmanned surface warship capabilities.¹⁵¹ Since publication of the *2024 Index*, the Navy has continued to make notable progress with its unmanned fleet to include a months-long deployment to the Western Pacific with stops in Japan, Guam, and Australia by a flotilla of four unmanned vessels.¹⁵²

The Navy reached a significant milestone in September 2021 when its small fleet of unmanned surface ships launched and hit a target with an SM-6 interceptor missile.¹⁵³ After years in a laboratory and in controlled at-sea navigational tests, unmanned ships are now deploying in operational settings. That same month, Task Force 59, based in the Persian Gulf and comprised of smaller unmanned drones and vessels, conducted International Maritime Exercise 2022 (IMX22), an exercise in the Red Sea that involved 10 nations and more than 80 unmanned platforms.¹⁵⁴ In a sign of growing confidence, the Navy announced that it will establish a similar unmanned vessel task force at Fourth Fleet based in Mayport, Florida.¹⁵⁵ While reporting does not indicate that this task force has been established, Fourth Fleet has conducted its first manned-unmanned platform exercise called Southern Spear to refine tactics important in monitoring and interdicting such illicit maritime activities as drug trafficking and illegal fishing.¹⁵⁶

Logistics, Auxiliary, and Expeditionary Ships. Expeditionary support vessels are highly flexible platforms of two types: those that are used for prepositioning and sustaining forward operations and others that are used for high-speed lift in uncontested environments. The Navy has five of the former (Expeditionary Sea Base [ESB] vessels) and 14 of the latter (shallow-draft Expeditionary Fast Transport [EPF] vessels).

In March and April 2022, ESB *Hershel Williams* (ESB 4) demonstrated the versatility of these ships during maritime security missions with African coast guards and navies. In August 2021, it conducted a counter-piracy exercise with the Brazilian navy. At the same time, China was attempting to secure a base in Equatorial Guinea.¹⁵⁷ The Navy christened ESB 6, USNS *John L. Canley*, on June 25, 2022.¹⁵⁸ ESB 7, USNS *Robert E. Simanek*, began construction in San Diego, California, with its keel laid in October 2021.¹⁵⁹ *Canley* entered service with the Navy on February 17, 2024, and *Simanek* joined the fleet on September 12, 2024.¹⁶⁰

With their shallow draft and versatile cargo capacity, EPFs offer unique capabilities that are well suited to austere but uncontested waters. Specifically, these ships can transport 600 short tons of military cargo (for example, main battle tanks) 1,200 nautical miles at 35 knots. In March 2021, the Navy revised its contract with Austal USA for \$235 million to modify EPF 14 and the future EPF 15 to enable them to serve as high-speed hospital ships with the capability of embarking a V-22 tilt-rotor aircraft.¹⁶¹ The keel for EPF 14 configured as a hospital ship was laid on January 26, 2022, and construction of EPF 15 in the same configuration commenced the same month.¹⁶² EPF 14, USNS *Cody*, was launched on March 20, 2023, and as of January 11, 2024, was in active service with the Military Sealift Command.¹⁶³

The Navy's Combat Logistics Force (CLF) includes dry-cargo and ammunition ships (T-AKE); fast combat support ships (T-AOE); and oilers (AO). The CLF provides critical support, including at-sea replenishment, that enables the Navy to sustain the fleet at sea for prolonged periods. The Navy's future oiler *John Lewis* (T-AO 205) was procured in 2016 and launched five years later on January 12, 2021; 20 ships of this class are planned.¹⁶⁴ However, because of a flooding incident at the graving dock, delivery of *John Lewis* was delayed, and this caused cascading delays of 12 to 15 months in construction of the second through sixth ships.¹⁶⁵ The lead ship of the class, *John Lewis*, was delivered to the Navy in July 2022¹⁶⁶ and conducted its first at-sea refueling in March 2025.¹⁶⁷ As of February 24, 2026, four oilers of this class had been delivered.¹⁶⁸

The capability of oilers has increased in importance since Secretary of Defense Lloyd Austin's March 7, 2022, decision to dismantle Red Hill fuel

storage facilities in Hawaii. A plan specifying how the Navy will mitigate the loss of these massive Pacific fuel storage facilities was due by May 31, 2022, but details are scant.¹⁶⁹ Given the delays in construction of oilers and the increased demand for them without Red Hill, it remains unlikely that the Navy could meet the fleet's operational energy needs in a high-tempo crisis.¹⁷⁰ This risk was made clear on September 25, 2024, by the grounding of the oiler *Big Horn* and its impact on combat operations against the Houthis by the *Abraham Lincoln* carrier strike group, which was being supported by the *Big Horn*.¹⁷¹

Strike Platforms and Key Munitions. The FY 2025 budget continues the Navy's focus on long-range offensive strikes launched from ships, submarines, and aircraft. A notable capability enhancement, Conventional Prompt Strike (CPS), a maneuverable hypersonic non-nuclear weapon for long-range strikes, was set to deploy initially in FY 2025 on the *Zumwalt*-class destroyer but has been delayed until FY 2027.¹⁷² Block V Maritime Strike Tomahawk (MST) kits with improved targeting procurement are entering their sixth year.¹⁷³ In late 2024, the Navy revealed its plan to procure 1,345 of these anti-ship cruise missiles.¹⁷⁴

To counter the threat posed by the Chinese PL-15 long-range air-to-air missile, which has an operational range of 186 miles, the Navy is working with the Air Force to develop the AIM-120 Advanced Medium-Range missile, the operational range of which has not been made public.¹⁷⁵ In March 2021, the Air Force reported a record long-range kill of a drone target by this developmental missile from one of its F-15C fighters.¹⁷⁶ Development of such a capability appears to be progressing. The Navy and Air Force are working on an extended range AIM-120E missile, and photos online point to even more capable weapons like the so-called AIM-260 or the modified SM-6 for air launch called the AIM-174B.¹⁷⁷

Shore-Based Anti-Ship Capabilities. Following the August 2019 U.S. withdrawal from the Intermediate-Range Nuclear Forces (INF) Treaty, new intermediate-range (500–1,000 miles) conventional ground-launched strike options became politically viable. This is especially important in Asia where such capable missiles deployed to the first island chain would have great relevance in any conflict with China. In March 2025, the Secretary of Defense announced the Marine Corps' deployment

to the Philippines of an anti-ship land launch cruise missile, the Naval Strike Missile (NSM) known as NMESIS, with its sensors and launcher.¹⁷⁸ The development of such capabilities is driven by the need to hold at risk China's rapidly modernizing and growing Navy.

A first step was taken with the FY 2020 budget that included \$76 million to develop ground-launched cruise missiles.¹⁷⁹ The FY 2021 budget included an additional \$59.6 million to procure 36 ground-based anti-ship missiles.¹⁸⁰ Confidence spiked when a photo of the launch of a U.S. Marine Corps truck-mounted Naval Strike Missile—ostensibly part of NMESIS—was released in April 2021.¹⁸¹ The FY 2023 budget funded low-rate initial production of 115 Naval Strike Missiles and associated development of Marine Corps platoon-level targeting systems.¹⁸² The FY 2025 budget continues to support procurement of these weapon systems: 12 NSM missiles for the Navy and 90 for the Marine Corps along with 22 shore-launched tactical Tomahawk missiles.¹⁸³ Ukraine's use of shore-based anti-ship missiles to sink Russia's Black Sea flagship, the *Moskva*, in April 2022 has sparked renewed interest in such systems.

Electronic Warfare (EW). The purpose of electronic warfare is to control the electromagnetic spectrum (EMS) by exploiting, deceiving, or denying its use by an enemy while ensuring its use by friendly forces. It is therefore a critical element of successful modern warfare. The final dedicated EW aircraft, the EA-18G Growler, was delivered in July 2019, meeting the Navy's requirement to provide this capability to nine carrier air wings (CVW), five expeditionary squadrons, and one reserve squadron.¹⁸⁴ Anticipating the EA-18G's retirement in the 2030s, the Navy has been exploring follow-on manned and unmanned systems, but no new developments have been reported since publication of the *2024 Index*.¹⁸⁵ To ensure that the EA-18G remains relevant on the battlefield until 2030, an anticipated upgrade or Block II modification with the improved Next Generation Electronic Attack Unit (NGEAU) is being pursued. A significant enhancement of the Navy's electronic warfare capability—IOC and combat use of a new jammer, AN/ALQ-249(V)1 (NGJ-MB)—was achieved in 2024.¹⁸⁶

The Navy's earlier proposal to retire all of its expeditionary electronic attack squadrons by FY 2025 came as a surprise.¹⁸⁷ Unless there is a replacement

capability, retirement of these aircraft removes the EW coverage provided by these units from forward airfields, shifting the support burden to nearby naval platforms and the other services. Given this uncertainty, Congress stipulated in the FY 2023 NDAA that the Secretary of the Navy may not retire an EA-18G aircraft until September 30, 2027, and required that no later than 180 days after the NDAA's enactment, "the Secretary of the Navy and the Secretary of the Air Force shall jointly submit to the congressional defense committees a report that includes a strategy and execution plan for continuously and effectively meeting the airborne electronic attack training and combat requirements of the joint force."¹⁸⁸ The status of that report is unknown, and the most recent Defense Department Strategic Management Plan includes few details.¹⁸⁹

Air Early Warning. The E-2D forms the hub of the Naval Integrated Fire Control Counter Air (NIFC-CA) system and provides critical theater air and missile defense capabilities. The Navy's FY 2021 budget supported the procurement of four aircraft with an additional 10 to be procured over the following two years.¹⁹⁰ The FY 2023 budget completed this plan by including procurement of the final five new E-2D aircraft, which are important air control platforms.

High Energy Laser (HEL). More than a year of sustained naval combat operations against the Houthis, who have used drones and cruise missiles to attack vessels in the Red Sea, has demonstrated the value of laser defense systems. These HEL systems provide the potential to engage targets or shoot down missiles without being limited by how much ammunition can be carried onboard ship. An early milestone was achieved when USS *Portland* (LPD-27) used its HEL Weapon System Demonstrator to shoot down an unmanned aerial vehicle (UAV) over the Pacific on May 16, 2020.¹⁹¹ This was followed by the Navy's decision to begin installation of a HEL system—the 60 kW High-Energy Laser with Integrated Optical Dazzler and Surveillance (HELIOS)¹⁹²—on destroyers in 2021 beginning with the USS *Preble*.¹⁹³

HELIOS is a scalable laser system that is integrated into the ship's weapons control and radar systems and can dazzle and confuse threats, disable small boats, or shoot down smaller air threats. The Navy's FY 2024 budget sustained the installation of HELIOS on the USS *Preble* and development of a

100 kW HEL demonstrator system on the USS *Portland*.¹⁹⁴ The FY 2025 budget continues modest investments in this capability: \$5.7 million to include at-sea testing on *Preble*.¹⁹⁵

In April 2022, the Navy demonstrated the ability of its Layered Laser Defense HEL system to shoot down a drone simulating a cruise missile.¹⁹⁶ Successful tests of this sort and the ongoing deployment of HELIOS on the destroyer *Preble* will be followed by installation of a much stronger 100 kW laser on *Portland* (LPD-27) that approaches the power needed for missile defense.¹⁹⁷ However, until field testing against meaningful threat platforms is conducted across a range of weather conditions, the effectiveness of such systems will remain unproven. This effort is further complicated by the Navy's lack of a range on which to test these systems under real-world combat conditions until the Army's White Sands Missile Range updates are completed.¹⁹⁸

Command and Control. Networked communications are essential to successful military operations. The information passed over these networks includes sensitive data on such subjects as targeting and logistics, and this makes cyber security, communications, and the information systems that generate and relay this information critical elements of the War Department's information enterprise.

On October 1, 2020, the CNO signed two memos establishing Project Overmatch. The goal of Project Overmatch was to achieve situational awareness and effective command and control of a geographically dispersed naval force. In his two memos, the CNO directed that investments be made to deliver network architectures, unmanned capabilities, and data analytics to ensure that the Navy can operate and dominate in a contested environment.¹⁹⁹ The CNO also directed the Navy to leverage related Air Force efforts on the Joint All-Domain Command and Control program (JADC2),²⁰⁰ now a Joint Force effort involving all of the military branches.

Remarkably, despite the significance of this effort, little has been publicly released on Project Overmatch. It is known to involve three classified funding lines with initial deployment or program capabilities slated for 2023, but no updates have been provided.²⁰¹ In unofficial venues, it has been hinted that the first platform to employ JADC2 capabilities will be an aircraft carrier, but public statements indicate that the objective is to connect all platform data flows from across the U.S. Joint Force

(potentially including partner forces), analyze them for classification, and make predictive targeting recommendations.

Since those reports in 2023, there has been no verified reporting to indicate that this deployment has occurred, although Rear Admiral Doug Small, Commander of Naval Information Warfare Systems Command, declared in April 2024 that the Navy "is ahead of the [CNO's] objectives" for Project Overmatch.²⁰² If successful, artificial intelligence paired with resilient communications and "big data" analytics might enable a key element of Distributed Maritime Operations (DMO).

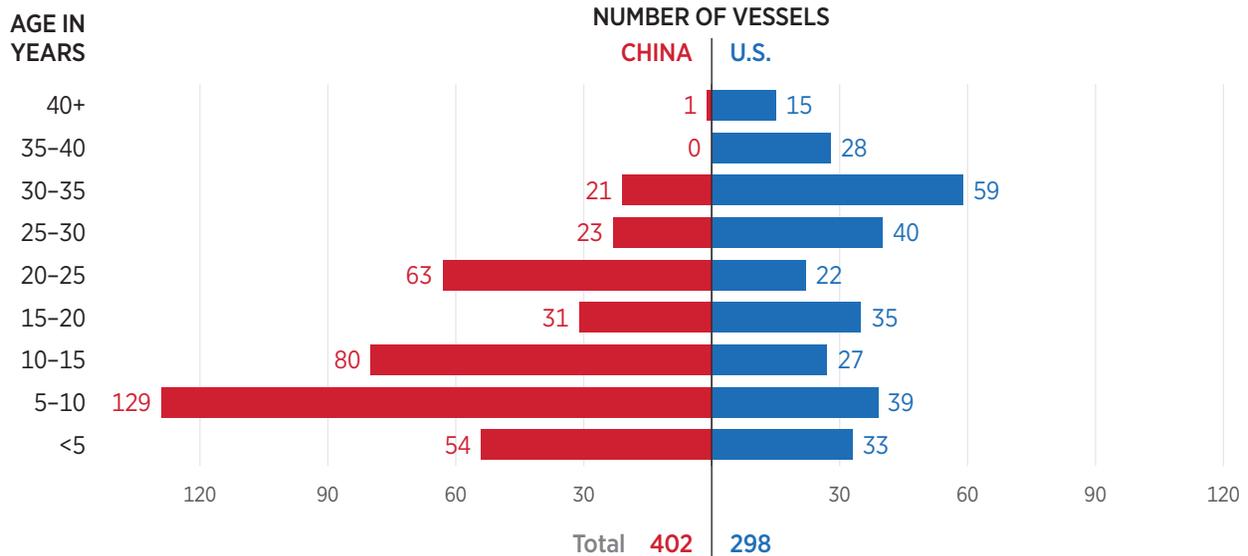
Readiness

In the 1980s, the Navy had nearly 600 ships in the fleet and kept roughly 100 (17 percent) deployed at any one time. On February 2, 2026, the fleet's OPTEMPO was 19.5 percent. With fewer ships carrying an unchanging operational workload, training schedules become shorter and deployments become longer. The commanding officer's discretionary time for training and crew familiarization is a precious commodity that is made scarcer by the increase in operational demands on fewer ships.

FY 2019 marked the first time in 10 years (and the last as of this edition of the *Index*) that DOD and the Navy did not have to operate under a continuing resolution for at least part of the fiscal year.²⁰³ Having a full fiscal year to plan and execute maintenance and operations helped the Navy to continue on its path to restoring fleet readiness. CNO Admiral John Richardson explained to the Senate Armed Services Committee in April 2018 that it would take until late 2021 or 2022 to restore fleet readiness to an "acceptable" level if adequate funding was maintained; without "stable and adequate funding," it would take longer.²⁰⁴ Unfortunately, the Navy began FY 2020 under another continuing resolution that delayed planned maintenance for the USS *Bainbridge* (DDG 96) and USS *Gonzalez* (DDG 66), revealing yet again that for the Administration and Congress, the need to correct deficiencies in America's naval power was not enough to ensure that they delivered a budget on time.²⁰⁵

Given this recent history and the demands of unplanned and urgently needed ship repairs brought about by such incidents as the October 2021 grounding of the submarine *Connecticut*, the Navy remains deficient in its ability to return ships to sea.

Comparison of Chinese and U.S. Naval Fleets in the Pacific



SOURCES:

- Manfred Meyer, *Modern Chinese Maritime Forces*, 2nd ed. (Lancaster, Pa.: Admiralty Trilogy Group, April 2022).
- U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China, 2024: Annual Report to Congress*, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF> (accessed January 21, 2026).
- Werner Globke, ed., *Warships of the World 2020–2022* (Bonn: Bernard & Graffe, 2020).
- U.S. Navy, “Fact Files,” <https://www.navy.mil/Resources/Fact-Files/> (accessed January 21, 2026).
- U.S. Navy, Naval Sea Systems Command, Naval Vessel Registry, “Ship Battle Forces,” <https://www.nvr.navy.mil/nvr/getpage.htm?pagetype=shipbattleforce> (accessed January 21, 2026).

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Impact of COVID-19. The eruption of the COVID-19 pandemic in 2020 caused many problems for the U.S. Navy. The USS *Theodore Roosevelt* (CVN 71), for example, was forced to quarantine for 55 days in Guam; the major biannual international Rim of the Pacific Exercise (RIMPAC) was scaled down; 1,629 reservists were called to active duty to backfill high-risk shipyard workers conducting critical maintenance; and the Navy was restricted to using “safe haven” COVID-free ports. In May 2020, the CNO said that “shipyards saw productivity drop to about 70 percent during March and April because many of the workers there are older and more vulnerable to the COVID-19 disease.”²⁰⁶

Given vaccination rates and the ebbing danger, the Navy appears to be past the COVID epidemic, and its response to account for and mitigate the

effects of COVID-driven restrictions has been a success overall. According to the Navy’s February 10, 2023, final COVID report, total cumulative COVID cases among active-duty uniformed Navy personnel numbered 109,310 with 17 deaths, 3,350 unvaccinated servicemembers remaining on active duty, and a total of 1,878 sailors separated for refusing the vaccine.²⁰⁷ Previous reporting indicated that 214 religious waivers were granted. Ideally, the Navy would implement lessons learned from this experience to prepare for future pandemics and biological attacks, but there is as yet little evidence that the service has conducted such a study, implemented new pandemic guidelines, or sought new capabilities to combat a future pandemic.

Maintenance and Repairs. Naval Sea Systems Command completed its Shipyard Optimization

Total Launch Capacity for Long-Range Strike or Anti-Ship Missiles

CATEGORY	U.S.	CHINA	ADVANTAGE %
Anti-Ship/Strike Missiles	9,194	3,782*	U.S. 158%
Torpedo Tubes	288	476	China 65%
Submarine Launched Ballistic Missiles	280	72	U.S. 289%
Troop Transport	30,623	16,640	U.S. 84%
Fixed Wing Aircraft	857	131	U.S. 554%

* Includes 550 launchers for DF-21D (CSS-5 mod 5); DF-26 (CSS-18); and DF-27 (under development).

NOTES: For U.S. vertical-launch systems, figures shown above assume all cells are carrying long-range strike weapons; actual load-out of strike weapons would be less because ships would have significant additional air and missile weapons loaded. For troop transport, figures reflect totals only for naval amphibious warships and do not include repurposed commercial shipping vessels.

SOURCES:

- Manfred Meyer, *Modern Chinese Maritime Forces*, 2nd ed. (Lancaster, Pa.: Admiralty Trilogy Group, April 2022).
- U.S. Department of Defense, *Military and Security Developments Involving the People's Republic of China, 2024: Annual Report to Congress*, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF> (accessed January 21, 2026).
- Werner Globke, ed., *Warships of the World 2020–2022* (Bonn: Bernard & Graffe, 2020).
- U.S. Navy, “Fact Files,” <https://www.navy.mil/Resources/Fact-Files/> (accessed January 21, 2026).
- U.S. Navy, Naval Sea Systems Command, Naval Vessel Registry, “Ship Battle Forces,” <https://www.nvr.navy.mil/nvr/getpage.htm?pagetype=shipbattleforce> (accessed January 21, 2026).

and Recapitalization Plan in September 2018.²⁰⁸ Seven years later, the improvement of public shipyard capacities is not progressing as rapidly as it should. According to the Navy’s Shipyard Infrastructure Optimization Program (SIOP), as of August 2025, “[n]early 50 facilities projects, valued at more than \$1 billion, [had] been completed,” “[o]ver 300 items of industrial plant equipment, valued at \$700 million, [had] been delivered,” and “[n]early 50 construction projects, valued at over \$6 billion, [were] in progress, including three new dry docks.” In addition, “Pearl Harbor’s dry dock project will add a Virginia-class submarine dry dock capability in the Pacific Ocean.”²⁰⁹

Attempts by Congress to accelerate this effort have not been effective.²¹⁰ At a May 10, 2022, Senate hearing, it became apparent both that the original costs were significantly underestimated and that timelines were slipping. There was measured improvement in 2024 with 67 percent of warship maintenance being completed on time, up from 41 percent in 2023 and 36 percent in 2022,²¹¹ but a

January 2025 GAO report emphasizes such “persistent challenges” as “limited spare parts, a lack of sufficient and qualified maintenance personnel, and a continual need to defer maintenance.”²¹² Overall, the capacity to sustain the fleet remains far from adequate.

Training, Ranges, and Live-Fire Exercises. Ship and aircraft operations and training are critical to fleet readiness. The Navy has sought to meet fleet readiness requirements by funding 58 underway days for each deployed warship and 24 underway days for each non-deployed warship per fiscal quarter.²¹³ As the Navy’s limited fleet must contend with a daunting Chinese fleet, wartime contributions from the U.S. Coast Guard will have greater importance. However, GAO audits indicate that defense readiness is a consistently low priority. Between 2011 and 2020, the Coast Guard devoted only 4 percent of its operational hours to defense readiness at an average of 7 percent of total operational expense.²¹⁴

As the *Big Horn* grounding makes clear, the Navy relies on logistics ships crewed by U.S. merchant

mariners. But here too there is high risk; due to a lack of ready merchant mariners, the Military Sealift Command has idled 17 logistics ships (oilers and dry-stores ships). To ensure that it is ready for a potential war in the Pacific, the nation will need a ready naval force to include the Navy, Coast Guard, and Merchant Marine.²¹⁵

To improve warfighting proficiency, the Navy is expanding and updating instrumentation of the training range at Naval Air Station Fallon, Nevada, to enable practice with the most advanced weapon systems.²¹⁶ The National Defense Authorization Act for Fiscal Year 2023 details the way ahead with expectations of future resourcing to achieve the needed improvements.²¹⁷ This training range fits into the larger five-year Pacific Deterrence Initiative (PDI) that, led by Indo-Pacific Command, is intended partly to transform the way the Navy trains for high-end conflict and improve training with U.S. allies in the Pacific.²¹⁸

Of particular importance to the Navy are PDI investments to modernize the Pacific Missile Range Facility (PMRF); the Joint Pacific Alaska Range Complex (JPARC); and the Combined/Joint Military Training (CJMT) Commonwealth Northern Mariana Islands in order to improve training for operations across all domains: air, land, sea, space, and cyber.²¹⁹ To this end, the FY 2025 request for PDI amounts to \$9.9 billion, which includes funding to improve training and testing ranges such as those in Guam, Alaska, and Kwajalein Atoll.²²⁰ This continues the FY 2024 budget's \$9.1 billion for PDI (\$3 billion more than in FY 2023). Especially important are long lead time infrastructure projects in Guam and Tinian in the northern Marianas.

Finally, not forgotten are the 2017 collisions of the USS *John S. McCain* (DDG 56) and USS *Fitzgerald* (DDG 62) in which 17 sailors were lost. Findings

of the subsequent investigations, which highlighted the importance of operational risk management and unit readiness, remain relevant.²²¹ To ensure that these tragic events are not repeated, the Secretary of the Navy's *Strategic Readiness Review* made several broad institutional recommendations:

- “The creation of combat ready forces must take equal footing with meeting the immediate demands of Combatant Commanders.”
- “The Navy must establish realistic limits regarding the number of ready ships and sailors and, short of combat, not acquiesce to emergent requirements with assets that are not fully ready.”
- “The Navy must realign and streamline its command and control structures to tightly align responsibility, authority, and accountability.”
- “Navy leadership at all levels must foster a culture of learning and create the structures and processes that fully embrace this commitment.”²²²

A reminder that the above recommendations remain relevant was the October 2021 grounding of the submarine *Connecticut* in the South China Sea and the September 2024 grounding of fleet oiler *Big Horn*. The subsequent investigation found that the *Connecticut* incident was avoidable even while operating in poorly surveyed waters—a reminder of the risk as well as the vigilance required at sea.²²³ As of the time this edition of the *Index* was being prepared, the Navy has not made public any statement regarding the causes of or remedies for the conditions that contributed to the grounding of *Big Horn*.

Scoring the U.S. Navy

Capacity Score: Very Weak

This *Index* assesses that the Navy needs a battle force consisting of 400 manned ships to do what is expected of it today. The Navy's current battle force fleet of 287 ships and intensified operational tempo combine to reveal a service that is much too small relative to its tasks. Contributing to a lower assessment is the Navy's persistent inability to arrest and reverse the

continued diminution of its fleet as adversary forces grow in number and capability. If it continues on its current trajectory, the Navy will shrink further to 280 ships by 2027. Depending on the Navy's ability to realize aggressive growth, reverse early decommissioning plans, increase its end strength, and develop creative service life extensions, its capacity score will probably remain “very weak” for the foreseeable future.

Capability Score: Marginal

The Navy's overall capability score remains "marginal" with downward pressure as the Navy's technological edge narrows against peer competitors China and Russia. The combination of a fleet that is aging faster than old ships are being replaced and the rapid growth of competitor navies with modern technologies has only intensified the danger for U.S. naval power. Without meaningful progress in fielding systems that are able to defend against an array of threats, greater integration of unmanned systems into the fleet, and development of a family of new long-range weapons, especially in air-to-air combat, the Navy's capability score could well decline to "weak" in the next *Index*. However, the Navy appears to be poised for rapid progress, at least with unmanned systems, with the standing up of operational units in Fourth Fleet and Third Fleet.

Readiness Score: Very Weak

The Navy's readiness score is decremented to "very weak." This is due to the Navy's persistent struggle to recapitalize antiquated, inadequate maintenance infrastructure and expand its shipyard workforce to meet current needs. The effectiveness of training and exercises measured against China will be an increasingly critical metric in this score, with particular importance assigned to how the Navy applies combat lessons from the Red Sea to a war against China. Finally, the decrement to "very weak" is due in large part to the sidelining of 17 logistic ships that are critical to sustaining combat operations. Should current positive trends in recruitment continue, added emphasis on fleet-level exercises be realized, and operational lessons from combat in the Red Sea be implemented across the Navy for a China threat, then this score will begin to trend upward. But achieving this needed improvement will require considerable Department of War and congressional action in the near term.

Overall U.S. Navy Score: Weak

The Navy's overall score in the *2026 Index* remains "weak," driven by lower scores in capacity and readiness. To correct this trend, the Navy will have to eliminate several readiness and capacity bottlenecks while seeing to it that America has an operational fleet with the numbers and capabilities postured to counter Russian and Chinese naval advances. There is added urgency given both that

China is aggressively posturing itself to obtain maximum advantage over Taiwan and that it will be several years before the U.S. Navy's efforts to improve itself can achieve the desired results.

Policy Recommendations

As already stated, resources in the form of budgets are critical but alone will not improve the Navy's capacity, capability, and readiness to win the next major war—a war that by all accounts appears to be becoming more and more likely with China over the fate of democratic Taiwan. This potential as well as the Chinese Communist Party's military threat must inform action to put more firepower in Asia by 2027. With this in mind, the United States needs to:

- **Reestablish First Fleet** focused on waging a maritime counterinsurgency in the South China Sea, bolstering the U.S. military presence and access that are needed to sustain a prolonged wartime effort, and provide oversight to accelerate the arrival of the first American submarine at HMAS Stirling as part of the AUKUS initiative.²²⁴
- **Commit to a sustained and assured procurement plan** for growing the fleet while also expanding naval shipbuilding industrial capacity.²²⁵
- **Execute a national shipbuilding program.** Getting the shipyards and workforce needed to build and repair warships requires a national effort. The Navy must integrate its efforts with those of the U.S. Coast Guard, the Merchant Marine, and the commercial shipping industry. Ensuring that this expanded industrial capacity is ready and secure will necessarily require better efforts to secure the associated supply chains—a task critical to the Navy but also requiring teamwork across government and with industry.²²⁶
- **Open needed new shipyards.** It was originally planned that a second shipyard would be named to build *Constellation*-class frigates in order to meet the Navy's urgent need for this class of warship. The Navy has planned to procure at least 20 of these vessels. At this

U.S. Military Power: Navy

	VERY WEAK	WEAK	MARGINAL	STRONG	VERY STRONG
Capacity	✓				
Capability			✓		
Readiness	✓				
OVERALL		✓			

ABOUT THE ASSESSMENT CATEGORIES

OVERALL ASSESSMENT. The overall assessment of a military service is measured against its ability to perform its respective role in a two-major regional contingency (MRC) scenario. The assessment of the U.S. Marine Corps is sized against a single major regional contingency (MRC) scenario. This benchmark is the *minimum* standard for U.S. hard-power capacity with the understanding that maintenance, operational tempo, training cycles, crisis response, treaty commitments, and/or strategic reserve considerations can cause some forces to be unavailable. Other factors that influence this assessment are the availability of logistical support to enable combat power (fueling ships, supply ships, cargo aircraft, etc.) and the ability to reconstitute combat power for protracted conflict (defense industrial base capacity, etc.).

CAPACITY. The U.S. military must have a sufficient quantity of the right capability or capabilities to meet its mission sets. Capacity (numbers) can be viewed in at least three ways:

- Compared to a stated objective for each category by each service,
- Compared to amounts required to complete various types of operations across a wide range of potential missions as measured against a potential adversary, and
- As measured against a set benchmark for total national capability.

time, the program is facing severe delays, but the design has matured. Construction should begin at a second yard as construction also progresses at the current shipyard in Marinette, Wisconsin. It is also time to break ground on a fifth public shipyard. Until 1996, the Navy had eight public shipyards that conducted all nuclear maintenance on submarines and aircraft carriers. Today, there are four, and nuclear maintenance is behind schedule despite efforts since 2018 to modernize and optimize these yards as part of the Shipyard Infrastructure Optimization Program (SIOP). The Secretary of the Navy would have to notify Congress when a site was selected, and it is estimated that the initial cost of a fifth shipyard would be \$10 billion.²²⁷

CAPABILITY. Examining the capability of a military force requires consideration of:

- The proper tools (material and conceptual) with the design, performance characteristics, technological advancement, and suitability that the force needs to perform its function against an enemy successfully;
- The sufficiency of armored vehicles, ships, airplanes, and other equipment and weapons needed to win against the enemy;
- The appropriate variety of options to preclude strategic vulnerabilities in the force and give flexibilities to battlefield commanders; and
- The degree to which elements of the force reinforce each other in covering potential vulnerabilities, maximizing strengths, and gaining greater effectiveness through synergies that are not possible in narrowly stovepiped, linear approaches to war.

READINESS. While capacity and capability considerations are central to the warfighting ability of the U.S. military, readiness performs a crucial role in determining whether combat power is prepared when it is needed. Factors that are considered include (among others):

- Sufficient staffing levels,
- Fulfillment of training requirements, and
- Age and maintenance of equipment.

- **Get firepower to sea.** China is arming so that it can be ready to wage and win a war with America by 2027—the same time that, unless something is done, the Navy’s at-sea firepower will reach its nadir. At present, there are few options to redress this danger: specifically, rapid deployment of Army and Marine Corps littoral combat forces with long-range weapons to East Asian allies and rapid fielding of armed unmanned platforms. The most viable option today is a ship like the USV (unmanned surface vehicle) *Ranger* that deployed to the Western Pacific in 2023 and in 2021 demonstrated a capability to launch weapons like the SM-6. Orders should be placed at two shipyards of similar design based on lessons learned from the *Ranger*. Arming these platforms and meeting urgent munitions needs will require a block

buy of key naval munitions: Standard Missile-3 (SM-3); Standard Missile-6 (SM-6); Advanced Capability (ADCAP) heavyweight torpedoes; and Tomahawk cruise missiles. The U.S. military's precision-guided munition inventory is classified, but recent expenditures in the Red Sea and in defending Israel from Iranian attack indicate that these inventories are obviously under pressure.²²⁸

- **Accelerate the building of needed submarine tenders and cruisers.** The existing two submarine tenders (AS), both of which are based in Guam, are years beyond their design lifetime, and replacements are critically needed to sustain a forward operating nuclear submarine force in the Western Pacific. The Navy will be retiring its aged submarine tenders *Frank Cable* and *Emory S. Land* in 2029 and 2030, respectively, but it has only just begun to design replacements, which means that the Navy must find assets that can execute the submarine tender mission until a replacement is put to sea, most likely in the next decade. It will also be necessary to accelerate design and begin advance procurement of long lead-time components for CG(X). The Navy's remaining nine *Ticonderoga*-class cruisers will reach the end of their lifespans by 2038. Since 2000, the Navy has attempted to build a replacement that can provide air defense for carrier strike

groups, but the newest *Arleigh Burke*-class destroyers (Flight III) with limited weapons load and space constraints for embarked air defense component command staff at best provide a partial cruiser replacement.²²⁹

- **Execute new fleet-level operations and exercises.** The Navy will fight not as independent units or just as carrier strike groups, but increasingly at a numbered fleet scale comprising over a dozen warships to include robust logistics ships. It is essential that new tactics be practiced and that those tactics and the platforms needed to execute them in war be refined. During the interwar years of the 1920s and 1930s, a series of such exercises ensured that the fleet was ready and able to defeat Imperial Japan in the Pacific. In fact, these exercises ensured that the fleet and its sailors were ready and able to adapt rapidly to every enemy adaptation as the Pacific War progressed.²³⁰

To be clear, aggressive execution of the above recommendations is not a panacea and will only begin to reverse a too-long slide into operational irrelevance. Reviving the nation's Navy and ensuring that peace is sustained with a fleet that is ready and armed to prevail in a war against China will be a decade-long endeavor. A dangerous condition of competition and contest with China is upon us in a new cold war that has no clear endpoint.

Endnotes

1. S. 2296, National Defense Authorization Act or Fiscal Year 2026, 119th Congress, introduced July 15, 2025, Section 4101, <https://www.congress.gov/bill/119th-congress/senate-bill/2296/text> (accessed November 8, 2025).
2. H.R. 1, One Big Beautiful Bill Act, Public Law 119-21, 119th Congress, July 4, 2025, Section 20002, <https://www.congress.gov/119/plaws/publ21/PLAW-119publ21.pdf> (accessed November 8, 2025).
3. U.S. Department of the Navy, Deputy Assistant Secretary of the Navy (Budget), "The Bottom Line: Fiscal Year 2026 Department of the Navy Budget Submission," July 11, 2025, https://www.secnav.navy.mil/fmc/fmb/Documents/26pres/The_Bottom_Line.pdf (accessed November 9, 2025).
4. U.S. Navy, "SECNAV Delivers Remarks at Harvard Kennedy School," September 26, 2023, <https://www.navy.mil/Press-Office/Speeches/display-speeches/Article/3538420/secnav-delivers-remarks-at-harvard-kennedy-school> (accessed November 9, 2025).
5. Associated Press, "Transcript of President Donald Trump's Speech to a Joint Session of Congress," March 4, 2025, updated March 5, 2025, <https://apnews.com/article/trump-speech-congress-transcript-751b5891a3265ff1e5c1409c391fef7c> (accessed November 11, 2025).
6. U.S. Department of the Navy, Office of Budget-2024, "Highlights of the Department of the Navy FY 2025 Budget," DON Budget Card, https://www.secnav.navy.mil/fmc/fmb/Documents/25pres/DON_Budget_Card.pdf (accessed November 9, 2025).
7. U.S. Navy, Office of Budget-2025, "FY 2026 Budget Highlights," DON Budget Card, https://www.secnav.navy.mil/fmc/fmb/Documents/26pres/DON_Budget_Card.pdf (accessed November 9, 2025).
8. U.S. Navy, Maritime Industrial Base Program Staff, "Navy's MIB Program Celebrates Year of Focused Effort to Strengthen Maritime Industrial Capability and Capacity," September 4, 2025, <https://www.navy.mil/Press-Office/News-Stories/display-news/Article/4293743/navys-mib-program-celebrates-year-of-focused-effort-to-strengthen-maritime-indu/> (accessed November 9, 2025).
9. Press release, "U.S. Marine Corps, Joint Force Deploy NMESIS to Batanes for Exercise Balikatan 2025," I Marine Expeditionary Force, April 27, 2025, <https://www.imef.marines.mil/Media-Room/Press-Releases/Announcement/Article/4168249/us-marine-corps-joint-force-deploy-nmesis-to-batanes-for-exercise-balikatan-2025/> (accessed November 9, 2025).
10. Sam LaGrone, "Oiler USNS Big Horn Now in Port in Oman as Congress Raises Questions over Logistics Fleet," U.S. Naval Institute News, September 25, 2024, <https://news.usni.org/2024/09/25/oiler-usns-big-horn-now-in-port-in-oman-as-congress-raises-questions-over-logistics-fleet> (accessed November 9, 2025).
11. News release, "Navy Demonstrates 'Game Changing' System to Rearm Warships at Sea," U.S. Navy, July 24, 2024, <https://www.navy.mil/Press-Office/News-Stories/Article/3848484/navy-demonstrates-game-changing-system-to-rearm-warships-at-sea/> (accessed November 9, 2025).
12. Message from the Chief of Naval Operations to NAVADMIN (Navy Specific Administrative Messages), "Subj[ect]/Establishment of the Robotics Warfare Specialist Rating," NAVADMIN 036/24, February 22, 2024, https://www.mynavyhr.navy.mil/Portals/55/Messages/NAVADMIN/NAV2024/NAV24036.txt?ver=EjDfIojT7afFYSDW_pJcg== (accessed November 9, 2025).
13. Mallory Shelbourne and Sam LaGrone, "Navy Wraps First Unmanned Surface Deployment to WESTPAC," U.S. Naval Institute News, January 16, 2024, <https://news.usni.org/2024/01/16/navy-wraps-first-unmanned-surface-deployment-to-westpac> (accessed November 9, 2025).
14. Press release, "SECNAV Del Toro Directs Comprehensive Navy Shipbuilding Review," U.S. Navy, January 11, 2024, <https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/3643774/secnav-del-toro-directs-comprehensive-navy-shipbuilding-review/#:~:text=> (accessed November 9, 2025).
15. Media handout, "Secretary of the Navy's 45-Day Shipbuilding Review," April 3, 2024, https://cdn01.dailycaller.com/wp-content/uploads/2024/04/3-45-Day-Shipbuilding-Review-Media-Handout-_UPDATED.pdf (accessed November 9, 2025).
16. News release, "Unprecedented: Dwight D. Eisenhower Carrier Strike Group Returns from Combat Deployment," Carrier Strike Group Two (CSG-2), July 15, 2024, <https://www.navy.mil/Press-Office/News-Stories/Article/3838261/unprecedented-dwight-d-eisenhower-carrier-strike-group-returns-from-combat-depl/> (accessed November 9, 2025).
17. U.S. Department of the Navy, U.S. Marine Corps, and U.S. Coast Guard, *Advantage at Sea: Prevailing with Integrated All-Domain Naval Power*, December 2020, <https://media.defense.gov/2020/Dec/17/2002553481/-1/-1/0/TRISERVICESTRATEGY.PDF/TRISERVICESTRATEGY.PDF> (accessed November 9, 2025).
18. See The Heritage Foundation, "The New 2020 Tri-Service Maritime Strategy—'Advantage at Sea,'" *Factsheet* No. 195, January 19, 2021, https://www.heritage.org/sites/default/files/2021-01/FS_195_0.pdf.
19. U.S. Naval Institute Staff, "USNI News Fleet and Marine Tracker: Nov. 3, 2025." <https://news.usni.org/2025/11/03/usni-news-fleet-and-marine-tracker-nov-3-2025> (accessed November 10, 2025).
20. President Joseph R. Biden, Jr., *National Security Strategic Guidance*, The White House, October 2022, <https://bidenwhitehouse.archives.gov/wp-content/uploads/2022/10/Biden-Harris-Administrations-National-Security-Strategy-10.2022.pdf> (accessed November 9, 2025).
21. The Global Force Management Allocation Plan (GFMAP) is a classified document that specifies forces to be provided by the services for use by operational commanders. It is an extension of a reference manual maintained by the Joint Staff, *Global Force Management Allocation Policies and Procedures* (CJCSM 3130.06B), which is also a classified publication. See U.S. Department of Defense, Joint Chiefs of Staff, "Adaptive

- Planning and Execution Overview and Policy Framework,” unclassified Chairman of the Joint Chiefs of Staff Guide 3130, April 12, 2023, p. B-2, <https://www.jcs.mil/Portals/36/Documents/Library/Handbooks/CJCS%20GUIDE%203130.pdf?ver=2019-03-18-122038-003> (accessed November 9, 2025).
22. Video by Senior Chief Petty Officer Elliot Fabrizio, “CNO Releases Navigation Plan 2024,” DVIDS (Defense Visual Information Distribution Service), September 18, 2024, <https://www.dvidshub.net/video/937044/cno-releases-navigation-plan-2024> (accessed November 9, 2025).
 23. Admiral James W. Kilby, Vice Chief of Naval Operations, Department of the Navy, testimony in stenographic transcript of *Hearing to Receive Testimony on the Current Readiness of the Joint Force*, Committee on Armed Services, U.S. Senate, March 12, 2025, p. 59, <https://www.armed-services.senate.gov/imo/media/doc/3122025subtranscript.pdf> (accessed November 9, 2025).
 24. Admiral Lisa Franchetti, “CNO Remarks at America’s Future Fleet: Reinvigorating the Maritime Industrial Base,” December 3, 2024, <https://www.navy.mil/Press-Office/Speeches/display-speech/Article/3986010/cno-remarks-at-americas-future-fleet-reinvigorating-the-maritime-industrial-base/> (accessed November 9, 2025).
 25. U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People’s Republic of China 2024*, pp. xii, 30–31, 34, and 44, <https://media.defense.gov/2024/Dec/18/2003615520/-1/-1/0/MILITARY-AND-SECURITY-DEVELOPMENTS-INVOLVING-THE-PEOPLES-REPUBLIC-OF-CHINA-2024.PDF> (accessed November 11, 2025).
 26. U.S. Navy, Office of Naval Operations, *Chief of Operations Navigation Plan for America’s Warfighting Navy 2024*, pp. iii and 12, <https://www.navy.mil/Portals/1/CNO/NAVPLAN2024/Files/CNO-NAVPLAN-2024-high-res-v2.pdf> (accessed November 9, 2025).
 27. Message from the Chief of Naval Operations to NAVADMIN, “Sub[ject]/C-Note #1: Sailors First,” NAVADMIN 186/25, September 3, 2025, <https://www.documentcloud.org/documents/26083461-cnote1/> (accessed November 9, 2025).
 28. Josh Luckenbaugh, “JUST IN: Lack of Shipyard Capacity Putting ‘Unsustainable Strain’ on Navy,” *National Defense*, January 11, 2023, <https://www.nationaldefensemagazine.org/articles/2023/1/11/lack-of-shipyard-capacity-putting-unsustainable-strain-on-navy> (accessed November 9, 2025).
 29. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, March 2024, p. 20, <https://s3.amazonaws.com/static.militarytimes.com/assets/pdfs/1710968056.pdf> (accessed November 9, 2025).
 30. Sam LaGrone, “Navy Raises Battle Force Goal to 381 Ships in Classified Report to Congress,” U.S. Naval Institute News, July 18, 2023, <https://news.usni.org/2023/07/18/navy-raises-battle-force-goal-to-381-ships-in-classified-report-to-congress> (accessed November 9, 2025).
 31. Sam LaGrone, “New CNO Caudle Calls for New Fleet Design in First Speech,” U.S. Naval Institute News, August 25, 2025, <https://news.usni.org/2025/08/25/new-cno-caudle-calls-for-new-fleet-design-in-first-speech> (accessed November 9, 2025).
 32. U.S. Department of Defense, Department of the Navy, Office of the Secretary, “General Guidance for the Classification of Naval Vessels and Battle Force Ship Counting Procedures,” SECNAV Instruction 5030.8D, June 28, 2022, pp. 1–2, <http://www.nvr.navy.mil/5030.8C.pdf> (accessed November 10, 2025).
 33. Thomas Callender, “The Nation Needs a 400-Ship Navy,” Heritage Foundation *Special Report* No. 205, October 26, 2018, <https://www.heritage.org/defense/report/the-nation-needs-400-ship-navy>. For an analysis regarding future force design out to 2035, see Brent D. Sadler, “Rebuilding America’s Military: The United States Navy,” Heritage Foundation *Special Report* No. 242, February 18, 2021, pp. 3–5, 7, 71, 75, and 83, <https://www.heritage.org/defense/report/rebuilding-americas-military-the-united-states-navy>.
 34. The full array of aircraft comprising a carrier air wing also includes one EA-18G Growler electronic attack squadron, one E-2D Hawkeye airborne early warning squadron, two SH-60 Seahawk helicopter squadrons, and one C-2 Greyhound logistics support squadron.
 35. U.S. Navy, “Executive Summary: 2016 Navy Force Structure Assessment (FSA),” December 15, 2016, p. 2, <http://static.politico.com/b9/99/0ad9f79847bf8e8f6549c445f980/2016-navy-force-structure-assessment-fsa-executive-summary.pdf> (accessed November 10, 2023). The full FSA was not released to the public. In July 2019, the Marine Corps cancelled the requirement for 38 amphibious ships as a formal force-sizing demand for the Navy. General David H. Berger, Commandant of the Marine Corps, stated his belief that future naval warfare and the Marine Corps’ role in it against a peer competitor will require new types of smaller vessels that will be harder for an enemy to find and target, as well as able to support an evolving concept of distributed naval warfare more effectively, and that can be purchased in greater quantity at a lower price per vessel. Nevertheless, the long-standing 38-ship requirement has informed Navy shipbuilding plans and remains a central factor in current ship acquisition contracts. See General David H. Berger, Commandant of the Marine Corps, “Commandant’s Planning Guidance,” U.S. Department of the Navy, U.S. Marine Corps, released July 17, 2019, p. 4, https://www.hqmc.marines.mil/Portals/142/Docs/%2038th%20Commandant%27s%20Planning%20Guidance_2019.pdf?ver=2019-07-16-200152-700 (accessed November 10, 2025).
 36. U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, “Fleet Size,” updated October 1, 2025, <https://www.nvr.navy.mil/nvr/getpage.htm?pagetype=fleetsize> (accessed November 10, 2025).
 37. Matthew Hipple, “20 Years of Naval Trends Guarantee a FY23 Shipbuilding Plan Failure,” Center for International Maritime Security, May 9, 2022, <https://cimsec.org/20-years-of-naval-trends-guarantee-a-fy23-shipbuilding-plan-failure/> (accessed November 10, 2025).
 38. Sam LaGrone, “CNO Gilday: ‘We Need a Naval Force of Over 500 Ships,’” U.S. Naval Institute News, February 18, 2022, <https://news.usni.org/2022/02/18/cno-gilday-we-need-a-naval-force-of-over-500-ships> (accessed November 9, 2025).
 39. U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, “Ship Battle Forces,” updated October 1, 2025, <https://www.nvr.navy.mil/nvr/getpage.htm?pagetype=shipbattleforce> (accessed November 10, 2025).

40. Bryan Clark and Jesse Sloman, *Deploying Beyond Their Means: America's Navy and Marine Corps at a Tipping Point*, Center for Strategic and Budgetary Assessments, November 18, 2015, pp. 5–8, [https://csbaonline.org/uploads/documents/CSBA6174_\(Deploying_Beyond_Their_Means\)_Final2-web.pdf](https://csbaonline.org/uploads/documents/CSBA6174_(Deploying_Beyond_Their_Means)_Final2-web.pdf) (accessed November 10, 2025).
41. Daniel Whiteneck, Michael Price, Neil Jenkins, and Peter Swartz, *The Navy at a Tipping Point: Maritime Dominance at Stake?* Center for Naval Analyses, CAB D0022262.A3/1REV, March 2010, p. 7, https://www.cna.org/CNA_files/PDF/D0022262.A3.pdf (accessed November 10, 2025).
42. Megan Eckstein, “No Margin Left: Overworked Carrier Force Struggles to Maintain Deployments After Decades of Overuse,” U.S. Naval Institute News, November 12, 2020, <https://news.usni.org/2020/11/12/no-margin-left-overworked-carrier-force-struggles-to-maintain-deployments-after-decades-of-overuse> (accessed November 9, 2025).
43. Operational Tempo (OPTEMPO) is the rate at which a warship is involved in military activities like exercises, presence operations, or training versus time in port for maintenance. U.S. Naval Institute Staff, “USNI News Fleet and Marine Tracker: Sept. 8, 2025,” U.S. Naval Institute News, updated September 10, 2025, <https://news.usni.org/2025/09/08/usni-news-fleet-and-marine-tracker-sept-8-2025> (accessed November 10, 2025).
44. U.S. Navy, U.S. Marine Corps, and U.S. Coast Guard, *Naval Operations Concept 2010: Implementing the Maritime Strategy*, p. 26, <https://fas.org/irp/doddir/navy/noc2010.pdf> (accessed November 10, 2025).
45. On average, rotational deployments require four ships for one ship to be forward deployed. This is necessary because one ship is sailing out to a designated location, one is at location, one is sailing back to the CONUS, and one is in the CONUS for maintenance.
46. Figure 4, “Comparison of Forward-Presence Rates Provided on an Annual Basis for Ships Homeported in the United States and Overseas,” in U.S. Government Accountability Office, *Navy Force Structure: Sustainable Plan and Comprehensive Assessment Needed to Mitigate Long-Term Risks to Ships Assigned to Overseas Homeports*, GAO-15-329, May 2015, p. 13, <https://www.gao.gov/assets/680/670534.pdf> (accessed November 10, 2025).
47. See H.R. 2810, National Defense Authorization Act for Fiscal Year 2018, Public Law 115-91, 115th Congress, December 12, 2017, Section 1025, <https://www.congress.gov/115/plaws/publ91/PLAW-115publ91.pdf> (accessed November 10, 2025). Though dating to 2017, this requirement has not been adjusted, thus serving as the legal reference point for the mandated size, or objective, of the Navy’s fleet.
48. See H.R. 5515, John S. McCain National Defense Authorization Act for Fiscal Year 2019, Public Law 115-232, 115th Congress, August 13, 2018, Section 123, <https://www.congress.gov/115/plaws/publ232/PLAW-115publ232.pdf> (accessed November 10, 2025), and table, “US Navy Active Ship Force Levels, 2000–2006,” in U.S. Navy, Naval History and Heritage Command, “US Ship Force Levels, 1886–Present,” November 17, 2017, <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html#2000> (accessed November 11, 2025).
49. Press release, “Sullivan Blasts U.S. Navy for Violating Law, Putting American Lives at Risk,” Office of U.S. Senator Dan Sullivan, May 4, 2023, <https://www.sullivan.senate.gov/newsroom/press-releases/sullivan-blasts-us-navy-for-violating-law-putting-american-lives-at-risk> (accessed November 10, 2025).
50. YouTube video, “Full Committee Hearing: ‘Department of the Navy FY 2024 Budget Request,’” Committee on Armed Services, U.S. House of Representatives, April 28, 2023, <https://armedservices.house.gov/calendar/eventsingle.aspx?EventID=3594> (accessed November 28, 2025).
51. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, p. 20.
52. Table 1, “Numbers of Certain Types of Chinese and U.S. Ships Since 2005,” in Ronald O’Rourke, “China Naval Modernization: Implications for U.S. Navy Capabilities—Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. RL33153, updated March 9, 2021, pp. 30–31, <https://assets.documentcloud.org/documents/20509332/china-naval-modernization-implications-for-us-navy-capabilities-background-and-issues-for-congress-march-9-2021.pdf> (accessed November 10, 2025).
53. Sam LaGrone, “Navy Plan to Buy 85 New Ships Will Cost \$1 Trillion, CBO Says,” U.S. Naval Institute News, January 7, 2025, <https://news.usni.org/2025/01/07/navy-plan-to-add-85-news-ships-will-cost-1-trillion-cbo-says#:~:text=According%20to%20the%20report%2C%20the,base%20over%20the%20next%20decade> (accessed November 10, 2025).
54. Table, “Private, 10 Total, All Industries, National, 2021–2024 First Quarter, All Establishment Sizes” in U.S. Department of Labor, U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Employment and Wages Data Viewer, https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=20&from=2021&to=2024&qtr=1&ind=10&size=0&supp=1 (accessed November 11, 2025); table, “Private, NAICS 3366 Ship and Boat Building, National, 2021–2024 First Quarter, All Establishment Sizes,” in U.S. Department of Labor, U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages, Employment and Wages Data Viewer, https://data.bls.gov/cew/apps/table_maker/v4/table_maker.htm#type=20&from=2021&to=2024&qtr=1&ind=3366&size=0&supp=1 (accessed November 11, 2025).
55. Table, “Private, NAICS 3366 Ship and Boat Building, National, 2021–2024 First Quarter, All Establishment Sizes.”
56. The Navy’s FY 2020 30-year shipbuilding plan identified opportunities to build three additional *Virginia*-class submarines over the next six years and an additional nine next-generation SSNs between FY 2037 and FY 2049. The Navy’s FY 2020 budget requested three *Virginia*-class SSNs. This was the first time in more than 20 years that the Navy procured three SSNs in one fiscal year. Since the advance procurement for the third *Virginia* SSN was not included in the Navy’s FY 2019 budget, construction of this third submarine most likely would not have commenced until sometime in FY 2023. Critical parts and equipment for this additional submarine above the planned 10-submarine block buy have not been purchased yet, and the shipyards (Electric Boat and Huntington Ingalls Industries Newport News Shipbuilding) have not planned for this

- submarine as part of their *Virginia*-class construction. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2020*, March 2019, pp. 5–6, <https://www.secnav.navy.mil/fmc/fmb/Documents/20pres/PB20%2030-year%20Shipbuilding%20Plan%20Final.pdf> (accessed November 11, 2025)
57. Ronald O'Rourke, "Navy Virginia-Class Submarine Program and AUKUS Submarine (Pillar 1) Project: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. RL32418, February 11, 2025, pp. 25–26, <https://fas.org/sgp/crs/weapons/RL32418.pdf> (accessed November 10, 2025).
 58. Press release, "BlueForge Alliance Awarded Prime Contract from U.S. Navy," BlueForge Alliance, September 11, 2024, <https://www.blueforgealliance.us/news/blueforge-alliance-awarded-prime-contract-from-u-s-navy> (accessed November 10, 2025).
 59. Contract Summary, General Services Administration contract awarded to Deloitte Consulting LLP, PIID47QFCA24C0003, start date July 15, 2024; current end date July 14, 2026; potential end date July 14, 2029, U.S. Department of the Treasury, Bureau of the Fiscal Service, [USAspending.gov](https://www.usaspending.gov/award/CONT_AWD_47QFCA24C0003_4732_-NONE-_-NONE-), https://www.usaspending.gov/award/CONT_AWD_47QFCA24C0003_4732_-NONE-_-NONE- (accessed November 11, 2025).
 60. Mallory Shelbourne, "Submarine Funding Anomaly Insufficient to Get Boats the Navy Wants, Says HII CEO," U.S. Naval Institute News, January 9, 2025, <https://news.usni.org/2025/01/09/submarine-funding-anomaly-insufficient-to-get-boats-the-navy-wants-says-hii-ceo> (accessed November 9, 2025).
 61. U.S. Government Accountability Office, *Weapon Systems Annual Assessment: DoD Is Not Yet Well-Positioned to Field Systems with Speed*, GAO-24-106831, June 2024, pp. 153, <https://www.gao.gov/assets/gao-24-106831.pdf> (accessed November 10, 2025).
 62. Ronald O'Rourke, "Navy Virginia-Class Submarine Program and AUKUS Submarine (Pillar 1) Project: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. RL32418, February 11, 2025, p. 5, <https://sgp.fas.org/crs/weapons/RL32418.pdf> (accessed November 10, 2025).
 63. Transcript, "CNO Gilday at HAC-D Navy Posture Hearing," U.S. Navy Office of Information, April 29, 2021, <https://www.navy.mil/Press-Office/Testimony/display-testimony/Article/2590426/cno-gilday-at-hac-d-navy-posture-hearing/> (accessed November 11, 2025).
 64. U.S. Government Accountability Office, *Weapon Systems Annual Assessment: Programs Are Not Consistently Implementing Practices That Can Help Accelerate Acquisitions*, GAO-23-106059, June 2023 p. 2, <https://www.gao.gov/assets/gao-23-106059.pdf> (accessed November 10, 2025).
 65. Vice Admiral Robert P. Burke, U.S. Navy, Chief of Naval Personnel and Deputy Chief of Naval Operations (Manpower, Personnel, Training & Education), statement on "Personnel Posture of the Armed Services" before the Subcommittee on Personnel, Committee on Armed Services, U.S. Senate, February 14, 2018, p. 11, https://www.armed-services.senate.gov/imo/media/doc/Burke_02-14-18.pdf (accessed November 11, 2025).
 66. Table, "U.S. Navy Active Ship Force Levels, 1993–1999," in U.S. Navy, Naval History and Heritage Command, "U.S. Ship Force Levels 1886–Present," published November 17, 2017, <https://www.history.navy.mil/research/histories/ship-histories/us-ship-force-levels.html> (accessed November 11, 2025); table, "U.S. Navy Personnel Strength, 1775 to Present," U.S. Navy, Naval History and Heritage Command, published July 27, 2020, <https://www.history.navy.mil/research/library/online-reading-room/title-list-alphabetically/u/usn-personnel-strength.html> (accessed November 11, 2025).
 67. U.S. Navy, "Mission: Navy Personnel Strength," <https://www.navy.mil/About/Mission/> (accessed November 11, 2025).
 68. Caitlyn Burchett, "Navy on Track to Meet Recruiting Goal for Second Consecutive Year," *Stars and Stripes*, February 19, 2025, <https://www.stripes.com/branches/navy/2025-02-19/navy-sailors-recruiting-goals-16886957.html> (accessed November 11, 2025).
 69. Figure 7.1, "Active Navy End Strength by Type," and Figure 7.2, "Active Navy End Strength Trend," in U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, p. 7.3, https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/Budget_Highlights_Book.pdf (accessed November 11, 2025). See also U.S. Department of the Navy, Office of Budget–2023, "Highlights of the Department of the Navy FY 2024 Budget," DON Budget Card, https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/DON_Budget_Card.pdf (accessed November 11, 2025).
 70. Press release, "Navy & Marine Corps Exceeded FY24 Recruiting Goals," U.S. Navy, October 1, 2024, <https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/3922258/navy-marine-corps-exceeded-fy24-recruiting-goals/> (accessed November 11, 2025).
 71. U.S. Government Accountability Office, *Navy Readiness: Additional Efforts Are Needed to Manage Fatigue, Reduce Crewing Shortfalls, and Implement Training*, GAO-21-366, May 2021, pp. 3–5, 10–12, and 17–20, <https://assets.documentcloud.org/documents/20792544/navy-readiness-additional-efforts-are-needed-to-manage-fatigue-reduce-crewing-shortfalls-and-implement-training-may-27-2021.pdf> (accessed November 10, 2025).
 72. Heather Mongilio, "At-Sea Billet Gaps Rise to 22,000 for E1–E4 Sailors, CNP Says," U.S. Naval Institute News, January 10, 2024, <https://news.usni.org/2024/01/10/at-sea-billet-gaps-rise-to-22000-for-e1-e4-sailors-cnp-says> (accessed November 11, 2025).
 73. Heather Mongolio, "Navy Must Meet Recruiting Goal for 3 Years to Close Gaps at Sea," U.S. Naval Institute News, January 23, 2025, <https://news.usni.org/2025/01/23/navy-must-meet-recruiting-goal-for-3-years-to-close-gaps-at-sea> (accessed November 11, 2025).
 74. Rebecca Kheel, "Compromise Defense Bill Would Give Junior Troops 14.5% Pay Raise in 2025," *Military.com*, December 9, 2024, <https://www.military.com/daily-news/2024/12/09/145-pay-raise-junior-enlisted-troops-2025-included-negotiated-defense-bill.html> (accessed November 11, 2025).

75. Enclosure II, “Summary of Department of Homeland Security (DHS) and Department of Defense (DOD) 2008 Memorandum of Agreement,” in U.S. Government Accountability Office, “Coast Guard: Information on Defense Readiness Mission Deployments, Expenses, and Funding,” GAO-21-104741, September 15, 2021, p. 12, <https://www.gao.gov/assets/gao-21-104741.pdf> (accessed November 10, 2025).
76. Brent D. Sadler, “A Conflict-Ready Coast Guard Is Vital to U.S. Success in a Long War with China,” Heritage Foundation *Backgrounder* No. 3695, March 21, 2022, pp. 6–7, <https://www.heritage.org/sites/default/files/2022-03/BG3695.pdf>.
77. U.S. Department of Homeland Security, U.S. Coast Guard, “U.S. Coast Guard Atlantic Area: Area Cutters,” <https://www.atlanticarea.uscg.mil/> (accessed November 24, 2025); U.S. Coast Guard, “U.S. Coast Guard Pacific Area,” https://www.pacificarea.uscg.mil/Portals/8/Documents/Final-Fact-Sheet-PAC-092.pdf?ver=MILvWXUWjAcPtVM_ZAeaBA%3d%3d (accessed November 24, 2025).
78. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, p. 20.
79. U.S. Department of the Navy, Office of Budget–2023, “*Highlights of the Department of the Navy FY 2024 Budget*,” DON Budget Card.
80. Press Brief, “Department of the Navy: President’s Budget (PB) 2026,” July 25, 2025, p. 7, https://www.secnav.navy.mil/fmc/fmb/Documents/26pres/DON_Press_Brief.pdf (accessed November 11, 2025).
81. The Honorable Thomas B. Modly, Acting Secretary of the Navy, Admiral Michael M. Gilday, Chief of Naval Operations, and General David H. Berger, Commandant of the U.S. Marine Corps, statement “On Fiscal Year 2021 Department of the Navy Budget” before the Committee on Armed Services, U.S. Senate, March 5, 2020, p. 10, https://www.armed-services.senate.gov/imo/media/doc/Modly--Gilday--Berger_03-05-20.pdf (accessed November 10, 2025).
82. David B. Larter, “US Navy Inks \$9.4B Contract for Two Columbia-Class Nuclear Missile Submarines,” *Defense News*, November 5, 2020, <https://www.defensenews.com/naval/2020/11/05/navy-inks-contract-for-two-columbia-class-nuclear-missile-submarines/> (accessed November 9, 2025).
83. News release, “Keel Laying Ceremony Held for First Columbia-Class Ballistic Missile Submarine,” Naval Sea Systems and Commander, Submarine Forces Public Affairs, June 4, 2022, <https://www.navy.mil/Press-Office/News-Stories/Article/3052900/keel-laying-ceremony-held-for-first-columbia-class-ballistic-missile-submarine/> (accessed November 11, 2025).
84. Ronald O’Rourke, “Navy Columbia (SSBN-826) Class Ballistic Missile Submarine Program: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. R41129, updated March 18, 2025, pp. 1 and 4–5, <https://www.documentcloud.org/documents/25597379-navy-columbia-ssbn-826-class-ballistic-missile-submarine-program-background-and-issues-for-congress/> (accessed November 10, 2025).
85. Press release, “Chairman Courtney’s Opening Statement: ‘Department of the Navy Fiscal Year 2023 Budget Request for Seapower and Projection Forces,’” Office of Representative Joe Courtney, Chairman, Subcommittee on Seapower and Projection Forces, Committee on Armed Services, U.S. House of Representatives, May 18, 2022, <https://courtney.house.gov/media-center/press-releases/chairman-courtneys-opening-statement-department-navy-fiscal-year-2023> (accessed November 11, 2025).
86. David B. Larter, “The US Navy, Seeking Savings, Shakes up Its Plans for More Lethal Attack Submarines,” *Defense News*, April 3, 2019, <https://www.defensenews.com/naval/2019/04/04/the-us-navy-seeking-savings-shakes-up-its-plans-for-more-lethal-attack-submarines/> (accessed November 9, 2025).
87. Exhibit P-40, “Budget Line Item Justification: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1611N: Shipbuilding and Conversion, Navy / BA 02: Other Warships / BSA 1: Other Warships, P-1 Line Item Number / Title: 2013 / Virginia Class Submarine,” and Exhibit P-27, “Ship Production Schedule: PB 2024 Navy, Appropriation / Budget Activity / Budget Sub Activity: 1611N / 02 / 1, P-1 Line Item Number / Title: 2013 / Virginia Class Submarine,” in U.S. Department of the Navy, *Department of Defense Fiscal Year (FY) 2024 Budget Estimates, Navy, Justification Book Volume 1 of 1, Shipbuilding and Conversion, Navy*, March 2023, pp. 114 and 120, https://media.defense.gov/2023/Mar/29/2003188820/-1/-1/0/SCN_BOOK.PDF (accessed November 11, 2025).
88. U.S. Department of Defense, Defense Visual Information Distribution Service, “USS Gerald R. Ford Departs Portsmouth,” November 18, 2022, <https://www.dvidshub.net/news/433595/uss-gerald-r-ford-departs-portsmouth> (accessed November 11, 2025).
89. Aaron-Matthew Lariosa, “Aircraft Carrier USS Gerald R. Ford Departs Norfolk for Worldwide Deployment,” U.S. Naval Institute News, May 2, 2023, <https://news.usni.org/2023/05/02/aircraft-carrier-uss-gerald-r-ford-departs-norfolk-for-worldwide-deployment> (accessed November 11, 2025).
90. News release, “Ford Carrier Strike Group Operates in the High North with NATO Allies,” U.S. 6th Fleet Public Affairs, September 8, 2025, <https://www.navy.mil/Press-Office/News-Stories/display-news/Article/4296815/ford-carrier-strike-group-operates-in-the-high-north-with-nato-allies/> (accessed November 11, 2025); U.S. Naval Institute Staff, “USNI News Fleet and Marine Tracker: March 31, 2025,” U.S. Naval Institute News, March 31, 2025, <https://news.usni.org/2025/03/31/usni-news-fleet-and-marine-tracker-march-31-2025> (accessed November 10, 2025).
91. Mallory Shelbourne, “Carrier John F. Kennedy Delivery Delayed 2 Years, Fleet Will Drop to 10 Carriers for 1 Year,” U.S. Naval Institute News, July 7, 2025, <https://news.usni.org/2025/07/07/carrier-john-f-kennedy-delivery-delayed-2-years-fleet-will-drop-to-10-carriers-for-1-year> (accessed November 9, 2025).
92. Peiyu Lin, “Navy’s Ford-Class Aircraft Carrier May Come to Bremerton as Early as 2029,” *Kitsap Sun*[Kitsap County, Washington], March 10, 2025, <https://www.kitsapsun.com/story/news/2025/03/10/next-navy-aircraft-carrier-based-in-bremerton-may-be-uss-john-f-kennedy/81943512007/> (accessed November 10, 2025).

93. H. I. Sutton, "China's New Super Carrier: How It Compares to the US Navy's Ford Class," *Naval News*, July 2, 2021, <https://www.navalnews.com/naval-news/2021/07/chinas-new-super-carrier-how-it-compares-to-the-us-navys-ford-class> (accessed November 10, 2025).
94. Minnie Chan, "Shanghai Shipyard Racing to Hit Communist Party Congress Deadline for China's Latest Aircraft Carrier," *South China Morning Post*, updated May 31, 2022, <https://www.scmp.com/news/china/military/article/3175840/shanghai-shipyard-racing-hit-party-congress-deadline-chinas> (accessed November 10, 2025).
95. Jack Lau, "China Launches Fujian, PLA Navy's 3rd Aircraft Carrier," *South China Morning Post*, June 17, 2022, <https://www.scmp.com/news/china/military/article/3182032/china-launches-fujian-pla-navys-3rd-aircraft-carrier> (accessed November 10, 2025).
96. U.S. Department of Defense, *Annual Report to Congress: Military and Security Developments Involving the People's Republic of China 2024*, pp. 90 and 116.
97. Matthew Bodner and Keir Simmons, "China Is Working on an Enormous Aircraft Carrier that Rivals the Biggest in the U.S. Fleet, Analysts say," NBC News, March 2, 2025, <https://www.nbcnews.com/news/world/china-working-enormous-aircraft-carrier-rivals-biggest-us-fleet-analys-rcna193593> (accessed November 11, 2025).
98. Figure 4.2, "DON Battle Force Ship Inventory Quantities," in U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, p. 4-3.
99. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, pp. 25–26.
100. Megan Eckstein, "Navy 'Struggling' to Modernize Aging Cruiser Fleet as Tight Budgets Push Pentagon to Shed Legacy Platforms," U.S. Naval Institute News, April 5, 2021, <https://news.usni.org/2021/04/05/navy-struggling-to-modernize-aging-cruiser-fleet-as-tight-budgets-push-pentagon-to-shed-legacy-platforms> (accessed November 9, 2025).
101. Brent D. Sadler, "Navy's Next Destroyer Is Vital as U.S.–China Tensions Escalate," Heritage Foundation *Backgrounder* No. 3760, April 14, 2023, p. 4, <https://www.heritage.org/sites/default/files/2023-04/BG3760.pdf>.
102. Ronald O'Rourke, "Navy DDG(X) Next-Generation Destroyer Program: Background and Issues for Congress," Congressional Research Service *In Focus* No. IF11670, updated March 21, 2025, https://www.congress.gov/crs_external_products/IF/PDF/IF11679/IF11679.45.pdf (accessed November 10, 2025).
103. Aaron-Matthew Lariosa, "US Navy Begins Hypersonic Integration on USS Lyndon B. Johnson," *Naval News*, January 16, 2025, <https://www.navalnews.com/event-news/sna-2025/2025/01/us-navy-begins-hypersonic-integration-on-uss-lyndon-b-johnson/> (accessed November 11, 2025).
104. Emma Helfrich, "Navy's Stealth Destroyer May Be on Its First Operational Deployment," *The War Zone*, September 21, 2022, <https://www.thedrive.com/the-war-zone/navys-stealth-destroyer-may-be-on-its-first-operational-deployment> (accessed November 11, 2025).
105. Sam LaGrone, "First Zumwalt to Wrap Missile Tube Install This Year, Michael Monsoor to Deploy to WESTPAC," U.S. Naval Institute News, updated January 16, 2025, <https://news.usni.org/2025/01/15/first-zumwalt-to-wrap-missile-tube-install-michael-monsoor-to-deploy-to-westpac> (accessed November 10, 2025).
106. Admiral John M. Richardson, Chief of Naval Operations, statement on "Fiscal Year 2020 Navy Budget" before the Subcommittee on Defense, Committee on Appropriations, U.S. Senate, May 1, 2019, pp. 7 and 8, <https://www.appropriations.senate.gov/imo/media/doc/05.01.19--Richardson%20Testimony.pdf> (accessed November 11, 2025).
107. Sam LaGrone, "Navy Refining Plan for Its \$17B Destroyer Electronic Warfare Backfit with 4 Test Ships," U.S. Naval Institute News, January 19, 2024, <https://news.usni.org/2024/01/19/navy-refining-plan-for-its-17b-destroyer-electronic-warfare-backfit-with-4-test-ships> (accessed November 10, 2025).
108. Xavier Vavasseur, "US Navy's Final Freedom-Variant LCS Launched by Fincantieri," *Naval News*, April 19, 2023, <https://www.navalnews.com/naval-news/2023/04/us-navys-final-freedom-variant-lcs-launched-by-fincantieri/> (accessed November 11, 2025).
109. David B. Larter, "US Navy Halts Deliveries of Freedom-Class Littoral Combat Ship," *Defense News*, January 19, 2021, <https://www.defensenews.com/breaking-news/2021/01/19/the-us-navy-halts-deliveries-of-freedom-class-littoral-combat-ship/> (accessed November 9, 2025).
110. Ronald O'Rourke, "Navy Constellation (FFG-62) Class Frigate (Previously FFG(X)) Program: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R44972, updated February 11, 2021, p. 3, <https://apps.dtic.mil/sti/trecms/pdf/AD1123109.pdf> (accessed November 24, 2025).
111. Sam LaGrone, "All Freedom Littoral Combat Ships in Commission Tapped for Early Disposal," U.S. Naval Institute News, March 29, 2022, <https://news.usni.org/2022/03/29/all-freedom-littoral-combat-ships-in-commission-tapped-for-early-disposal> (accessed November 10, 2025).
112. News release, "Champion, Scout, Ardent Decommission After Distinguished Service," Commander, Naval Surface Forces, U.S. Pacific Fleet, August 20, 2020, <https://www.navy.mil/Press-Office/News-Stories/Article/2320324/champion-scout-ardent-decommission-after-distinguished-service/> (accessed November 11, 2025).
113. Appendix 4, "Planned Decommissioning, Dismantling, and Disposals During FY2025–FY2029 Future Years Defense Program (FYDP)," in U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, pp. 25–26.

114. Admiral Michael Gilday in transcript, “Maritime Security Dialogue: The Future of the U.S. Navy,” Center for Strategic and International Studies, April 28, 2022, p. 15, https://csis-website-prod.s3.amazonaws.com/s3fs-public/event/220428_Future_US_Navy.pdf?qQocZ6tvUQWELISHsF6f4HFUT9c5C3Db (accessed November 10, 2025).
115. U.S. Government Accountability Office, *Weapon Systems Annual Assessment: Programs Are Not Consistently Implementing Practices That Can Help Accelerate Acquisitions*, p. 150; news release, “Navy Declares Initial Operational Capability of Mine Countermeasures Mission Package,” U.S. Navy, Naval Sea Systems Command, May 2, 2023, <https://www.navsea.navy.mil/Media/News/Article-View/Article/3380673/navy-declares-initial-operational-capability-of-mine-countermeasures-mission-pa/> (accessed November 11, 2025).
116. Sam LaGrone, “Navy Deploys First Operational LCS Mine Countermeasures Packages,” U.S. Naval Institute News, March 18, 2025, <https://news.usni.org/2025/03/18/navy-deploys-first-operational-lcs-mine-countermeasures-packages> (accessed November 10, 2025).
117. Paul McLeary, “Navy Unveils Surprise Plan for Littoral Combat Ships,” *Breaking Defense*, April 29, 2021, <https://breakingdefense.com/2021/04/navy-unveils-surprise-plan-for-littoral-combat-ships/> (accessed November 10, 2025).
118. Petty Officer 2nd Class Vance Hand, “Naval Strike Missile System Now Aboard USS Oakland (LCS 24),” U.S. Navy, December 10, 2021, <https://www.surfpac.navy.mil/Media/News/Article/2872102/naval-strike-missile-system-now-aboard-uss-oakland-lcs-24/> (accessed November 10, 2025).
119. U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, p. 2-12; Figure 2.4, “Weapons Procurement Quantities and Total Funding,” in *ibid.*, p. 2-9; table, “Weapons Procurement, Navy (WPN),” in *ibid.*, p. A-8.
120. News release, “U.S. Navy Enhances LCS Surface Warfare Mission Package with Counter-Unmanned Aircraft System Capability,” U.S. Navy, Naval Sea Systems Command, January 16, 2025, <https://www.navsea.navy.mil/Media/News/Article/4031852/us-navy-enhances-lcs-surface-warfare-mission-package-with-counter-unmanned-airc/> (accessed November 10, 2025).
121. Megan Eckstein, “Fincantieri Wins \$795M Contract for Navy Frigate Program,” U.S. Naval Institute News, April 30, 2020, <https://news.usni.org/2020/04/30/fincantieri-wins-795m-contract-for-navy-frigate-program> (accessed November 9, 2025).
122. Capt. Kevin Smith, “Guided Missile Frigate (FFG 62) Update, National Symposium—Surface Navy Association,” U.S. Navy, Naval Sea Systems Command, Program Executive Office Unmanned and Small Combatants, PowerPoint Presentation, January 12–14, 2021, <https://www.navsea.navy.mil/Portals/103/Images/Exhibits/SNA2021/SNA2021GuidedMissileFrigate-FFG62Update.pdf> (accessed November 10, 2025).
123. U.S. Government Accountability Office, *Weapon Systems Annual Assessment: Programs Are Not Consistently Implementing Practices That Can Help Accelerate Acquisitions*, p. 148.
124. Mallory Shelbourne, “Navy Issues \$554M Contract Modification for Second Navy Frigate,” U.S. Naval Institute News, May 20, 2021, <https://news.usni.org/2021/05/20/navy-issues-554m-contract-modification-for-second-navy-frigate> (accessed November 9, 2025).
125. Ronald O’Rourke, “Navy Constellation (FFG-62) Class Frigate Program: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. R44792, updated December 19, 2024, pp. 3–6, <https://www.documentcloud.org/documents/25471523-navy-constellation-ffg-62-class-frigate-program/> (accessed November 10, 2025).
126. Carter Johnston, “Competition Opens for Second Constellation-Class Shipyard,” *Naval News*, November 22, 2024, <https://www.navalnews.com/naval-news/2024/11/competition-opens-for-second-constellation-class-shipyard/> (accessed November 10, 2025).
127. Media handout, “Secretary of the Navy’s 45-Day Shipbuilding Review.”
128. Ronald O’Rourke, “Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. RL32665, June 3, 2020, pp. 14–16, https://www.congress.gov/crs_external_products/RL/PDF/RL32665/RL32665.305.pdf (accessed November 10, 2025).
129. The Landing Ship Medium (LSM) was previously known as the Light Amphibious Warship (LAW). The Secretary of the Navy changed the name so that it would be aligned with traditional nomenclature for amphibious warships and reflect the evolving discussion about the ship’s purpose and capabilities. John Grady, “SECNAV Del Toro ‘Excited’ About New Landing Ship Mediums,” U.S. Naval Institute News, February 22, 2023, <https://news.usni.org/2023/02/22/secnav-del-toro-excited-about-new-landing-ship-mediums> (accessed November 9, 2025). See also Ronald O’Rourke, “Navy Medium Landing Ship (LSM) (Previously Light Amphibious Warship [LAW]) Program: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. R46374, updated August 7, 2023, https://www.congress.gov/crs_external_products/R/PDF/R46374/R46374.56.pdf (accessed November 10, 2025), and Ronald O’Rourke, “Navy Light Amphibious Warship (LAW) Program: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. R46374, updated July 20, 2022, https://www.congress.gov/crs_external_products/R/PDF/R46374/R46374.45.pdf (accessed November 10, 2025).
130. General David H. Berger, Commandant of the Marine Corps, “Force Design 2030,” U.S. Department of the Navy, U.S. Marine Corps, March 2020, pp. 2 and 4, <https://www.hqmc.marines.mil/Portals/142/Docs/CMC38%20Force%20Design%202030%20Report%20Phase%20I%20and%20II.pdf?ver=2020-03-26-121328-460> (accessed November 10, 2025).
131. H.R. 7776, James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Public Law 117-263, 117th Congress, December 23, 2022, Section 1023, <https://www.congress.gov/117/plaws/publ263/PLAW-117publ263.pdf> (accessed November 10, 2025).
132. Andrew Feickert, “U.S. Marine Corps Force Design Initiative: Background and Issues for Congress,” Congressional Research Service *Report for Members and Committees of Congress* No. R47614, October 3, 2024, <https://s3.documentcloud.org/documents/25188650/us-marine-corps-force-design-initiative-background-and-issues-for-congress-oct-3-2024.pdf> (accessed November 10, 2025).

133. Ronald O'Rourke, "Navy Medium Landing Ship (LSM) Program: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R46374, updated April 21, 2025, pp. 4–6, <https://www.documentcloud.org/documents/25907089-navy-medium-landing-ship-lsm-program-background-and-issues-for-congress-april-21-2025/> (accessed November 10, 2025). The term "first island chain" refers to a string of archipelagoes in the Western Pacific ringing the Asia landmass in the East, stretching from the Kamchatka Peninsula in the North through Japan, Taiwan, the Philippines, Malaysia, and Indonesia in the South.
134. "The Future Naval Force Study is a collaborative [Office of the Secretary of Defense], Joint Staff and Department of the Navy effort to assess future naval force structure options and inform future naval force structure decisions and the 30-year shipbuilding plan," according to a Navy spokesman quoted in David B. Larer and Aaron Mehta, "The Pentagon Is Eyeing a 500-Ship Navy, Documents Reveal," *Defense News*, September 24, 2020, <https://www.defensenews.com/naval/2020/09/24/the-pentagon-is-eyeing-a-500-ship-navy-documents-reveal/> (accessed November 9, 2025). See also Ronald O'Rourke, "Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. RL32665, September 17, 2020, pp. 10 and 11, https://www.everycrsreport.com/files/2020-09-17_RL32665_c609d44928ddf6f859c2d347ac90c2ab90a813ed.pdf (accessed November 10, 2025).
135. LaGrone, "Navy Raises Battle Force Goal to 381 Ships in Classified Report to Congress."
136. Mallory Shelbourne, "Landing Ship Medium Program Stalled over Price, Navy Cancels Industry RFP," USNI News, updated December 18, 2024, <https://news.usni.org/2024/12/17/landing-ship-medium-program-stalled-over-price-navy-cancels-industry-rfp> (accessed November 9, 2025).
137. Megan Eckstein, "The Light Amphibious Warship Is Delayed, but the Marine Corps Has a Temporary Solution," *Defense News*, May 10, 2022, <https://www.defensenews.com/naval/2022/05/10/the-light-amphibious-warship-is-delayed-but-the-marine-corps-has-a-temporary-solution/> (accessed November 9, 2025).
138. U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, "Ship Battle Forces," updated October 1, 2025, <https://www.nvr.navy.mil/nvr/getpage.htm?pagetype=shipbattleforce> (accessed November 10, 2025).
139. U.S. Senate Armed Services Committee, "Fiscal Year 2021 National Defense Authorization Act," p. 10, <https://www.armed-services.senate.gov/imo/media/doc/FY%2021%20NDAA%20Summary.pdf> (accessed November 10, 2025).
140. Testimony of Kenneth J. Braithwaite, Secretary of the Navy, and Admiral Michael M. Gilday, Chief of Naval Operations, in stenographic transcript of *Hearing to Receive Testimony on Navy and Marine Corps Readiness*, Subcommittee on Readiness and Management Support, Committee on Armed Services, U.S. Senate, December 2, 2020, pp. 84–87, https://www.armed-services.senate.gov/imo/media/doc/20-40_12-02-2020.pdf (accessed November 10, 2025).
141. *Naval News* Staff, "Fabrication Begins on Future USS Fallujah (LHA 9)," *Naval News*, December 21, 2022, <https://www.navalnews.com/naval-news/2022/12/fabrication-begins-on-future-uss-fallujah-lha-9/> (accessed November 10, 2025).
142. Mallory Shelbourne, "USS Tripoli Moving to Japan to Serve as Forward-Deployed Big Deck," U.S. Naval Institute News, February 14, 2025, <https://news.usni.org/2025/02/14/uss-tripoli-moving-to-japan-to-serve-as-forward-deployed-big-deck> (accessed November 9, 2025).
143. As of March 2020, the LPD 28 was "planned for delivery in September 2021." The Honorable James F. Geurts, Assistant Secretary of the Navy, Research, Development & Acquisition ASN(RD&A); Vice Admiral James W. Kilby, Deputy Chief of Naval Operations, Warfighting Requirements and Capabilities (OPNAV N9); and Lieutenant General Eric Smith, Deputy Commandant, Combat Development and Integration, Commanding General, Marine Corps Combat Development Command, statement on "The Department of the Navy Fiscal Year 2021 Budget Request for Seapower and Projection Forces" before the Subcommittee on Seapower and Projection Forces, Committee on Armed Services, U.S. House of Representatives, March 4, 2020, p. 13, <https://www.congress.gov/116/meeting/house/110637/witnesses/HHRG-116-AS28-Wstate-KilbyJ-20200304.pdf> (accessed November 10, 2025). In the end, the LPD 28 was delivered in March 2022. U.S. Navy, Naval Sea Systems Command, "Amphibious Transport Dock–LPD," *Fact File*, last updated March 6, 2025, <https://www.navy.mil/Resources/Fact-Files/Display-FactFiles/Article/2222713/amphibious-transport-dock-lpd/> (accessed November 10, 2025).
144. Ronald O'Rourke, "Navy LPD-17 Flight II and LHA Amphibious Ship Programs: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R43543, December 16, 2024, p. 5, <https://sgp.fas.org/crs/weapons/R43543.pdf> (accessed November 10, 2025).
145. Ronald O'Rourke, "Navy LPD-17 Flight II and LHA Amphibious Ship Programs: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R43543, updated May 22, 2023, pp. 8 and 17–22, <https://s3.documentcloud.org/documents/23826196/r43543-2.pdf> (accessed November 10, 2025).
146. Paul McLeary, "Marines Furious over the Navy's Plan for Troop-Carrying Ships," *Politico*, March 17, 2023, <https://www.politico.com/news/2023/03/17/marines-furious-over-the-navys-plan-for-troop-carrying-ships-00087716> (accessed November 10, 2025).
147. U.S. Navy, Naval Sea Systems Command, "Amphibious Transport Dock–LPD."
148. Table 1, "FYDP Funding for Unmanned Platforms," in U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations (Warfighting Requirements and Capabilities–OPNAV N9), *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels*, December 9, 2020, p. 4, https://media.defense.gov/2020/Dec/10/2002549918/-1/-1/1/SHIPBUILDING%20PLAN%20DEC%2020_NAVY_OSD_OMB_FINAL.PDF (accessed November 10, 2025).
149. U.S. Navy, Office of the Chief of Naval Operations, Deputy Chief of Naval Operations for Warfighting Requirements and Capabilities–OPNAV N9, *Report to Congress on the Annual Long-Range Plan for Construction of Naval Vessels for Fiscal Year 2025*, p. 11.

150. Sam LaGrone, "Ghost Fleet Ship 'Nomad' Transited Panama Canal, Headed to California," U.S. Naval Institute News, May 20, 2021, <https://news.usni.org/2021/05/20/ghost-fleet-ship-nomad-transited-panama-canal-headed-to-california> (accessed November 10, 2025).
151. Ensign Ronan Williams, "Navy Increases Unmanned Capabilities with Newly Established Unmanned Surface Division," Commander, Naval Surface Forces, U.S. Pacific Fleet, May 13, 2022, <https://www.surfpac.navy.mil/Media/News/Article/3033092/navy-increases-unmanned-capabilities-with-newly-established-unmanned-surface-di/> (accessed November 10, 2025).
152. Shelbourne and LaGrone, "Navy Wraps First Unmanned Surface Deployment to WESTPAC."
153. David Axe, "The Pentagon's Robot Warship Just Fired Its First Missile," *Forbes*, September 8, 2021, <https://www.forbes.com/sites/davidaxe/2021/09/08/the-pentagons-robot-warships-just-fired-their-first-missiles/?sh=58a75e9b3c78> (accessed November 10, 2025).
154. Special Briefing, "Special Briefing via Telephone with Vice Admiral Brad Cooper, Commander, U.S. Naval Forces Central Command, U.S. Fifth Fleet, and Combined Maritime Forces," U.S. Department of State, May 11, 2022, <https://2021-2025.state.gov/special-briefing-via-telephone-with-vice-admiral-brad-cooper-commander-u-s-naval-forces-central-command-u-s-fifth-fleet-and-combined-maritime-forces/#:~:text=Vice%20Admiral%20Cooper%20provides%20an%20update%20on%20recent,unmanned%20systems%20and%20artificial%20intelligence%20into%20fleet%20operations.> (accessed November 10, 2025).
155. Megan Eckstein, "Navy Creating Unmanned, AI Operations Hub Within US Southern Command," *Defense News*, April 4, 2023, <https://www.defensenews.com/newsletters/2023/04/04/navy-creating-unmanned-ai-operations-hub-within-us-southern-command/> (accessed November 9, 2025).
156. Press release, "Operation Southern Spear: Latest Development in Operationalizing Robotic and Autonomous Systems," U.S. Navy, January 28, 2025, <https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/4044322/operation-southern-spear-latest-development-in-operationalizing-robotic-and-aut/> (accessed November 10, 2025).
157. Mass Communication Specialist 1st Class Fred Gray IV, "USS Hershel 'Woody' Williams Completes Gulf of Guinea Maritime Security Patrol," U.S. Navy, April 20, 2022, <https://www.navy.mil/Press-Office/News-Stories/Article/3004507/uss-hershel-woody-williams-completes-gulf-of-guinea-maritime-security-patrol/> (accessed November 10, 2025); Brent D. Sadler, "Effective Naval Statecraft Can Prevent Communist Chinese Naval Bases in Africa," Heritage Foundation *Backgrounder* No. 3688, March 10, 2022, p. 12, <https://www.heritage.org/sites/default/files/2022-03/BG3688.pdf>.
158. Mike Schuler, "U.S. Navy Christens New Expeditionary Sea Base USNS John L. Canley," gCaptain, June 27, 2022, <https://gcaptain.com/u-s-navy-christens-new-expeditionary-sea-baseusns-john-l-canley/> (accessed November 10, 2025).
159. Team Ships Public Affairs, "Keel Authenticated for Future USS Robert E. Simanek," U.S. Navy, Naval Sea Systems Command, October 24, 2022, <https://www.navy.mil/Press-Office/News-Stories/Article/3197454/keel-authenticated-for-future-uss-robert-e-simanek/> (accessed November 10, 2025).
160. U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, "Ship Class—ESB 3," updated October 1, 2025, <https://www.nvr.navy.mil/nvr/getHulls.htm?hullType=ESB+3&fleetCategoryId=7&listType=BF&shipClassTitle=ESB+3A+EXPEDITIONARY+SEA+BASE> (accessed November 10, 2025).
161. Hope Hodge Seck, "Speedy 'Ambulance Ships' a High Priority for Navy Medicine, Admiral Says," *Military.com*, April 21, 2021, <https://www.military.com/daily-news/2021/04/21/speedy-ambulance-ships-high-priority-navy-medicine-admiral-says.html> (accessed November 10, 2025).
162. Press release, "Keel Authenticated for the Future USNS Cody," U.S. Navy, Naval Sea Systems Command, January 28, 2022, <https://www.navy.mil/Press-Office/Press-Releases/display-pressreleases/Article/2915837/keel-authenticated-for-the-future-usns-cody/> (accessed November 10, 2025).
163. Team Ships Public Affairs, "U.S. Navy Launches USNS Cody," U.S. Navy, Military Sealift Command, March 29, 2023, <https://www.msc.usff.navy.mil/Press-Room/News-Stories/Article/3347298/us-navy-launches-usns-cody/> (accessed November 10, 2025); U.S. Navy, Naval Sea Systems Command, Naval Vessel Register, "Ship Details – USNS Cody (T-EPF 14)," updated October 1, 2025, <https://www.nvr.navy.mil/nvr/getHull.htm?shipId=7720> (accessed November 10, 2025).
164. Press release, "General Dynamics NASSCO Launches First Ship in the T-AO Fleet Oiler Program for the U.S. Navy," General Dynamics NASSCO, January 13, 2021, <https://nassco.com/press-releases/general-dynamics-nassco-launches-first-ship-in-the-t-ao-fleet-oiler-program-for-the-u-s-navy/nggallery/page/2> (accessed November 10, 2025).
165. Ronald O'Rourke, "Navy John Lewis (TAO-205) Class Oiler Shipbuilding Program: Background and Issues for Congress," Congressional Research Service *Report for Members and Committees of Congress* No. R43546, updated December 12, 2024, pp. 9–10, <https://sgp.fas.org/crs/weapons/R43546.pdf> (accessed November 10, 2025).
166. Team Ships Public Affairs, "Navy Accepts Delivery of USNS John Lewis (T-AO 205)," U.S. Navy, Naval Sea Systems Command, July 29, 2022, <https://www.navy.mil/Press-Office/News-Stories/Article/3108994/navy-accepts-delivery-of-usns-john-lewis-t-ao-205/#:~:text=From%20Team%20Ships%20Public%20Affairs,AO%20205> (accessed November 10, 2025).
167. Sarah Cannon, "USNS John Lewis Completes First Fleet Tasked Underway Replenishment," U.S. Navy, Commander, U.S. Pacific Fleet, March 19, 2025, <https://www.cpf.navy.mil/Newsroom/News/Article/4125077/usns-john-lewis-completes-first-fleet-tasked-underway-replenishment/> (accessed November 10, 2025).
168. Fact File, "Fleet Replenishment Oilers T-AO," U.S. Navy, Military Sealift Command, last updated August 19, 2025, <https://www.navy.mil/Resources/Fact-Files/Display-FactFiles/Article/2222909/fleet-replenishment-oilers-t-ao/> (accessed November 10, 2025).

169. News release, “Statement by Secretary of Defense Lloyd J. Austin III on the Closure of the Red Hill Bulk Fuel Storage Facility,” U.S. Department of Defense, March 7, 2022, <https://www.defense.gov/News/Releases/Release/Article/2957825/statement-by-secretary-of-defense-lloyd-j-austin-iii-on-the-closure-of-the-red/> (accessed November 10, 2025).
170. Heather Mongilio, “Joint Task Force–Red Hill Aims to Begin Defueling as Early as October, Per New Plan,” U.S. Naval Institute News, May 23, 2023, <https://news.usni.org/2023/05/23/joint-task-force-red-hill-aims-to-begin-defueling-as-early-as-october-per-new-plan> (accessed November 10, 2025).
171. Mike Schuler, “UPDATE: Damaged Navy Oiler USNS Big Horn Towed Dead Stick to Oman,” gCaptain, September 25, 2024, <https://gcaptain.com/u-s-navy-oiler-usns-big-horn-towed-to-oman-after-grounding-incident/> (accessed November 10, 2025).
172. U.S. Department of Defense, Director, Operational Test & Evaluation, *FY 2024 Annual Report*, January 2025, pp. 204–206, <https://www.dote.osd.mil/Portals/97/pub/reports/FY2024/other/2024Annual-Report.pdf?ver=AkqD4yxlhmNndurzRkvqQ%3d%3d> (accessed November 10, 2025).
173. U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, pp. 2-10–2-12.
174. Nick Wilson, “Navy to Buy over 1,000 Anti-Ship Maritime Strike Tomahawks, Wants Missiles ASAP Despite Development Issues,” *Inside Defense*, December 26, 2024, <https://insidedefense.com/daily-news/navy-buy-over-1000-anti-ship-maritime-strike-tomahawks-wants-missiles-asap-despite> (accessed November 10, 2025).
175. U.S. Department of Defense, Director, Operational Test & Evaluation, *FY 2021 Annual Report*, January 2022, p. 194, https://www.dote.osd.mil/Portals/97/pub/reports/FY2021/other/2021_DOTEAnnualReport.pdf?ver=YVOVPcF7Z5drzl8IGPSqJw%3d%3d (accessed November 10, 2025).
176. Thomas Newdick and Tyler Rogoway, “F-15 Eagle Scores ‘Longest Known’ Air-to-Air Missile Shot During U.S. Air Force Test,” *The War Zone*, updated April 14, 2021, <https://www.thedrive.com/the-war-zone/40184/f-15-eagle-scores-longest-known-air-to-air-missile-shot-during-u-s-air-force-test> (accessed November 10, 2025).
177. Joseph Trevithick, “New AIM-120E Variant of AMRAAM Air-to-Air Missile Hinted At by USAF,” *The War Zone*, updated April 1, 2025, <https://www.twz.com/air/new-aim-120e-air-to-air-missile-variant-hinted-at-by-usaf> (accessed November 10, 2025).
178. Transcript, “Defense Secretary Pete Hegseth and Philippine Secretary of National Defense Gilberto Teodoro Hold Joint Media Availability,” U.S. Department of War, March 28, 2025, <https://www.defense.gov/News/Transcripts/Transcript/Article/4138360/defense-secretary-pete-hegseth-and-philippine-secretary-of-national-defense-gil/> (accessed November 10, 2025).
179. The Honorable John C. Rood, Under Secretary of Defense for Policy, written testimony for hearing, *Strategic Threats, Ongoing Challenges, and National Defense Strategy Implementation*, Committee on Armed Services, U.S. Senate, December 5, 2019, p. 8, https://www.armed-services.senate.gov/imo/media/doc/Rood--Allvin_12-05-19.pdf (accessed September 4, 2023). See also stenographic transcript of *Hearing to Receive Testimony on Strategic Threats, Ongoing Challenges, and National Defense Strategy Implementation*, Committee on Armed Services, U.S. Senate, December 5, 2019, https://www.armed-services.senate.gov/imo/media/doc/19-80_12-05-19.pdf (accessed November 10, 2025).
180. Table, “Sec. 4101. Procurement,” in Report No. 116-617, *William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021*, Conference Report to Accompany H.R. 6395, U.S. House of Representatives, 116th Congress, 2nd Session, December 3, 2020, p. 1966, <https://www.congress.gov/116/crpt/hrpt617/CRPT-116hrpt617.pdf> (accessed November 10, 2025).
181. Mallory Shelbourne, “First Image of Marines’ New Anti-Ship Missile Unmanned Truck Emerges,” U.S. Naval Institute News, April 28, 2021, <https://news.usni.org/2021/04/28/first-image-of-marines-new-anti-ship-missile-unmanned-truck-emerges> (accessed November 9, 2025).
182. U.S. Department of the Navy, Office of Budget–2022, *Highlights of the Department of the Navy FY 2023 Budget*, pp. 2-16 and 3-9, https://s3.documentcloud.org/documents/21613097/highlights_book-2022.pdf (accessed November 11, 2025).
183. U.S. Department of the Navy, Office of Budget–2024, *Highlights of the Department of the Navy FY 2025 Budget*, pp. 2-9, https://www.secnav.navy.mil/fmc/fmb/Documents/24pres/Budget_Highlights_Book.pdf (accessed November 11, 2025).
184. The Honorable James F. Geurts, Assistant Secretary of the Navy for Research, Development and Acquisition ASN(RD&A); Lieutenant General Steven Rudder, Deputy Commandant for Aviation; and Rear Admiral Scott Conn, Director, Air Warfare, statement on “Department of the Navy Aviation Programs” before the Subcommittee on Seapower, Committee on Armed Services, U.S. Senate, April 10, 2019, p. 6, https://www.armed-services.senate.gov/imo/media/doc/Geurts_Rudder_Conn_04-10-19.pdf (accessed November 10, 2025).
185. U.S. Department of Defense, Director, Operational Test & Evaluation, *FY 2024 Annual Report*, pp. 229–231.
186. “Feature: USN’s Next Generation Jammer Aims to Field Digital-Era Electronic Attack,” *Janes*, February 13, 2025, <https://www.janes.com/osint-insights/defence-and-national-security-analysis/post/usns-next-generation-jammer-aims-to-field-digital-era-electronic-attack> (accessed November 10, 2025).
187. U.S. Department of the Navy, Office of Budget–2022, *Highlights of the Department of the Navy FY 2023 Budget*, p. 12-6.
188. H.R. 7776, James M. Inhofe National Defense Authorization Act for Fiscal Year 2023, Title I, Subtitle C, Section 121.
189. U.S. Department of Defense, *DoD Strategic Management Plan, Fiscal Years 2022–2026*, FY 2024 Annual Performance Report, p. 89, <https://media.defense.gov/2025/Jan/17/2003630175/-1/-1/FY2024-ANNUAL-PERFORMANCE-REPORT-FOR-THE-DOD-STRATEGIC-MANAGEMENT-PLAN-FOR-FYS-2022-2026.PDF> (accessed November 11, 2025).
190. Figure 4.3, “Aircraft Procurement Quantities and Total Funding,” in U.S. Navy, Office of Budget–2020, *Highlights of the Department of the Navy FY 2021 Budget*, 2020, p. 4-6, https://www.secnav.navy.mil/fmc/fmb/Documents/21pres/Highlights_book.pdf (accessed November 10, 2025).

191. "Navy Warship Uses a New High-Energy Laser to Shoot down Drone in Mid-Flight," *Stars and Stripes*, May 24, 2020, <https://www.stripes.com/news/pacific/navy-warship-uses-a-new-high-energy-laser-to-shoot-down-drone-in-mid-flight-1.631053> (accessed November 10, 2025).
192. Lockheed Martin, "More Than a Laser, HELIOS Is an Integrated Weapon System," January 9, 2021, <https://www.lockheedmartin.com/en-us/news/features/2021/more-than-a-laser-helios-is-an-integrated-weapon-system.html> (accessed November 10, 2025).
193. Xavier Vavasseur, "Lockheed Martin Delivers HELIOS Laser Weapon System to U.S. Navy," *Naval News*, January 11, 2021, <https://www.navalnews.com/naval-news/2021/01/lockheed-martin-delivers-helios-laser-weapon-system-to-u-s-navy/> (accessed November 10, 2025).
194. U.S. Department of the Navy, Office of Budget–2023, *Highlights of the Department of the Navy FY 2024 Budget*, p. 3-9.
195. U.S. Department of the Navy, Office of Budget–2025, *Highlights of the Department of the Navy FY 2025 Budget*, 2024, pp. 3-7 and 3-8, https://www.secnav.navy.mil/fmc/fmb/Documents/25pres/Highlights_Book.pdf (accessed November 10, 2025).
196. Warren Duffie Jr., Office of Naval Research, "Laser Trailblazer: Navy Conducts Historic Test of New Laser Weapon System," U.S. Navy, April 13, 2022, <https://www.navy.mil/Press-Office/News-Stories/Article/2998829/laser-trailblazer-navy-conducts-historic-test-of-new-laser-weapon-system/> (accessed November 10, 2025).
197. U.S. Department of the Navy, Office of Budget–2022, *Highlights of the Department of the Navy FY 2023 Budget*, pp. 3-8 and 3-9.
198. U.S. Department of Defense, Director, Operational Test & Evaluation, FY 2024 Annual Report, pp. 28–29.
199. Memorandum from M. M. Gilday, Chief of Naval Operations, to Rear Admiral Douglas Small, USN, "Subj: Project Overmatch," October 1, 2020, and memorandum from M. M. Gilday, Chief of Naval Operations, to Vice Admiral James Kilby, USN, "Subj: A Novel Force," October 1, 2020, <https://news.usni.org/2020/10/27/navy-focused-on-strengthening-networks-to-support-unmanned-operations> (accessed November 10, 2025).
200. For an overview of the Joint All-Domain Command and Control program, see John R. Hoehn, "Joint All-Domain Command and Control (JADC2)," Congressional Research Service *In Focus* No. IF11493, updated January 21, 2022, <https://apps.dtic.mil/sti/trecms/pdf/AD1157645.pdf> (accessed November 9, 2025).
201. Megan Eckstein, "Navy Remains Mum on Project Overmatch Details So China Won't Steal Them," *Defense News*, February 25, 2022, <https://www.defensenews.com/naval/2022/02/25/navy-remains-mum-on-project-overmatch-details-so-china-wont-steal-them/> (accessed November 9, 2025).
202. John Grady, "JADC2 Network Key to Managing Forces Across the World, Says Panel," U.S. Naval Institute News, April 10, 2024, <https://news.usni.org/2024/04/10/jadc2-network-clear-to-managing-forces-across-the-world-says-panel> (accessed November 9, 2025).
203. Seamus P. Daniels, "What Are Key Milestones and Decisions Affecting U.S. Defense Spending in 2025?" Center for Strategic and International Studies *Commentary*, February 14, 2025, <https://www.csis.org/analysis/what-are-key-milestones-and-decisions-affecting-us-defense-spending-2025> (accessed November 9, 2025).
204. Testimony of Admiral John M. Richardson, Chief of Naval Operations, in stenographic transcript of *Hearing on the Posture of the Department of the Navy in Review of the Defense Authorization Request for Fiscal Year 2019 and the Future Years Defense Program*, Committee on Armed Services, U.S. Senate, April 19, 2018, pp. 91–92, https://www.armed-services.senate.gov/imo/media/doc/18-42_04-19-18.pdf (accessed November 9, 2025).
205. The Honorable James F. Geurts, Assistant Secretary of the Navy for Research, Development and Acquisition, and Vice Admiral Thomas Moore, Commander, Naval Sea Systems Command, statement on "Ship and Submarine Maintenance" before the Subcommittee on Seapower and Subcommittee on Readiness and Management Support, Committee on Armed Services, U.S. Senate, December 4, 2019, pp. [1] and [8], https://www.armed-services.senate.gov/imo/media/doc/Geurts--Moore_12-04-19.pdf (accessed November 9, 2025).
206. Megan Eckstein, "CNO, Commandant: Naval Forces Can Meet Today's Obligations, but 2021 Readiness at Risk with Pandemic," U.S. Naval Institute News, May 21, 2020, <https://news.usni.org/2020/05/21/cno-commandant-naval-forces-can-meet-todays-obligations-but-2021-readiness-at-risk-with-pandemic> (accessed November 24, 2025).
207. U.S. Navy Office of Information, "Navy COVID-19 Update," February 10, 2023, <https://web.archive.org/web/20230810223307/https://www.navy.mil/Resources/COVID-19-Updates/> (accessed November 24, 2025).
208. Megan Eckstein, "Executive Summary to Naval Shipyard Recapitalization and Optimization Plan," U.S. Naval Institute News, updated September 13, 2018, <https://news.usni.org/2018/09/12/executive-summary-to-naval-shipyard-recapitalization-and-optimization-plan> (accessed November 10, 2025).
209. U.S. Navy, Naval Facilities Engineering Systems Command, Shipyard Infrastructure Optimization Program, SIOP Overview Card, August 2025, <https://www.navfac.navy.mil/PEO-Industrial-Infrastructure/PMO-555-SIOP/SIOP-Overview-Card/> (accessed November 17, 2025). Emphasis in original.
210. Megan Eckstein, "NAVSEA: Navy Could Accelerate Some Public, Private Shipyard Upgrades If Money Were Available," U.S. Naval Institute News, May 7, 2021, <https://news.usni.org/2021/05/07/navsea-navy-could-accelerate-some-public-private-shipyard-upgrades-if-money-were-available> (accessed November 9, 2025).
211. Caitlyn Burchett, "Navy to Revamp Ship Maintenance, Training Schedules to Ready the Fleet for Potential China Conflict," *Stars and Stripes*, January 21, 2025, <https://www.stripes.com/branches/navy/2025-01-21/navy-ships-maintenance-training%C2%A0china-16559012.html> (accessed November 10, 2025).

212. U.S. Government Accountability Office, *Navy Surface Ships: Maintenance Funds and Actions Needed to Address Ongoing Challenges*, GAO-25-106990, January 31, 2025, p. 2, <https://www.gao.gov/assets/gao-25-106990.pdf> (accessed November 17, 2025). See also *ibid.*, pp. 9–11.
213. U.S. Department of the Navy, Office of Budget–2024, *Highlights of the Department of the Navy FY 2025 Budget*, p. 4-4, https://www.secnav.navy.mil/fmc/fmb/Documents/25pres/Highlights_Book.pdf (accessed November 11, 2025).
214. U.S. Government Accountability Office, “Coast Guard: Information on Defense Readiness Mission Deployments, Expenses, and Funding,” pp. 7 and 14.
215. Mallory Shelbourne, “Navy Will Sideline 17 Support Vessels to Ease Strain on Civilian Mariners,” U.S. Naval Institute News, November 21, 2024, <https://news.usni.org/2024/11/21/navy-will-sideline-17-support-vessels-to-ease-strain-on-civilian-mariners> (accessed November 9, 2025).
216. Modly, Gilday, and Berger, statement “On Fiscal Year 2021 Department of the Navy Budget,” pp. 11 and 25.
217. H.R. 7776, National Defense Authorization Act for Fiscal Year 2023, Title XXIX.
218. U.S. Department of Defense, Office of the Under Secretary of Defense (Comptroller), *Department of Defense Budget Fiscal Year 2023: Pacific Deterrence Initiative*, April 2022, pp. 5 and 17, https://comptroller.war.gov/Portals/45/Documents/defbudget/FY2023/FY2023_Pacific_Deterrence_Initiative.pdf (accessed November 10, 2025).
219. Davidson, statement on “U.S. Indo-Pacific Command Posture,” March 9, 2021, pp. 25–26.
220. U.S. Department of Defense, *Department of Defense Budget, Fiscal Year (FY) 2025: Pacific Deterrence Initiative*, March 2024, pp. 4, 6–7 and 14–16, https://comptroller.defense.gov/Portals/45/Documents/defbudget/FY2025/FY2025_Pacific_Deterrence_Initiative.pdf (accessed November 10, 2025).
221. See U.S. Department of the Navy, Fleet Forces Command, *Comprehensive Review of Recent Surface Force Incidents*, October 26, 2017, *passim*, <https://s3.documentcloud.org/documents/4172114/Comprehensive-Review-of-Recent-Surface-Force.pdf> (accessed November 10, 2025).
222. U.S. Department of the Navy, *Strategic Readiness Review 2017*, p. 5, <https://www.documentcloud.org/documents/4328654-U-S-Navy-Strategic-Readiness-Review-Dec-11-2017> (accessed November 10, 2025).
223. Rear Admiral Christopher J. Cavanaugh, USN, *Command Investigation of the Apparent Striking of a Submerged Object by USS Connecticut (SSN 22) While Underway in the U.S. Seventh Fleet Area of Operations on 2 October 2021*, Final Investigation Report, October 29, 2021, https://s3.documentcloud.org/documents/22035805/connecticut_mark.pdf (accessed November 9, 2025).
224. Brent D. Sadler, “Reestablish First Fleet and Advance AUKUS to Close Critical Gaps in America’s Pacific Defense,” Heritage Foundation *Issue Brief* No. 5391, September 8, 2025, p. 8, <https://www.heritage.org/sites/default/files/2025-09/IB5391.pdf>.
225. Brent D. Sadler, “A Modern Naval Act to Meet the Surging China Threat,” Heritage Foundation *Backgrounder* No. 3732, October 24, 2022, pp. 5–6, <https://www.heritage.org/sites/default/files/2022-10/BG3732.pdf>.
226. Brent Droste Sadler, “Reviving America’s Maritime Strength: Comprehensive by Necessity,” Heritage Foundation *Backgrounder* No. 3918, July 24, 2025, pp. 3–20, <https://www.heritage.org/sites/default/files/2025-07/BG3918.pdf>.
227. Brent D. Sadler, “Nine for the Navy: Proposals to Accelerate a Delayed Naval Buildup,” Heritage Foundation *Issue Brief* No. 5394, September 23, 2025, pp. 2–4, <https://www.heritage.org/sites/default/files/2025-09/IB5394.pdf>.
228. *Ibid.*, pp. 4–5.
229. *Ibid.*, p. 6.
230. Brent Droste Sadler, *Naval Power in Action: Seizing the Initiative in the New Cold War with China* (Annapolis: Naval Institute Press, 2025), pp. 90–98.