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# **Defense Primer: Naval Forces**

# "Naval Forces" Refers to Both the Navy and Marine Corps

Although the term *naval forces* is often used to refer specifically to Navy forces, it more properly refers to both Navy and Marine Corps forces, because both the Navy and Marine Corps are naval services. For further discussion, see CRS In Focus IF10484, *Defense Primer: Department of the Navy*, by Ronald O'Rourke. For a discussion of the Marine Corps that focuses on its organization as a ground-combat force, see CRS In Focus IF10571, *Defense Primer: Organization of U.S. Ground Forces*, by Barbara Salazar Torreon and Andrew Feickert.

## **U.S. Strategy and Naval Forces**

U.S. naval forces give the United States the ability to convert the world's oceans—a global commons that covers more than two-thirds of the planet's surface—into a medium of maneuver and operations for projecting U.S. power ashore and otherwise defending U.S. interests around the world. The ability to use the world's oceans in this manner—and to deny other countries the use of the world's oceans for taking actions against U.S. interests—constitutes an immense asymmetric advantage for the United States.

As discussed elsewhere (see CRS In Focus IF10485, *Defense Primer: Geography, Strategy, and U.S. Force Design*, by Ronald O'Rourke), the size and composition of U.S. naval forces reflect the position of the United States as a Western Hemisphere power with a goal of preventing the emergence of regional hegemons in Eurasia. As a result, the U.S. Navy includes significant numbers of aircraft carriers, nuclear-powered attack submarines, large surface combatants, large amphibious ships, and underway replenishment ships.

#### **Navy Ship Types**

The Navy's ballistic missile submarines (SSBNs) are dedicated to performing a singular mission of strategic nuclear deterrence. The Navy's other ships, which are sometimes referred to as the Navy's general-purpose ships, are generally multimission ships capable of performing a variety of missions other than strategic nuclear deterrence. The principal types of general-purpose ships in the Navy include attack submarines (SSNs); aircraft carriers (CVNs); large surface combatants, meaning cruisers (CGs) and destroyers (DDGs); small surface combatants, meaning frigates (FFGs), Littoral Combat Ships (LCSs), mine warfare (MIW) ships, and patrol craft (PCs); amphibious ships, whose primary function is to transport Marines and their equipment and supplies to distant operating areas and support Marine ship-to-shore movements and Marine operations ashore; combat logistics force (CLF) ships, which perform underway replenishment (UNREP) operations, meaning the at-sea resupply of combat ships; and other support ships of various types.

The Navy's aircraft carriers embark multimission carrier air wings (CVWs) consisting of 60+ aircraft—mostly fixed-wing aircraft, plus a few helicopters. Each CVW typically includes 40 or more strike fighters that are capable of air-to-ground (strike) and air-to-air (fighter) combat operations.

## Size of the Navy

The total number of ships in the Navy is a one-dimensional metric that leaves out many other important factors bearing on the Navy's size and capabilities. Even so, observers often cite the total number of ships in the U.S. Navy as a convenient way of summarizing the Navy's size and capabilities.

The quoted number of ships in the Navy reflects the battle force ships counting method, which is a set of rules for which ships count (or do not count) toward the quoted number of ships. The battle force ships counting method was established in the early 1980s and has been modified by legislation in recent years. Essentially, it includes ships that are readily deployable overseas, and which contribute to the Navy's overseas combat capability. The Naval History and Heritage Command maintains a database on numbers of ships in the Navy from 1886 to the present. (It is available here: https://www.history.navy.mil/research/ histories/ship-histories/us-ship-force-levels.html.) Since this database extends back to 1886, it uses a different counting method that is more suitable for working with older historical data. This alternate counting method, however, produces, for the 1980s onwards, figures for the total size of the Navy that are different than the figures produced by the battle force ships counting method. For this reason, using figures from the NHHC database to quote the size of the Navy in recent years can cause confusion.

#### Navy Force-Level Goal

The Navy determines its force-level goal—the size and composition of the fleet it would like to reach and maintain in coming years—through a Force Structure Analysis (FSA). FSAs are conducted every few years. For each type of ship, the FSA calculates the number required for warfighting, and the number required for maintaining day-to-day forward-deployed presence overseas.

In December 2016, the Navy released a force-structure goal that calls for achieving and maintaining a fleet of 355 ships of certain types and numbers. The 355-ship goal was made U.S. policy by Section 1025 of the FY2018 National Defense Authorization Act (H.R. 2810/P.L. 115-91 of December 12, 2017). The 355-ship goal predates the Trump and Biden Administrations' national defense strategies and does not reflect the new fleet architecture (i.e., new mix of ships) that the Navy wants to shift toward in coming years. This new fleet architecture is to feature a smaller proportion of larger ships, a larger proportion of smaller ships, and a

new third element of large unmanned vehicles (UVs). The Navy and the Department of Defense (DOD) have been working since 2019 to develop a successor for the 355-ship force-level goal that would reflect current national defense strategy and the new fleet architecture. The Navy's FY2023 30-year (FY2023-FY2052) shipbuilding plan, released on April 20, 2022, presents the results of three studies on possibilities for the Navy's successor force-level goal. These studies call for a future Navy with 321 to 404 manned ships and 45 to 204 large UVs.

## **Current Size of the Navy**

The size of the Navy in recent years has generally ranged between 270 and 300 battle force ships. As of April 18, 2022, the figure was 298.

## **Nuclear-Powered Ships**

The Navy's submarines and aircraft carriers are all nuclear powered, meaning that they use on-board nuclear reactors to generate power for propulsion and for running shipboard equipment. Navy submarines each have one reactor; Navy aircraft carriers each have two. All other Navy ships are conventionally powered, meaning that they burn petroleum-based fuels for propulsion and shipboard power.

## **Navy Nuclear Weapons**

The Navy maintains a neither-confirm-nor-deny (NCND) policy regarding the presence or absence of nuclear weapons on specific ships. In general, however, it is understood that the only Navy ships that carry nuclear weapons are SSBNs, which carry nuclear-armed submarine-launched ballistic missiles (SLBMs). All of the Navy's other nuclear weapons, which were referred to collectively as nonstrategic naval nuclear weapons, were withdrawn from the fleet as part of a unilateral initiative announced by President George H.W. Bush at the end of the Cold War in 1991.

## **Navy Formations**

Naval forces are modular and scalable—Navy ships can be combined into formations of various types and sizes that are tailored for their intended missions. The two most prominent types of naval formations are carrier strike groups (CSGs) and amphibious ready groups (ARGs). The composition of a CSG can vary, but typically includes a CVN with its embarked CVW, perhaps three to five surface combatants (typically one cruiser, plus some destroyers), a CLF ship, and perhaps an SSN. An ARG typically includes three amphibious ships—one LHA/LHD type "big deck" amphibious assault ship (which resembles a medium-sized aircraft carrier) and two smaller (but still sizeable) amphibious ships known as LPDs and LSDs. An ARG typically embarks a Marine Expeditionary Unit (MEU), which includes more than 2,000 Marines and their equipment (including some aircraft) and supplies. A third type of naval formation is a **Surface Action Group (SAG)**, which consists of a few or several surface combatants, without an aircraft carrier. Navy ships sometimes operate by themselves—all SSBNs and many SSNs operate this way, as do some surface combatants and amphibious ships that are deployed to lower-threat areas (such as South America or parts of Africa) for purposes of engaging with allied or partner forces in those areas.

## **Forward-Deployed Operations**

The U.S. Navy is unique among the world's navies in that, at any given moment, a sizeable fraction of the Navy is forward-deployed to distant operating areas, particularly the Western Pacific, the Indian Ocean/Persian Gulf region, and the waters around Europe. At any given moment, roughly 30% or more of the Navy, including two or three CSGs and two or three ARGs, might be forward-deployed. Having enough ships to maintain these forward deployments is a major influence on calculations that determine the Navy's force-level goal.

The forward-deployed presence of Navy ships is intended to support a number of ongoing or potential missions, including deterrence of potential aggressors; reassurance of allies and partners; engagement operations with foreign naval and other military forces (which can strengthen political bonds and improve interoperability between the Navy and those other forces); intelligence, surveillance, and reconnaissance (ISR) operations; rapid response in humanitarian assistance/disaster response (HA/DR) situations; noncombatant evacuation operations (NEOs); counter-terrorist operations, crisis response and containment, and timely initial actions during the early (and potentially critical) stages of a conflict.

## **Forward-Homeported Ships**

Most of the Navy's ships are homeported in the United States. To help support its ability to maintain its forward-deployed presence, some Navy ships are homeported in forward locations. The Navy's largest forward-homeporting location is Japan, where a CSG, an ARG, and some mine warfare ships are homeported. Additional Navy ships are forward-homeported elsewhere in the Pacific, in the Persian Gulf (at Bahrain), and in or near the Mediterranean (in Spain and Italy).

#### **Relevant Statutes**

Title 10, U.S. Code, Subtitle C – Navy and Marine Corps

#### **CRS Products**

CRS Report RL32665, Navy Force Structure and Shipbuilding Plans: Background and Issues for Congress, by Ronald O'Rourke

#### **Other Resources**

Congressional Budget Office, The U.S. Military's Force Structure: A Primer, 2021 Update, May 2021, particularly Chapter 3 (pp. 45-77)

Department of the Navy, Highlights of the Department of the Navy FY 2023 Budget, accessed April 21, 2022, at https://www.secnav.navy.mil/fmc/fmb/Documents/23pres/Highlights\_Book.pdf

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