

# ALLHANDS

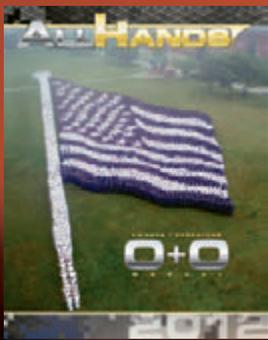


OWNERS + OPERATORS

O + O

M A N U A L

2012



**[On the Front Cover]**

In preparation for the 2011 Great Lakes Centennial, more than 7400 staff and students from Training Support Center, Recruit Training Command, Hospital Corps School and many other tenant commands at Naval Station Great Lakes recreated the Living Flag from 1917 on National Flag Day at Ross Field.

Photo by GSEC David C. Smith

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\* Fold out poster of Enlisted Ratings, Warfare Pins, Armed Forces Ranks, Order of Precedence and Devices included.

**All Hands**

Number 1136 | 2012

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**All Hands** (ISSN 0002-5577) Number 1136 is published by the Defense Media Activity, Navy Production Department, 6700 Taylor Avenue, Ft. Meade, MD 20755. For Sale: by the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402 or call 202/512-1800. Single copy prices \$7.50 (domestic)/ \$9 (foreign). Postmaster: Send address changes to All Hands, Defense Media Activity, Navy Production Department, 6700 Taylor Avenue, Ft. Meade, MD 20755. Editorial Offices: Send submissions and correspondence to Defense Media Activity, Navy Production Department, ATTN: Editor, 6700 Taylor Avenue, Ft. Meade, MD 20755 Tel: DSN 733-4373 or 301/222-6373 Fax: DSN 733-4948 or 301/833-4948 Authorization: The Secretary of the Navy has determined this publication is necessary in the transaction of business required by law of the Department of the Navy. Funds for printing this publication have been approved by the Navy Publications and Printing Committee.

## MISSION

### Our core responsibilities

Deter aggression and, if deterrence fails, win our nation's wars. Employ the global reach and persistent presence of forward-stationed and rotational forces to secure the nation from direct attack, assure joint operational access and retain global freedom of action. With global partners, protect the maritime freedom that is the basis for global prosperity. Foster and sustain cooperative relationships with an expanding set of allies and international partners to enhance global security.

## PRIORITIES

The enduring responsibilities of each CNO:

- Remain ready to meet current challenges today,
- Build a relevant and capable future force,
- Enable and support our Sailors, Navy civilians and their families.

## VISION

Navy's contribution and characteristics over the next 10-15 years: The U.S. Navy will remain critical to our national security and our economic prosperity.

- The Navy will continue to be at the front line of our nation's efforts in war and peace with a proud heritage of success in battle on, above, and below the sea.
- The Navy will continue protecting the interconnected systems of trade, information, and security that underpin American prosperity.

Operating forward across the globe, the Navy will provide the nation offshore options to win today and advance our interests in an era of uncertainty.

- We will deliver credible capability for deterrence, sea control, and power projection to deter or contain conflict and fight and win wars.
- As ground forces draw down in the Middle East, the Navy will continue to deter aggression and reassure our partners – we will have the watch.

Ready Sailors and civilians will remain the source of the Navy's warfighting capability.

- Our people will be diverse in experience, background and ideas; personally and professionally ready; and proficient in the operation of their weapons and systems.
- Our Sailors and civilians will continue a two-century tradition of warfighting excellence, adaptation, and resilience.
- Our character and our actions will remain guided by our commitment to the nation and to each other as part of one Navy team.

We will address economic change by being effective and efficient.

We will innovate to:

- Use new technologies and operating concepts to sharpen our warfighting advantage against evolving threats;
- Operate forward at strategic maritime crossroads;
- Sustain our fleet capability through effective maintenance, timely modernization, and sustained production of proven ships and aircraft;
- Provide our Sailors confidence in their equipment and in their own skills.

Over the next 10 to 15 years, the Navy will evolve and remain the preeminent maritime force.

- The reach and effectiveness of ships and aircraft will be greatly expanded through new and updated weapons, unmanned systems, sensors, and increased power.

- The Air-Sea Battle Concept will be implemented to sustain U.S. freedom of action and Joint Assured Access.
- Unmanned systems in the air and water will employ greater autonomy and be fully integrated with their manned counterparts.
- The Navy will continue to dominate the undersea domain using a network of sensors and platforms with expanded reach and persistence from unmanned autonomous systems.
- Cyberspace will be operationalized with capabilities that span the electromagnetic spectrum providing superior awareness and control when and where we need it. Our forces will operate forward in new and flexible ways with access to strategic maritime crossroads.
- Our posture will be focused and improved using a combination of rotational deployments, forward bases, temporary and austere facilities and partner nation ports.
- Our forward presence will build on and strengthen our partnerships and alliances where sea lanes, resources, and vital U.S. interests intersect.

## TENETS

The key considerations we should apply to every decision:

### Warfighting First

Be ready to fight and win today, while building the ability to win tomorrow.

### Operate Forward

Provide offshore options to deter, influence and win in an era of uncertainty.

### Be Ready

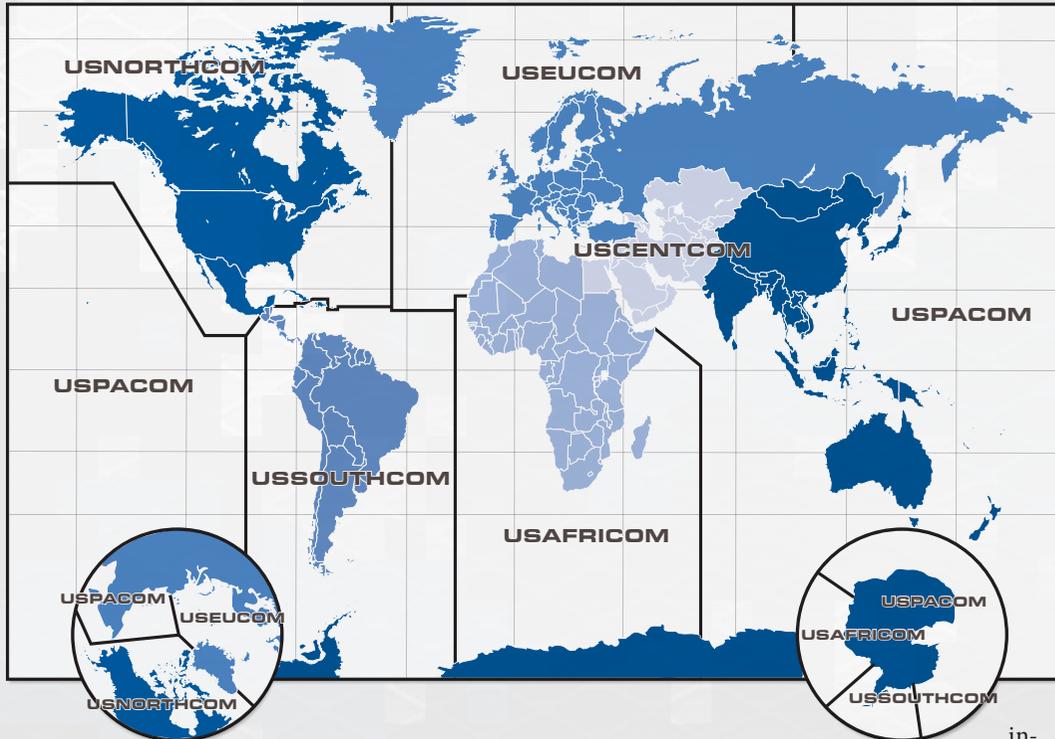
Harness the teamwork, talent and imagination of our diverse force to be ready to fight and responsibly employ our resources.

The starting point for developing and executing our plans:

- Our primary mission is warfighting. All our efforts to improve capabilities, develop people, and structure our organizations should be grounded in this fundamental responsibility.
- People are the Navy's foundation. We have a professional and moral obligation to uphold a covenant with Sailors, civilians and their families – to ably lead, equip, train and motivate.
- Our approach should be joint and combined when possible. However, we own the sea, and must also be able to operate independently when necessary.
- Our primary joint partner is the U.S. Marine Corps. We must continue to evolve how we will operate and fight as expeditionary warfare partners.
- At sea and ashore, we must be ready to part with Navy roles, programs and traditions if they are not integral to our future vision or a core element of our mission.
- We must ensure today's force is ready for its assigned missions. Maintaining ships and aircraft to their expected service lives is an essential contribution to fleet capacity.
- Our Navy Ethos defines us and describes the standard for character and behavior.
- We must clearly and directly communicate our intent and expectations both within and outside the Navy.
- I believe in the "Charge of Command." We will train and empower our leaders with authorities commensurate with their responsibilities. 

## Numbered Fleets

The map depicts the unified commands' Areas of Operation (AO). The Navy supports regional unified commands with component commands and numbered fleets.



### U.S. Fleet Forces Command

**Headquarters:** Norfolk

**Mission:** U.S. Fleet Forces (USFF) organizes, mans, trains and equips Navy forces. USFF is the Navy component commander providing direct support to U.S. Joint Forces Command, U.S. Northern Command and U.S. Strategic Command.

USFF's other primary responsibilities include determining and providing future and current needs of the fleet for warfighting and readiness capabilities to the chief of naval operations. USFF strives to have an effectively prepared total Navy force by building a fleet with speed, endurance, global reach, unique capabilities and the operational agility to give a range of options to regional combatant commanders.

### U.S. Pacific Fleet

**Headquarters:** Pearl Harbor

**Mission:** U.S. Pacific Fleet (PACFLT) operates in support of the U.S. Pacific Command (PACOM) theater security strategy and provides

interoperable, trained and combat ready naval forces to PACOM and other U.S. combatant commanders as required. In addition to these traditional Title 10 responsibilities, PACFLT has a vital operational role as Commander, Joint Task Force 519. This mission requires PACFLT to not only maintain the training and readiness of the Joint Task Force Headquarters staff, but to also command the joint force during times of conflict, crisis or war.

As part of the nation's maritime strategy, PACFLT conducts humanitarian assistance and disaster relief efforts. Pacific Partnership is an annual mission by PACFLT involving partner nations, nongovernmental organizations and other groups working to provide medical, dental and veterinary care as well as engineering agricultural civic action programs to provide sustainable improvements in the quality of life for the citizens of host nations throughout Southeast Asia and the South Pacific.

PACFLT provides forward presence, deterrence, sea control, power projection and

security for the Pacific Ocean, the world's largest maritime domain, covering one-third of the world's surface.

### U.S. 3rd Fleet

**Headquarters:** San Diego

**Mission:** U.S. 3rd Fleet delivers combat-ready naval forces, executes fleet operations and defines future fleet requirements to deter aggression, preserves freedom of the seas and promotes peace and security.

**AO:** Pacific Ocean from the North Pole to the South Pole and from the continental West Coast to the international date line.

### U.S. Naval Forces Southern Command/U.S. 4th Fleet

**Headquarters:** Mayport, Fla.

**Mission:** U.S. Naval Forces Southern Command (NAVSO) is the Navy component commander for U.S. Southern Command (SOUTHCOM), which is headquartered in Miami. U.S. 4th Fleet is the numbered fleet assigned to NAVSO. NAVSO/4th Fleet directs U.S. Navy forces operating in the SOUTHCOM AO and interacts with Caribbean, Central and South American civil forces and navies to shape the maritime environment.

Through theater security cooperation, NAVSO/4th Fleet work to build and strengthen relations, develop partner nation capabilities and maintain maritime access to defend southern approach to the United States in support of the maritime strategy.

NAVSO/4th Fleet also provides operational control for U.S. Navy units supporting joint and interagency efforts in counter-illicit trafficking operations and efforts to stem the flow of illegal migration.

**AO:** Caribbean Sea, Eastern Pacific and South Atlantic waters surrounding 31 countries and 12 dependencies, and covering about 15.6 million square miles.

### U.S. Naval Forces Central Command/U.S. 5th Fleet/ Combined Maritime Forces

**Headquarters:** Manama, Bahrain

**Mission:** U.S. Naval Forces Central Command (COMUSNAVCENT)/5th Fleet is the naval component command for U.S. Central Command that conducts maritime operations to help ensure security and stability

throughout the region, promotes U.S. interests, prevents regional conflict and defeats our adversaries.

COMUSNAVCENT acts in concert with other Central Command components, Combined Maritime Forces and joint task forces to deter destabilizing activities and promote a lawful maritime order in the Central Command's AO.

U.S. and coalition forces conduct missions in support of Operations Enduring Freedom and Iraqi Freedom as well as maritime security operations in the Arabian Gulf, Arabian Sea, Red Sea and off the coast of Somalia.

Operations in the NAVCENT area are focused on reassuring regional partners of the United States' commitment to security, that promotes stability and global prosperity. These operations protect maritime infrastructure, deter and disrupt piracy, prevent drug and weapons smuggling and deny violent extremists use of the maritime environment as a venue for attack.

**AO:** Approximately 5 million square miles, including the Arabian Gulf, Gulf of Oman, Arabian Sea, Gulf of Aden, Red Sea and parts of the Indian Ocean. This expanse, comprised of 22 countries, includes three critical chokepoints at the Strait of Hormuz, the Suez Canal and the Strait of Bab al Mandeb at the southern tip of Yemen.

### **U.S. Naval Forces Europe/ Naval Forces Africa/U.S. 6th Fleet**

**Headquarters:** Naples, Italy

**Mission:** Commander, U.S. Naval Forces Europe; Commander, U.S. Naval Forces Africa; Commander, U.S. 6th Fleet (CNE-CNA-C6F) is the maritime component of both U.S. European Command and U.S. Africa Command. CNE-CNA-C6F leads full-spectrum maritime operations in concert with allied, coalition, joint, interagency and other partners to advance U.S. interests while enhancing maritime security and stability in Europe and Africa.

As a forward deployed naval component, CNE-CNA-C6F conducts missions through comprehensive planning, engagement, and communication in order to protect the homeland from attack, ensure freedom of the seas, promote regional stability, enable prosperity, foster cooperative security with

allies and partners, and when directed, fight and win wars.

CNE-CNA-C6F efforts are organized along three lines of operation: deterrence and warfighting in the mission areas of ballistic missile defense, anti-submarine warfare and command and control; maritime security operations in the mission areas of counter-terrorism, counter-piracy and counter-illicit trafficking; and crisis response in the mission areas of precision strike, non-combatant evacuation operations and humanitarian assistance/disaster relief.

**AO:** The CNE-CNA-C6F area of responsibility extends over 20 million square nautical miles of ocean and includes a landmass extending more than 14 million square miles. It touches three continents and encompasses more than 67 percent of the Earth's coastline, 30 percent of its landmass, and nearly 40 percent of the world's population. It includes all of Russia, Europe and nearly the entire continent of Africa and encompasses 105 countries with a combined population of more than one billion people. The CNE-CNA-C6F AO covers approximately half of the Atlantic Ocean, from the North Pole to Antarctica; as well as the Adriatic, Baltic, Barents, Black, Caspian, Mediterranean and North Seas and half of the Indian Ocean.

**Flagship:** USS *Mount Whitney* (LCC/JCC 20)

### **U.S. 7th Fleet**

**Headquarters:** Yokosuka, Japan

**Mission:** The U.S. 7th Fleet operates in the largest area of responsibility of the Navy's numbered fleets. U.S. naval forces have maintained a continuous forward presence in this region for more than a century-and-a-half, directly supporting U.S. national interests, upholding key alliances and expanding maritime partnerships. The U.S. 7th Fleet uses both forward and rotationally deployed ships, aircraft, submarines and other maritime forces independently or as part of a joint, combined or multinational force, executing military operations across the spectrum, from major combat operations to humanitarian assistance and disaster relief.

U.S. 7th Fleet Fleet forces operate in the region on a continuous basis and obtain critical "local knowledge" increasing opportunities to train and operate with our allies, friends and

partners, while allowing for rapid response to any crisis, natural or man-made. The 7th Fleet AOR is home to more than 50 percent of the world's population, speaking more than 3,000 languages and includes two of the world's largest economies (China and Japan).

**AO:** Covers 48 million square miles of the Pacific and Indian Oceans, from the international date line to the waters east of Africa, and from the Kuril Islands in the north to the Antarctic in the south, including 39 coastal nations.

**Flagship:** USS *Blue Ridge* (LCC 19)

### **U.S. Fleet Cyber Command/ U.S. 10th Fleet**

**Headquarters:** Fort George G. Meade, Md.

**Mission:** U.S. Fleet Cyber Command (FLTCYBERCOM) is the Navy's service component to U.S. Cyber Command (USCYBERCOM), and executes the operational missions assigned to the Navy by U.S. Strategic Command and USCYBERCOM. As the Navy's principal point of action for cyber warfare, information operations and space, to include computer network operations, U.S. 10th Fleet (C10F) partners with and supports other fleet commanders to provide guidance and direction to ensure coordinated, synchronized and effective preventative and response capability in cyberspace.

FLTCYBERCOM/C10F unifies the Navy's ability to implement DoD cyberspace policy and strategy at the convergence of sea power and cyber power as well as increases our ability to prevent and respond to cyber threats. It brings unity of effort for cyberspace integration into planning and operations to support commanders' warfighting requirements by creating capabilities that complement kinetic options.

FLTCYBERCOM/C10F works closely with joint and interagency partners to develop offensive and defensive cyberspace capabilities, infrastructure, experience and access, posturing our Navy to reduce risks associated with cyber threats while at the same time offering opportunities for the Navy to continue leveraging the advantages of cyberspace.

**AO:** Worldwide 🌐



## Commander, Navy Installations Command

**Headquarters:** Washington, D.C.

**Mission:** Commander, Navy Installations Command (CNIC) is the single responsible office, advocate and point of contact for Navy installations worldwide. CNIC is focused on delivering sustained and improved readiness from the shore. Its mission is to provide consistent, effective, and efficient shore installations services and support to sustain and improve current and future fleet readiness and mission execution; to provide unified and consistent practices and procedures, standards of service, and funding to manage and oversee shore installation support to the fleet; to execute delivery of installation services through Navy regions and installations; and to coordinate policy, planning, budgeting, execution and reporting for all regions and shore installations.

Through their management of 11 Navy regions, 70 installations and 122 distinct product lines, CNIC strives to provide consistent, reliable service from the shore to the fleet, fighter and family. Some of the many services CNIC provides include Navy Housing; Morale, Welfare and Recreation, Liberty and Outdoor Recreation programs; Navy Food Service Ashore; Fleet and Family Support Centers; Navy Fitness; Navy Ombudsman Program; Fire and Emergency Services; Navy Family Accountability and Assessment System; Port Operations, Environmental, and Anti-Terrorism/Force Protection.

### United States

#### Commander Navy Region Mid-Atlantic

- Submarine Base (SUBASE) New London
- Naval Station (NAVSTA) Newport
- Naval Support Activity (NSA) Mechanicsburg
- NSS Norfolk Naval Shipyard
- NSY BOS Portsmouth
- Joint Expeditionary Base (JEB) Little Creek-Fort Story
- NSA Hampton Roads
- Naval Air Station (NAS) Oceana
- NSA Saratoga Springs
- NAVSTA Norfolk
- Weapons Station (WPNSTA) Yorktown
- WPNSTA Earle Colts Neck

#### Commander Navy Region Naval District Washington

- NSA Bethesda
- NAS Patuxent River
- Joint Base (JB) Anacostia Bolling
- NSA South Potomac
- NSA Annapolis
- NSA Washington

#### Commander Navy Region Southeast

- NAS Pensacola
- NAS/JRB New Orleans
- NAS Jacksonville
- NAS Key West
- NAS Corpus Christi
- Naval Activity (NA) Puerto Rico
- SUBASE Kings Bay
- Navy Support Facility (NSF) Beaufort
- NAVSTA Mayport
- NAS Kingsville
- NAS Whiting Field
- NAVSTA Guantanamo Bay
- NSA Orlando
- NSA Panama City
- Naval Construction Battalion Center (CBC) Gulfport
- NAS Meridian
- NAS/Joint Reserve Base (JRB) Fort Worth

#### Commander Navy Region Midwest

- NAVSTA Great Lakes
- NSA Mid South
- NSA Crane

#### Commander Navy Region Northwest

- NAS Whidbey Island
- Naval Magazine (NAVMAG) Indian Island
- NAVBASE Kitsap
- NAVSTA Everett

#### Commander Navy Region Southwest

- NAVBASE San Diego
- NAVBASE Coronado
- Naval Air Weapons Station (NAWS) China Lake
- NAF El Centro
- NAS Fallon
- NSA Monterey
- WPNSTA Seal Beach
- NAS Lemoore
- NAVBASE Point Loma
- NAVBASE Ventura County Pt Mugu

#### Commander Navy Region Hawaii

- Pacific Missile Range Facility (PMRF) Barking Sands
- JB Pearl Harbor-Hickam

### Worldwide

#### Commander Navy Region Korea

- Commander Fleet Activities (CFA) Chinhae

#### Commander Navy Region Japan

- CFA Okinawa
- CFA Yokosuka
- CFA Sasebo
- Naval Air Facility (NAF) Atsugi
- NAF Misawa
- NSF Diego Garcia
- Singapore Area Coordinator

#### Commander Joint Region Marianas

- NSA Andersen
- NAVBASE Guam

#### Commander Navy Region Europe, Africa, Southwest Asia

- Camp Lemonnier Djibouti
- NSA Naples
- NAVSTA Rota
- NAS Sigonella
- NSA Bahrain
- NSA Souda Bay

(Source: CNIC)



Photo by MC2 Mark A. Leonasio

**T**he Fleet & Family Readiness (FFR) program at Commander, Navy Installations Command (CNIC) is responsible for policy development, resourcing and oversight of quality-of-life programs for Sailors and their families. FFR enables a ready Navy force through programs such as family readiness, fleet readiness and housing programs.

## Family Readiness

More than 80 Fleet and Family Support Centers throughout the fleet provide Sailors and their families access to services, resources, counseling and education. Programs include:

- Deployment Support
- Ombudsman Support
- Personal Financial Management
- New Parent Support Home Visitation
- Transition Assistance
- Family Employment Readiness
- Relocation Assistance
- Clinical Counseling Services
- Family Advocacy
- Exceptional Family Member
- Sexual Assault Prevention and Response (SAPR)

- Life Skills Workshops
- Emergency Response/Community Alliance Services
- Child & youth programs provide child development spaces worldwide for Navy families.

To submit an online request for care, go to [www.navymwr.mil](http://www.navymwr.mil), click on “Child and Youth” and “I need to apply for Childcare.”

For more information about these and other programs go to [www.ffsp.navy.mil](http://www.ffsp.navy.mil).

## Fleet Readiness

### Fitness, Sports & Deployed Forces

The Navy’s Morale, Welfare and Recreation (MWR) services offer programs to help

Sailors shape up and stay fit. Among these programs are:

- Deployed Forces Support program
- Deployed Forces Support Coordinators
- The Navy’s MWR Civilian Afloat program (fit bosses/fun bosses)
- All-Navy Sports program

More information can be found at [www.navymwr.mil](http://www.navymwr.mil).

## Housing

The CNIC Housing program is focused on ensuring that all eligible accompanied and unaccompanied personnel have an opportunity to be housed suitably, affordably and safely in the community, in privatized housing or in government-managed housing.

To learn more about the CNIC Housing program or to find Navy installation-specific housing information go to the One-Stop website at [www.cnic.navy.mil/CNIC\\_HQ\\_Site/WhatWeDo/FleetandFamilyReadiness/Housing/index.htm](http://www.cnic.navy.mil/CNIC_HQ_Site/WhatWeDo/FleetandFamilyReadiness/Housing/index.htm). 🏠

(Source: CNIC)

(Source: BUMED)

Doctors: 4,404  
Active Duty: 3,827  
Reservists: 577

Dentists: 1,322  
Active Duty: 1,061  
Reservists: 261



Photo by Mcl Kin Williams

### Bureau of Medicine and Surgery

The Navy Bureau of Medicine and Surgery (BUMED) is the headquarters command for Navy Medicine. Under the leadership of the Navy Surgeon General, Vice Adm. Matthew L. Nathan, Navy Medicine provides high-quality health care to beneficiaries in wartime and in peacetime. Highly trained Navy Medicine personnel deploy with Sailors and Marines worldwide – providing critical mission support aboard ship, in the air, under the sea and on the battlefield. At the same time, Navy Medicine’s military and civilian health care professionals are providing care for uniformed services’ family members and retirees at military treatment facilities around the globe. Every day, no matter what the environment, Navy Medicine is ready to care for those in need, providing world-class care ... anytime, anywhere.

### Navy Medicine’s Global Force for Good

Navy Medicine’s mission is one with a truly global footprint. Navy Medicine is forward deployed with warfighters overseas

and its research units provide a global health benefit around the world. Navy Medicine personnel serve as ambassadors worldwide and are the heart and soul of the U.S. Navy as a “Global Force for Good.” Its humanitarian assistance/disaster response (HA/DR) missions in direct support of the Navy’s maritime strategy continue to expand because they continually prove to be highly successful. With past support to critical missions like Operation *Unified Response* in Haiti following the 2010 earthquake, Navy Medicine serves the international community as a global leader in HA/DR.

More recently, Navy Medicine personnel provided essential support to Operation *Tomodachi* after the devastating earthquake and tsunami in Japan in 2011. As the foremost experts in radiation health issues, Navy Medicine Radiation Health Officers and Radiation Health Techs answered the international call for assistance to Japan and provided paramount support following the Fukushima nuclear power plant disaster. They provided on-site monitoring of radioactive fallout, counseling to those affected and advice to Navy and Marine commanding generals and combatant commanders in the Pacific area of responsibility. Their presence and expertise provided relief and solace to a severely anxious population.

The Navy hospital ships also conduct planned deployment humanitarian assistance missions where they work with local ministries of health to bring care to the people of foreign nations. USNS *Comfort*’s mission in Central and South America and the Caribbean for *Continuing Promise* 2011, as well as USNS *Mercy*’s upcoming 2012 *Pacific Partnership* mission to Southeast Asia provide further evidence of our continued commitment to the global efforts to foster security and stability worldwide. Its hospital ships are executing the maritime strategy by building the trust and cooperation we need to strengthen regional alliances and empower partners around the world. With each successful deployment, Navy Medicine increases its interoperability with host and partner nations, non-governmental organizations and interagencies.

### Regional Medical Commands, Hospitals

Walter Reed National Military Medical Center, Bethesda, Md.  
Naval Medical Center (NMC) Portsmouth, Va.  
NMC San Diego

### Other facilities include:

Nine CONUS Naval Hospitals  
Seven OCONUS Naval Hospitals  
Eight CONUS Naval Health Clinics  
Two OCONUS Naval Health Clinics  
119 Branch Medical Clinics  
Six CONUS Dental Clinics  
Two OCONUS Dental Clinics  
Six CONUS Research Commands  
Three OCONUS Research Commands  
Five DoD Health Care Schools

### Military Sealift Command Hospital ships:

USNS *Mercy* (T-AH 19), homeport San Diego  
USNS *Comfort* (T-AH 20), homeport Baltimore

## Navy Medicine Resources

### National Intrepid Center of Excellence (NICoE)

The National Intrepid Center of Excellence (NICoE), dedicated June 24, 2010, is an advanced facility dedicated to research, diagnosis and treatment of military personnel and veterans suffering from mild traumatic brain injury (mTBI) and psychological health issues.

The NICoE is a 72,000-square-foot, two-story facility located in Bethesda, Md. It is designed to provide the most advanced services for education, introduction to therapeutic modalities, referral and reintegration support for military personnel and veterans with mTBI, post traumatic stress disorder, and/or complex psychological health issues. Further, the NICoE conducts research, tests new protocols and provides comprehensive training and education to patients, providers and families while maintaining ongoing telehealth follow-up care across the country and throughout the world.

Medical Service Corps: 2,875  
Active Duty: 2,526  
Reservists: 349

Nurses: 4,073  
Active Duty: 2,911  
Reservists: 1,162

Hospital Corpsmen: 28,817  
Active Duty: 25,092  
Reservists: 3,725

The Navy was appointed the executive agent of the NICoE Aug. 10, 2010, by DoD and has been treating patients since October 2010.

## Operational Stress Control Resources

Navy Operational Stress Control (OSC) is a program supported by Navy Medicine. The foundation of OSC is the Stress Continuum Model, that provides Sailors, leaders and family members a visual tool for assessing stress responses and practical steps to take to mitigate stress injuries.

For more information, visit <https://www.nko.navy.mil/portal/operationstresscontrol/operationalstresscontrol>.

The Naval Center for Combat and Operational Stress Control was created to improve the psychological health of Navy and Marine Corps forces through training, education, care system improvement and facilitating research and information distribution. For more information see, [www.nccosc.navy.mil](http://www.nccosc.navy.mil).

## OSCAR Teams

The Marine Corps, in collaboration with Navy Medicine, has deployed the Operational Stress Control and Readiness (OSCAR) program which embeds psychological health professionals within operational units. OSCAR provides early intervention and prevention support throughout all of the phases of deployment. The OSCAR program is now available at all three active Marine divisions. Each OSCAR team consists of two mental health providers and two specially trained psychiatric technicians. These teams provide education and consultation to commanders, entire units and individual Marines.



## Project FOCUS

Project FOCUS, Families OverComing Under Stress (FOCUS), is designed for families needing to ramp up their resiliency to best handle the demands of deployment and combat and operational stress. Through parent, child and family sessions, FOCUS helps Navy and Marine families develop strong skills in problem solving, goal setting, communication and emotional regu-

lation. The free program is offered through BUMED in collaboration with University of California, Los Angeles. For details and a list of FOCUS locations, go to [www.focusproject.org](http://www.focusproject.org) or call 310-794-2482.

## Returning Warrior Workshops

Making a successful transition from the war zone to the home front is the focus of Returning Warrior Workshops (RWW), a well-received program for Navy and Marine Corps Reservists. The workshops are expense-paid weekend events for about 200 service members and their spouses or significant others. In addition to presentations from senior military leaders who have been in combat, there are breakout sessions where participants discuss and help learn to resolve stressful situations arising in deployment and reintegration. A number of support services are available at the workshops along with counselors, psychological health outreach coordinators and chaplains to assist service members in re-acclimating with their families and to civilian life.

For more information on workshops in your area, visit <https://www.navyreserve.navy.mil/reservefamilies/Pages/YellowRibbonReintegrationProgram.aspx>.



## Navy Safe Harbor

The Navy's wounded warrior program, Navy Safe Harbor, provides the highest quality non-medical care to seriously wounded, ill, and injured Sailors and Coast Guardsmen, as well as their families. Through proactive leadership, the program provides a lifetime of individually tailored assistance throughout all phases of a service member's recovery, rehabilitation, and reintegration. Navy Safe Harbor non-medical care managers are based at all major Naval Medical and VA Polytrauma Centers across the country. Support includes lodging and housing adaption; child and youth care; pay and personnel issues; legal and guardianship support; and much more.

## TRICARE

TRICARE, the civilian-care component of the military health system, recently launched the TRICARE Assistance Program (TRIAP), a free Web-based service for psychological health services. Available to active-duty service members and their families, TRIAP uses audiovisual telecommunications systems, such as video chat and instant messaging. Assistance counselors are on hand around-the-clock for nearly any behavioral health issue, and a referral or prior authorization is not required. For complete information, visit [www.tricare.mil/TRIAP](http://www.tricare.mil/TRIAP).

## Additional Resources

Navy Suicide Prevention Program Website: [www.suicide.navy.mil](http://www.suicide.navy.mil).

Combat operational stress control/management, resiliency materials and programs designed specifically for the Navy population are accessible at [www.nmcphc.med.navy.mil/healthy\\_living/psychological\\_health/stress\\_management/operandcombatstress.aspx](http://www.nmcphc.med.navy.mil/healthy_living/psychological_health/stress_management/operandcombatstress.aspx).

(Source: BUMED)



Photo by MCA Eric C. Tetter



Photo by MCA Eric C. Tetter



## Family Separation Allowance

Family Separation Allowance (FSA) compensates qualified members for added expenses incurred because of a forced family separation. There are three different categories depending on the status of the Sailor and their family members. FSA is \$250 per month. See the DoD Financial Management Regulation (FMR) Volume 7A, Chapter 27 for more information.

## Overseas Tour Extension Incentive Program

The Overseas Tour Extension Incentive Program offers eligible enlisted members the opportunity to receive their choice of one of four incentive options for extension of the DoD tour length for 12 months or more. For more information see your command career counselor or MILPERSMAN Article 1306-300.

## Hardship Duty Pay

Hardship Duty Pay is payable to members who are entitled to basic pay while performing duty designated by the Secretary of Defense as hardship duty. Current rates and locations are maintained in the DoD FMR, 7A, 17.

## Combat Zone Tax Exclusion

Combat Zone Tax Exclusion allows earnings received while performing duties in, or in direct support of, areas designated as combat zones to be excluded from taxes. Exclusion is unlimited for enlisted members and warrant officers. For more information consult DoD FMR, 7A, 44, or go to: [www.defenselink.mil/militarypay/pay/tax/10\\_combatzone\\_05.html](http://www.defenselink.mil/militarypay/pay/tax/10_combatzone_05.html).

## Imminent Danger Pay, Hostile Fire Pay

Imminent Danger Pay (IDP) is a threat-based pay, meaning it is payable when the member performs duty in an IDP area (designated by DoD). Hostile Fire Pay (HFP) is an event-based pay, meaning the member is exposed to an actual occurrence of hostile fire or an explosion of hostile mine. Designated areas are listed in DoD FMR, 7A, 10. Prior to Dec. 31, 2011, members eligible for IDP were paid the full monthly rate of \$225 for any complete or partial month they served in a qualifying area. The 2012 National Defense Authorization Act modified IDP payments, limiting eligibility to only the actual days served in a qualifying area. Now service members will receive \$7.50 for each day they are on official duty in an IDP area up to the maximum monthly rate of \$225. The monthly rate is paid to members who serve an entire calendar month in an IDP area regardless of the

number of individual days in that month. Members who are exposed to a hostile fire or hostile mine explosion event are eligible to receive non-prorated HFP in the full monthly amount of \$225. Members cannot receive both IDP and HFP in the same month.

### Sea Duty Incentive Pay

Sea Duty Incentive Pay (SDIP) offers extra pay of up to \$750 per month for extension on, or early return to sea (voluntary curtailment of shore duty). For more information on SDIP, visit: [www.npc.navy.mil/CAREER/PAYANDBENEFITS/Pages/sdip.aspx](http://www.npc.navy.mil/CAREER/PAYANDBENEFITS/Pages/sdip.aspx).

### Special Duty Assignment Pay

Special Duty Assignment Pay (SDAP) is a monthly incentive pay to sustain manning levels and obtain high-quality enlisted personnel for designated special duty assignments. For more information on SDAP, visit: [www.npc.navy.mil/CAREER/ENLISTEDCAREERADMIN/Pages/SRB.aspx](http://www.npc.navy.mil/CAREER/ENLISTEDCAREERADMIN/Pages/SRB.aspx).

### Selective Reenlistment Bonus

Selective Reenlistment Bonus is a re-enlistment incentive used to maintain desired manning in specific ratings and NECs. Highly responsive to needs of the Navy, SRB levels are subject to change. For more information on SRB, visit: [www.npc.navy.mil/career/enlistedcareeradmin/Pages/SRB.aspx](http://www.npc.navy.mil/career/enlistedcareeradmin/Pages/SRB.aspx).

### Assignment Incentive Pay

Assignment Incentive Pay (AIP) incentivizes traditionally hard-to-fill assignments or less desirable geographic locations. For more AIP information including a listing of locations eligible for AIP, visit: [www.npc.navy.mil/CAREER/PAYANDBENEFITS/Pages/aip.aspx](http://www.npc.navy.mil/CAREER/PAYANDBENEFITS/Pages/aip.aspx).

### Foreign Language Proficiency Bonus

Sailors skilled in a foreign language may be eligible for a foreign language proficiency bonus of up to \$500 per month for demonstrated proficiency in a foreign language or a maximum \$1,000 per month for more than one foreign language. Refer to OPNAVINST 7220.7g and NAVADMIN 091/11, for specific eligibility criteria.

### Basic Allowance for Housing

Basic Allowance for Housing (BAH) reduces out-of-pocket expenses for off-base living. This non-taxable allowance generally covers rent, utilities and renter's insurance. For details visit: [www.militarypay.defense.gov/pay/bah/index.html](http://www.militarypay.defense.gov/pay/bah/index.html).

### Basic Allowance for Subsistence

Basic Allowance for Subsistence (BAS) is adjusted annually based on the cost of food. For details on 2012 rates, visit: [www.dfas.mil/militarymembers.html](http://www.dfas.mil/militarymembers.html).

### Savings Deposit Program

The Savings Deposit Program (SDP) is allowed for Sailors during assignments and deployments to specified locations. SDP pays 10 percent interest and allows Sailors to deposit a portion of their current pay, up to a maximum of \$10,000. Interest paid on SDP is taxable and

rules apply. For information, contact the local finance office prior to deployment. [www.dfas.mil/militarymembers/payentitlements/sdp.html](http://www.dfas.mil/militarymembers/payentitlements/sdp.html).

### Family Subsistence Supplemental Allowance in Addition to BAS

Family Subsistence Supplemental Allowance, in addition to BAS, is an additional food allowance some large military families may qualify for and is based on total household income. Contact the Fleet and Family Support Center or a command financial specialist for assistance in determining eligibility. For details, go to: [www.fns.usda.gov/fns/](http://www.fns.usda.gov/fns/) or <https://www.dmdc.osd.mil/fssa>.

### Federal Tax Advantage

Because some allowances are not taxable, the result is actually additional compensation. Untaxed allowances include BAS, BAH, overseas housing allowance, cost-of-living allowance and FSA. Further tax advantages are available through participation in the Uniformed Services Thrift Savings Plan (TSP). See the pay and compensation calculator at: <https://staynavytools.bol.navy.mil/PCC/?B3=Launch+Calculator> or choose the calculator on [www.defenselink.mil/militarypay/pay/bp/index.html](http://www.defenselink.mil/militarypay/pay/bp/index.html).

### Military Pay Raises

Annual military pay raises are linked to the employment cost index (ECI). Military pay raises are equal to a yearly increase in the ECI. But, pay raises may exceed these levels if authorized and funded by Congress. See [www.defenselink.mil/militarypay/pay/bp/05\\_annualraise.html](http://www.defenselink.mil/militarypay/pay/bp/05_annualraise.html).

### Medical and Dental

The TRICARE medical plan is one of the benefits afforded active and Reserve families. TRICARE is a regionally managed health care program. Contact a health care benefits advisor at your nearest military treatment facility or Navy Reserve activity. For additional information see [www.tricare.mil](http://www.tricare.mil).

### Military Leave and Liberty

Active-duty members accumulate two-and-a-half days of leave per month, totaling 30 days of paid leave each year. While earned leave is intended for use throughout the year, members may carry forward leave not to exceed 75 days at the end of the fiscal year (this carryover eligibility has been extended to 30 September 2013 per 23 August 2010 NAVADMIN 281/10 when leave carryover resets to 60 days).

### Navy Exchange/Commissary

The Navy Exchange Service Command (NEXCOM) manages tax-free, discounted shopping for quality goods and also manages Navy Lodges, ship's stores, and other programs. For more information visit the Navy Exchange website at [www.navy-nex.com](http://www.navy-nex.com).

The Defense Commissary Agency operates a worldwide chain of grocery stores serving military personnel, retirees and their families in a safe and secure shopping environment. Shoppers save an average of more than 30 percent on their purchases which is worth about \$4,400 annual savings for a family of four. For more information visit the Commissary website at: [www.commissaries.com](http://www.commissaries.com).

## All Hands 2012 Navy Monthly Pay (proposed)

Years of Service	2	3	4	6	8	10	12	14	16	18	20	22	24	26
<b>Enlisted Members</b>														
E-9 <sup>3</sup>	0	0	0	0	0	4,708.80	4,815.60	4,950.00	5,108.10	5,267.70	5,523.60	5,739.60	5,967.30	6,315.30
E-8	0	0	0	0	3,854.70	4,025.10	4,130.70	4,257.30	4,394.40	4,641.60	4,766.70	4,980.00	5,098.20	5,389.50
E-7	2,679.60	2,924.70	3,036.60	3,185.10	3,300.90	3,499.80	3,611.70	3,810.90	3,976.20	4,089.00	4,256.10	4,412.40	4,496.40	4,815.90
E-6	2,317.80	2,550.30	2,662.80	2,772.30	2,886.30	3,143.10	3,243.30	3,436.80	3,496.20	3,539.40	3,589.80	3,589.80	3,589.80	3,589.80
E-5	2,123.40	2,265.90	2,375.40	2,487.60	2,662.20	2,845.20	3,012.90	3,012.90	3,012.90	3,012.90	3,012.90	3,012.90	3,012.90	3,012.90
E-4	1,946.70	2,046.30	2,157.30	2,266.50	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10	2,363.10
E-3	1,757.40	1,868.10	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20	1,981.20
E-2	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30	1,671.30
E-1	1,491	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>E-1 with less than four months: 1,294.50</b>														
<b>Warrant Officers</b>														
W-5	0	0	0	0	0	0	0	0	0	0	6,930.00	7,281.60	7,543.50	7,833.30
W-4	3,897.60	4,192.50	4,312.80	4,431.30	4,635.00	4,836.90	5,040.90	5,348.70	5,618.10	5,874.30	6,084.00	6,288.60	6,589.20	7,117.80
W-3	3,558.90	3,707.40	3,859.50	3,909.30	4,068.90	4,382.70	4,709.10	4,862.70	5,040.60	5,224.20	5,553.60	5,776.20	5,909.40	6,243.30
W-2	3,149.40	3,447.30	3,539.10	3,602.10	3,806.40	4,123.80	4,281.00	4,436.10	4,625.40	4,773.30	4,907.40	5,067.60	5,173.20	5,256.90
W-1	2,764.50	3,061.80	3,141.90	3,311.10	3,511.20	3,805.80	3,943.50	4,135.50	4,324.80	4,473.60	4,610.70	4,776.90	4,776.90	4,776.90
<b>Commissioned Officers</b>														
O-10	0	0	0	0	0	0	0	0	0	0	15,647.10	15,723.30	16,050.60	16,620.00
O-9 <sup>1</sup>	0	0	0	0	0	0	0	0	0	0	13,685.10	13,882.50	14,167.20	14,664.00
O-8 <sup>1</sup>	9,683.10	10,000.20	10,269.60	10,532.40	10,971.00	11,073.30	11,489.70	11,609.10	11,968.20	12,487.80	11,725.50	11,725.50	11,725.50	11,785.20
O-7 <sup>1</sup>	8,045.70	8,419.80	8,592.60	8,730.00	8,979.00	9,225.00	9,509.40	9,792.90	10,077.30	10,971.00	11,725.50	11,725.50	11,725.50	11,785.20
O-6	5,963.40	6,551.70	6,981.30	6,981.30	7,008.00	7,308.60	7,348.20	7,665.80	8,504.10	8,937.60	9,370.50	9,617.10	9,866.70	10,350.60
O-5	4,971.30	5,600.40	5,988.00	6,061.20	6,303.00	6,447.60	6,765.90	6,999.30	7,301.10	7,763.10	7,982.40	8,199.30	8,446.20	8,446.20
O-4	4,289.40	4,965.60	5,296.80	5,370.60	5,678.10	6,007.80	6,418.50	6,738.30	6,960.60	7,088.10	7,161.90	7,161.90	7,161.90	7,161.90
O-3	3,771.30	4,275.30	4,614.60	5,031.00	5,271.90	5,536.50	5,707.80	5,988.90	6,135.60	6,135.60	6,135.60	6,135.60	6,135.60	6,135.60
O-2	3,258.60	3,711.30	4,274.40	4,418.70	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60	4,509.60
O-1	2,828.40	2,943.90	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60	3,558.60
<b>Commissioned Officers (with more than four years of active service as an Enlisted Member or Warrant Officer)</b>														
O-3 <sup>2</sup>	0	0	0	5,031.00	5,271.90	5,536.50	5,707.80	5,988.90	6,226.20	6,362.40	6,548.10	6,548.10	6,548.10	6,548.10
O-2 <sup>2</sup>	0	0	0	4,418.70	4,509.60	4,653.30	4,895.70	5,082.90	5,222.40	5,222.40	5,222.40	5,222.40	5,222.40	5,222.40
O-1 <sup>2</sup>	0	0	0	3,558.60	3,800.10	3,940.80	4,084.50	4,225.50	4,418.70	4,418.70	4,418.70	4,418.70	4,418.70	4,418.70

Basic pay for an O-7 to O-10 is limited by Level II of the Executive Schedule which is \$14,975.10. Basic pay for O-6 and below is limited by Level V of the Executive Schedule which is \$12,141.60.  
 1. While serving as Chairman, Joint Chief of Staff/Vice Chairman, Joint Chief of Staff, Chief of Navy Operations, Commandant of the Marine Corps, Army/Air Force Chief of Staff, Commander of a unified or specified combatant command, basic pay is \$20,587.80. (See note 1 above).  
 2. Applicable to O-1 to O-3 with at least 4 years and 1 day of active duty or more than 1460 points as a warrant and/or enlisted member. See Department of Defense Financial Management Regulations for more detailed explanation on who is eligible for this special basic pay rate.  
 3. For the Master Chief Petty Officer of the Navy, Chief/Master Sergeant of the AF, Sergeant Major of the Army or Marine Corps or Senior Enlisted Advisor of the JCS, basic pay is \$7,609.50.  
 Combat Zone Tax Exclusion for O-1 and above is based on this basic pay rate plus the amount of HF/IDP the officer is receiving for the month, not to exceed \$225. Applicable to E-1 with 4 months or more of active duty. Basic pay for an E-1 with less than 4 months of active duty is \$1,378.80.  
 Basic pay rate for Academy Cadets/Midshipmen and ROTC members/applicants is \$990.00.



Photo by MCG Trevor Walsh

## Retirement Pay

One of the most attractive incentives of a military career is the retirement system that provides lifelong retirement income for those who serve 20 or more years. Active-duty and Reserve retirement plans differ. To view retirement plans and an easy-to-use online calculator visit: [www.npc.navy.mil/career/payandbenefits](http://www.npc.navy.mil/career/payandbenefits) or [www.defenselink.mil/militarypay/pay/bp/index.html](http://www.defenselink.mil/militarypay/pay/bp/index.html) and then choose the calculator.

## Thrift Savings Plan

The Thrift Savings Plan is a 401(k)-like savings plan for Sailors. It accumulates long-term, tax-deferred savings and earnings for a retirement nest egg, regardless of whether the Sailor remains for a full military career. Useful information can be found at: [www.tsp.gov](http://www.tsp.gov).

## Certifications/NAVY COOL

The Navy's Credentialing Opportunities On-Line (COOL) identifies civilian credentials that best map to a Sailor's rating and training. The COOL website guides Sailors seeking training paths and funding toward industry-recognized, professional certification and licensure exams. This tool helps ensure Sailors have career opportunities within the Navy, as well as a successful follow-on career when they transition to the civilian workforce. For more information on Navy COOL visit: <https://www.cool.navy.mil>.

## Navy Personnel Command Customer Service Center

The Navy Personnel Command (NPC) Customer Service Center (CSC) is the one-stop shop for all questions. If unsure about who to

contact or where to go, call 1-866-U-ASK-NPC (1-866-827-5672) and let the customer service agents help you, or visit the CSC Web page at: [www.npc.navy.mil/AboutUs/NPC/CSC](http://www.npc.navy.mil/AboutUs/NPC/CSC).

E-mail questions can be sent to [CSCMailbox@navy.mil](mailto:CSCMailbox@navy.mil).

## The Balancing Act – Navy Assistance For Sailors' Lives

### Pregnancy Policy

Known as the Postpartum Operational Deferment, the June 2007 revision of the Pregnancy and Parenthood Instruction (OPNAVINST 6000.1C) authorized an extension of current operational deferment from four to 12 months for new mothers. The increased operational deferment policy allows more time for families to arrange long-term child care. For more, see the Women's Policy website at: [www.npc.navy.mil/AboutUs/BUPERS/WomensPolicy](http://www.npc.navy.mil/AboutUs/BUPERS/WomensPolicy).

### Adoption Leave

Navy families are authorized up to 21 days of non-chargeable administrative leave for parents who adopt children in a DoD-qualified adoption. Details are covered in OPNAVINST 6000.1C Section 202.

### Paternity Leave

Male service members are now able to take up to 10 days of administrative leave when their spouse gives birth to a child. The leave must be used within 60 days of the birth or return from deployment. For more information, see NAVADMIN 341/08.

(Source: Navy Personnel Command) 

## Navy Refines Processes, Improves Training, Support For Individual Augmentees (IAs), Families

Approximately 10,000 Sailors are on IA orders at any given time, and more than 80,000 Sailors have been on an IA assignment since 2002.

The Navy is committed to improving the process of assigning IA Sailors and to supporting them and their families with the same commitment and care that deploying Sailors and their families traditionally receive. Several organizations play key roles in providing oversight and support to our Sailors deploying for nontraditional expeditionary missions in support of overseas contingency operations (OCO).

U.S. Fleet Forces Command is the executive agent for the IA continuum and Navy Installations Command is the executive agent for IA family support. The following key stakeholders in the IA continuum are vital to the success of IA Sailors and family support:

- Navy Personnel Command - orders generation and personnel support
- Navy Reserve Forces Command - administration and oversight of Reserve personnel
- Expeditionary Combat Readiness Center (ECRC) - supervision and coordination of IA training
- Commander, Task Force-Individual Augmentee - Boots-on-Ground administrative support
- Navy Mobilization and Processing Sites (NMPS) – The sites in Norfolk, San Diego, Gulfport, Miss., and Port Hueneme, Calif., provide in-processing support ensuring Sailors are prepared for deployment. During redeployment, they ensure Sailors' needs, issues and concerns are addressed prior to reintegration into Navy and civilian life.
- Fleet and Family Support Centers - dedicated support to Navy families throughout the IA continuum.

## Deciding To Be A Navy IA

There are four primary assignment processes that determine how IA Sailors deploy: Global Support Assignment (GSA), Individual Augmentee Manpower Management (IAMM), Reserve Component Mobilization (RC Mob) and OCO Support Assignment (OSA) Sailors. With recent changes imple-



mented, only officers fill billets in the GSA process. RC Mob assignments provide the right RC Sailor with the right skills at the right time. IAMM assignments meet the dynamic demands of the combatant commanders. The OSA process, that went into effect for enlisted Sailors on Nov. 1, 2010, encourages volunteerism and eliminates inequities identified in other processes.

IA billets supporting OSA assignments can be viewed on the Career Management System-Individual Detailing, [www.npc.navy.mil/Enlisted/CMS](http://www.npc.navy.mil/Enlisted/CMS).

Officers can contact their specialty detailer for IA assignments. Reserve Component Sailors can sign up to receive automated emails for mobilization opportunities by subscribing to GovDelivery [www.navyreserve.navy.mil](http://www.navyreserve.navy.mil).

## Career Benefits Of Volunteering For IA Duty

IA tours are career enhancing in the areas of advancement and recognition. Some incentives include guaranteed follow-on detailing, advancement exams options, campaign/service awards, projected rotation date extensions if coming from shore duty, OCO Navy enlisted classification or additional qualified designations, concurrent evaluations/fitness reports, and increased IA advancement rates. To learn about additional IA incentives, go to the FAQ section on the Navy IA website [www.ia.navy.mil](http://www.ia.navy.mil).

## IA Deployment Orders

First and foremost, read your orders. Sailors receive different orders based on the assignment process they are billeted to fill. GSA Sailors receive two sets of orders. The first set of orders for a permanent change of station is received shortly after negotiating with the detailer and has details for detaching from the current command and reporting to ECRC San Diego or Norfolk. The second set of orders for temporary additional duty (TEMADD) outline point-of-contact information, training site locations, transportation, OCONUS deployment and additional guidance (NAVADMIN 333/10).

IAMM Sailors receive TEMADD/Indeterminate Temporary Duty (ITDY) orders. Emergent requirements due to operational need mean delivery of orders to the selected IA may be less than 60 days prior to the first interim stop report date (NAVADMIN 332/10).

RC Mob Sailors receive involuntary orders. Notification for involuntary mobilization is a minimum of 60 days with the goal of 180 days notification. NRFC uses volunteers to fill mobilization requirements to the maximum extent possible. Sailors who desire to volunteer for mobilization are encouraged to contact their Navy Operational Support Center and have their manpower availability status codes updated to a volunteer status (NAVADMIN 235/08).

OSA Sailors will not receive TEMADD orders. These orders will take them from their current parent command to the identified NMPS, through a mission-specific training track into theater for their OSA assignment, and back to their parent command (NAVADMIN 334/10).

To view their orders, IA Sailors can log onto BUPERS Online (BOL) [www.bol.navy.mil](http://www.bol.navy.mil), select the NMCMPs link, and click “View My Orders.”

### Command Individual Augmentee Coordinator (CIAC)

Every command is required to have a CIAC. A CIAC is the command’s representative who supports the IA Sailor before, during, and after deployment. CIACs are the IA Sailor’s “first line of defense” for IA information and support. They work closely with the command’s ombudsman and individual deployment support specialists (IDSS) to ensure the family is supported while the Sailor is deployed.

### Training

All IA Sailors are required to complete the pre-deployment online training courses listed in the latest Expeditionary Screening Checklist (NAVPERS 1300/22). The courses are accessible on the Navy Knowledge Online (NKO) e-Learning under the mandatory training “For All Individual Augmentees.” These online courses prepare Sailors for pre-deployment training pipelines, to include Navy Individual Augmentee Combat Training, a three-week program that provides Navy IAs with the basic combat skills training for their Boots-on-Ground tour.

### Requirements

The Expeditionary Screening Checklist is a detailed checklist IA Sailors are required to complete to ensure they are ready for deployment. It includes medical and dental screenings (NAVMED 1300/4), as well as government travel card, security clearance, training and personal requirements. Commanding officers report the IA Sailors’ suitability via BOL. The Expeditionary Screening Checklist is available on the Navy IA website or on Navy Personnel Command’s website [www.npc.navy.mil](http://www.npc.navy.mil).

### Noble Eagle Number

The Noble Eagle (NE) number is a tracking number applied to a specific IA mission. It can be found in every IA Sailor’s orders. IA Sailors should provide their NE number to their families to expedite location and communication in case of any emergency situation. A brief description of NE numbers is available on NKO under the “Individual Augmentee” tab.

### Family Support

The Navy is just as committed to the families of IA Sailors as to the Sailors themselves. To guarantee families receive the best support possible, IA Sailors need to update their family member information in the Navy Family Accountability and Assessment System.

If a family changes location during the deployment, needs help or has general questions, they can contact the CIAC, ombudsman, IDSS or the ECRC IA family help desk at [ecrc.fs.fct@navy.mil](mailto:ecrc.fs.fct@navy.mil). For emergencies, they can contact the 24-hour toll-free hotline at (877) 364-4302 with their deployed IA Sailor’s NE number.

### Reintegrating After Deployment

Sailors returning from an IA deployment have had a wide-range of experiences. During the Warrior Transition Program in Kuwait, Sailors begin the process of reintegration back into normal Navy or civilian life. There, Sailors complete a Post-Deployment Health Assessment, and six months later they complete a follow-on Post-Deployment Health Re-Assessment, both outlined in Defense Health Assessment guidance.

Following their return to CONUS, Sailors can attend Returning Warrior Workshops (RWW), a key component of the DoD Yellow Ribbon Program for Reintegration. RWWs are designed to enhance the resiliency of active component and Reserve component Sailors who have completed IA assignments in combat zones or were exposed to highly stressful situations during deployment. These weekend events provide an atmosphere to address personal stress associated with non-traditional deployments and are comprised of workshops intended to assist Sailors with successful reintegration back into work, community and family life. The RWW schedule is posted on the Navy IA website.

(Source: U.S. Fleet Forces Command, Navy Expeditionary Combat Command and Expeditionary Combat Readiness Center.)



Photo by MCC Michael B. Watkins

## **Commander Navy Expeditionary Combat Command (NECC), Virginia Beach, Va.**

NECC serves as the type commander for the Navy's expeditionary forces and as central management for the readiness, resources, manning, training and equipping of those forces.

NECC is a command element and force provider for integrated maritime expeditionary missions. NECC provides expeditionary forces capable of performing waterborne and ashore anti-terrorism/force protection, theater security cooperation and engagement, and humanitarian assistance/disaster relief contingency response. Upon request, NECC supplements Coast Guard homeland security requirements while training and equipping forces to support joint mission requirements.

## **Coastal Riverine Force (CRF)**

Coastal Riverine Force provides inshore and coastal surveillance, security and anti-terrorism/force protection for aircraft, airfields, campsites, convoys and convoy routes, ports, harbors, anchorages, approaches, roadways and other inshore or coastal areas of importance.

Additionally, CRF embarks security teams on board Navy and merchant vessels to provide in-transit security protection. Coastal Riverine Squadrons are deployable worldwide and operate sophisticated surveillance and communications equipment supporting landward, seaward and embarked security forces.

Together, these forces provide security to vital shipping, forces and infrastructure in the littoral regions.

## **Commander, Coastal Riverine Group 2, Virginia Beach, Va. (Lead)**

- Coastal Riverine Group 2, Det. Bahrain.
- Coastal Riverine Squadron (CRRON) 2, Little Creek, Va.
- CRRON 4, Little Creek, Va.
- CRRON 8, Newport, R.I.
- CRRON 10, Jacksonville, Fla. (Reserve)

## **Commander, Coastal Riverine Group (CRG) 1, San Diego (Follow)**

- Coastal Riverine Group 1, Det Guam
- CRRON 3, San Diego
- CRRON 1, San Diego (Reserve)
- CRRON 11, Seal Beach, Calif.

## **Explosive Ordnance Disposal (EOD)**

EOD conducts counter improvised explosive device operations both ashore and at sea. They locate, identify, and render safe explosive hazards and disarm underwater explosives such as mines. EOD technicians can handle chemical, biological and radiological threats, and are the only military EOD force that can both parachute from the air to reach distant targets or dive under the sea to disarm weapons. Mobile diving and salvage units are the only DoD capability that provides force protection and dive services in the combat zone to clear harbors of navigation hazards, engage in underwater search-and-recovery operations, and perform limited underwater repairs on ships.

## **Commander, EOD Group 1, San Diego**

- EOD Mobile Unit (EODMU) 7, San Diego
- EODMU 3, San Diego
- EODMU 5, Guam
- EODMU 11, Whidbey Island, Wash.
- Mobile Diving and Salvage Unit (MDSU) 1, Pearl Harbor
- EOD Training and Evaluation Unit (EODTEU) 1, San Diego
- EOD Expeditionary Support Unit (EODESU) 7, San Diego

## **Commander, EOD Group 2, Virginia Beach, Va.**

- EODMU 2, Virginia Beach, Va.
- EODMU 6, Virginia Beach, Va.
- EODMU 8, Sigonella, Italy
- EODMU 12, Virginia Beach, Va.
- EODESU 2, Virginia Beach, Va.
- EODTEU 2, Virginia Beach, Va.
- MDSU 2, Virginia Beach, Va.
- EOD Operational Support Unit (EODOSU) 10, Virginia Beach, Va.

## **Commander, Navy Expeditionary Logistics Support Group (NAVELSG) Williamsburg, Va.**

The Navy Expeditionary Logistics Force is responsible for providing expeditionary logistics capabilities for the Navy or joint service-customers, primarily within the maritime domain of the littorals. NAVELSG conducts surface- and air-handling missions, cargo terminal and warehouse operations, fuels distribution, customs inspections, ordnance reporting and handling and expeditionary communications.

As part of NECC, NAVELSG deploys tailored force packages providing expeditionary logistics to combatant commanders and component commanders, and provides support to all NECC deployed commands, detachments and teams. NAVELSG provides multi-function logistics detachments with organic command and control to support both CONUS and OCONUS operations.

## **1st Expeditionary Logistics Regiment (NAVELR)**

- Navy Cargo Handling Battalion (NCHB) 1, Williamsburg, Va.

## **2nd NAVELR**

- NCHB 4, Charleston, S.C.
- NCHB 10, Yorktown, Va.

## **3rd NAVELR**

- NCHB 7, Great Lakes, Ill.
- NCHB 8, Fort Dix, N.J.

## **4th NAVELR**

- NCHB 11, Jacksonville, Fla.
- NCHB 12, Bessemer, Ala.
- NCHB 13, Gulfport, Miss.

## **5th NAVELR**

- NCHB 3, Alameda, Calif.
- NCHB 5, Tacoma, Wash.
- NCHB 14, Port Hueneme, Calif.



Photo by Army Spc. Juan Carlos Paz

**NAVELSG Training And Evaluation Unit, Williamsburg, Va.**

**NAVELSG Expeditionary Support Unit, Williamsburg, Va.**

### **Naval Construction Force**

The Naval Construction Force (Seabees) provides a wide range of construction in support of operating forces, including roads, bridges, bunkers, airfields and logistics bases. It provides support in response

to disaster recovery operations; performs civic action projects as part of the Navy's theater security cooperation program; and provides force protection for personnel and construction projects.

Underwater construction teams provide construction, inspection and repair of ocean facilities such as wharves, piers, underwater pipelines, moorings and boat ramps.

**1st Naval Construction Division, Virginia Beach, Va.**

**1st Naval Construction Division Forward, Pearl Harbor**

## Naval Construction Regiments

### 1st Naval Construction Regiment, Port Hueneme, Calif.

- Naval Mobile Construction Battalion (NMCB) 17, Fort Carson, Colo.
- NMCB 18, Tacoma, Wash.
- NMCB 22, Fort Worth, Texas
- Naval Construction Force Support Unit 2, Port Hueneme, Calif.

### 3rd Naval Construction Regiment, Atlanta

- NMCB 14, Jacksonville, Fla.
- NMCB 23, Ft. Belvoir, Va.
- NMCB 24, Huntsville, Ala.

### 7th Naval Construction Regiment, Newport, R.I.

- NMCB 21, Lakehurst, N.J.
- NMCB 26, Mt. Clemens, Mich.
- NMCB 27, Brunswick, Maine

### 9th Naval Construction Regiment, Dallas

- NMCB 15, Belton, Mo.
- NMCB 25, Fort McCoy, Wis.
- NMCB 28, Shreveport, La.

### 22nd Naval Construction Regiment, Gulfport, Miss.

- NMCB 1, Gulfport, Miss.
- NMCB 11, Gulfport, Miss.
- NMCB 74, Gulfport, Miss.
- Underwater Construction Team (UCT) 1, Virginia Beach, Va.

### 25th Naval Construction Regiment, Gulfport, Miss.

- NMCB 7, Gulfport, Miss.
- NMCB 133, Gulfport, Miss.
- Construction Battalion Maintenance Unit (CBMU) 202, Virginia Beach, Va.

### 30th Naval Construction Regiment, Port Hueneme, Calif.

- NMCB 3, Port Hueneme, Calif.
- NMCB 4, Port Hueneme, Calif.
- NMCB 5, Port Hueneme, Calif.
- NMCB 40, Port Hueneme, Calif.
- CBMU 303, San Diego
- UCT 2, Port Hueneme, Calif.

### Seabee Readiness Groups

- 20th Seabee Readiness Group (SRG), Gulfport, Miss.
- 31st SRG, Port Hueneme, Calif.

## Riverine Force

The riverine force is a combat arms force developed to establish and maintain control of rivers and waterways for military and civil purposes; deny their use to hostile forces; and destroy waterborne, hostile forces as necessary. The riverine force combats sea-based terrorism and other illegal activities, such as hijacking, piracy and human trafficking.

### Commander, Riverine Group 1, Virginia Beach, Va.

- Riverine Squadron (RIVRON) 1, Virginia Beach, Va.
- RIVRON 2, Virginia Beach, Va.
- RIVRON 3, Yorktown, Va.

## Maritime Civil Affairs And Security Training (MCAST) Command, Virginia Beach, Va.

Maritime Civil Affairs and Security Training (MCAST) Command provides maritime civil affairs (MCA) and security force assistance (SFA) core competencies to enhance international partnerships. These capabilities enable a partner nation to establish maritime security and enhance regional stability.

Maritime Civil Affairs Teams (MCATs) deploy globally and engage on the front lines of American diplomacy. Comprised of Sailors with language expertise and cultural skills, MCATs identify the critical needs of local citizens in the most vulnerable regions of the world.

MCA regionally aligned planners, teams and specialists coordinate between the operational commander, U.S. country team, host nation civil and military entities and other key partners to facilitate the collaboration of diplomacy, defense and development.

SFA mobile training teams (MTTs) support combatant and Navy component commanders' security cooperation efforts by delivering customized training to designated host nations. SFA MTTs provide training in foreign locales and give local nationals the capability to govern and protect themselves and their areas of responsibility from enemies.

- MCAST Det. Virginia Beach, Va.

## Navy Expeditionary Intelligence Command (NEIC), Virginia Beach, Va.

NEIC capabilities provide timely, relevant force protection indications, warnings and tactical intelligence, which enables combatant commanders to conduct missions across the spectrum of expeditionary operations; including major combat operations, maritime security operations, combat engineering/construction, theater security cooperation support, security assistance, foreign military training, MCA and riverine operations.

## Expeditionary Combat Readiness Center (ECRC), Virginia Beach, Va.

ECRC coordinates with the U.S. Army across 14 states to oversee all administrative processing, equipping, training, deployment and re-deployment of Sailors assigned as individual augmentees, in lieu of forces as well as providing support to Sailors assigned to provisional units committed to joint and maritime security operations.

- ECRC Det. Kuwait
- ECRC Det. Iraq
- ECRC Det. Afghanistan

(Source: Navy Expeditionary Combat Command) 

## Commander, Naval Special Warfare Command, Coronado, Calif.

### Naval Special Warfare Recruiting Directorate, Coronado, Calif.

- Navy Parachute Team "Leap Frogs," Coronado, Calif.

### Commander, Naval Special Warfare Group (NSWG) 1, Coronado, Calif.

- SEAL Teams 1/3/5/7
- Logistics Support Unit (LOGSU) 1, Coronado, Calif.
- Naval Special Warfare Unit (NSWU) 1, Guam
- NSWU 3, Bahrain

### Commander, NSWG 2, Little Creek, Va.

- SEAL Teams 2/4/8/10
- LOGSU 2, Little Creek, Va.
- NSWU 2, Germany

### Commander, NSWG 3, Coronado, Calif.

- SEAL Delivery Vehicle Team 1, Pearl City, Hawaii
- LOGSU 3, Pearl City, Hawaii.
- SDSV Det. 1, Little Creek, Va.

### Commander, NSWG 4, Little Creek, Va.

- Special Boat Team (SBT) 12, Coronado, Calif.
- SBT 20, Little Creek, Va.
- SBT 22, Stennis, Miss.
- Naval Small Craft Instruction and Technical Training School, Stennis, Miss.

### Naval Special Warfare Center (NSWC), Coronado, Calif.

- Naval Special Warfare Basic Training Command, Coronado, Calif.
- Naval Special Warfare Advanced Training Command, Imperial Beach, Calif.

### Commander, NSWG 11

- SEAL Team 17, Coronado, Calif.
- SEAL Team 18, Little Creek, Va.

### Commander, Naval Special Warfare Development Group, Dam Neck, Va.

(Source: Naval Special Warfare Command)



Photo by M.C. Andre N. McIntyre

**T**he Navy Working Uniform (NWU) is intended for year-round wear and shall be the standard working uniform ashore. The NWU is designed to accommodate male and female Sailors and to fulfill multi-functional/geographical uniform requirements at sea and ashore.

## Enlisted Men's Working Uniform

### Basic Uniform Components (E6 & below)

- Shirt, NWU
- Trousers, NWU
- Cap, Eight-Point
- Boot, Black, Leather 9" (Men)
- Sock, Black, Boot
- Undershirt, Cotton, Blue, Crewneck
- Undershorts
- Belt, Black, Cotton or Nylon w/Silver Clip
- Buckle, Silver
- Insignia, Collar (Embroidered)
- Name/U.S. NAVY Service Tapes  
(Identification Markings)
- Straps, Blousing

### Prescribable Items

- Coat, Parka (w/Black Fleece Liner)
- Cap, Knit (Watch), Black
- Mockneck, Black

### Optional Items

- Boots, Black, Rough Out 9"
- Earmuffs (w/outer garment only)
- Overshoes
- Gloves, Black Leather

## Enlisted Women's Working Uniform

### Basic Uniform Components (E6 & below)

- Shirt, NWU
- Trousers, NWU
- Cap, Eight-Point
- Boot, Black, Leather 9"
- Sock, Black, Boot
- Undershirt, Cotton, Blue, Crewneck
- Brassiere
- Underpants
- Belt, Black, Cotton or Nylon w/Silver Clip
- Buckle, Silver
- Insignia, Collar (Embroidered)
- Name/U.S. NAVY Service Tapes  
(Identification Markings)
- Straps, Blousing

### Prescribable Items

- Coat, Parka (w/Black Fleece Liner)
- Cap, Knit (Watch), Black
- Mockneck, Black

### Optional Items

- Boots, Black, Rough Out 9"
- Earmuffs (w/outer garment only)
- Overshoes
- Gloves, Black Leather
- Earrings, Silver Ball
- Handbag, Black

*Refer to NAVADMIN 366/11 for expanded occasion of wear and revised manner of wear for NWU. Information regarding the proper wear of the Black Fleece liner can be found in NAVADMIN 259/11.*

**(Note:** For proper wear refer to U.S. Navy Uniform Regulation NAVPERS 15665 online at [www.public.navy.mil/bupers-npc/support/uniforms/uniformw/regulations/pages/default.aspx](http://www.public.navy.mil/bupers-npc/support/uniforms/uniformw/regulations/pages/default.aspx)) 



Photo by MC2(EXW) Todd Frantom

#### 8-Point Cover

- Square on head, not resting on ears.
- Visor just above eye level and parallel to deck.

#### Rank Insignia

- The appropriate embroidered rate/rank insignia will be worn on the front of the NWU cap and on each collar by all Sailors E-4 to O-10.

#### T-Shirt & Mockneck Sweater

- Collar should fit comfortably around neck.
- Mockneck sweater sleeve length shall not extend beyond the length of the NWU shirt sleeve.

#### Warfare Insignia

- Primary warfare insignia shall be sewn centered and flush with the top of U.S. Navy tape. The fabric strip shall be sewn with a  $\frac{1}{4}$  inch border on the left and right of the embroidery.

#### Sleeve Length

- When shirt cuff is fastened, length of sleeve should cover the wrist bone, but not extend further than the first knuckle at the base of the thumb.

#### Sleeve Rolling

- 3-inch-wide band covered with fabric side out and cuff clearly visible.
- 2 inches above elbow.

#### Shirt Length

- Shirt length must extend to the bottom of the crotch, but not lower than the middle of the cargo pocket flap.
- No gapping at blouse front, both sides of shirt opening must overlap.

#### Trouser

- Trousers worn at waistline with belt.
- Trouser length should be long enough to touch deck when not wearing boots.

#### Trouser Blousing

- Blouse trousers using blousing straps. Blousing straps should be affixed between the 3rd and 4th eyelets from the top.

#### NWU Boots

- Boot laces must be tied and tucked into the cuff of the boots.
- Boots should be worn with boot socks.
- Smooth finish boots are authorized for shore and shipboard use.
- Rough-out boots are authorized for shore duty only.

\* All buttons and closures shall be secured.

\* Recommend uniforms be washed inside out.

## Air Force | Army | Marine Corps

## Navy & Coast Guard

## Air Force

No Warrant

## Army



Chief Warrant Officer 5



Chief Warrant Officer 4



Chief Warrant Officer 3



Chief Warrant Officer 2



Warrant Officer 1

## Marine Corps



Chief Warrant Officer 5



Chief Warrant Officer 4



Chief Warrant Officer 3



Chief Warrant Officer 2



Warrant Officer 1

## Navy & Coast Guard



Chief Warrant Officer 5



Chief Warrant Officer 4



Chief Warrant Officer 3



Chief Warrant Officer 2



Warrant Officer 1

(Coast Guard Only)

Warrant Officers

0-10



General of the Air Force/Army  
(Reserved for Wartime)



Fleet Admiral (Reserved for Wartime)



General



Admiral | Commandant of the Coast Guard

0-9



Lieutenant General



Vice Admiral

0-8



Major General



Rear Admiral

0-7



Brigadier General



Rear Admiral (Lower Half)

0-6



Colonel



Captain

0-5



Lieutenant Colonel



Commander

0-4



Major



Lieutenant Commander

0-3



Captain



Lieutenant

0-2



First Lieutenant



Lieutenant Junior Grade

0-1



Second Lieutenant



Ensign

**Air Force**

**Army**

**Marine Corps**

**Navy & Coast Guard**

E-9



**Chief Master Sergeant of the Air Force**



**Sergeant Major of the Army**



**Sergeant Major of the Marine Corps**



**Master Chief Petty Officer of the Navy / Coast Guard**

E-8



**Chief Master Sergeant, First Sergeant, Command Chief Master Sergeant**



**Sergeant Major, Command Sergeant Major**



**Master Gunnery Sergeant, Sergeant Major**



**Master Chief Petty Officer, Fleet / Force / Command Master Chief Petty Officer**

E-7



**Senior Master Sergeant, First Sergeant**



**Master Sergeant, First Sergeant**



**Master Sergeant, First Sergeant**



**Senior Chief Petty Officer**

E-6



**Master Sergeant, First Sergeant**



**Sergeant First Class**



**Gunnery Sergeant**



**Chief Petty Officer**

E-5



**Technical Sergeant**



**Staff Sergeant**



**Staff Sergeant**



**Petty Officer First Class**

E-4



**Staff Sergeant**



**Sergeant**



**Sergeant**



**Petty Officer Second Class**

E-3



**Senior Airman**



**Corporal, Specialist**



**Corporal**



**Petty Officer Third Class**

E-2



**Airman First Class**



**Private First Class**



**Lance Corporal**



**Seaman**

E-1



**Airman**



**Private**



**Private First Class**



**Seaman Apprentice**

**Airman Basic**

**Private**

**Private**

**Seaman Recruit**

# Enlisted Ratings

**E**nlisted Sailors wear their job specialty in plain sight. Rating badges, worn on the left sleeve, consist of an eagle (called a crow); chevrons indicating the wearer's rank; and a specialty mark indicating rating. While some of these ratings have historical significance (such as the boatswain's mate), others show the evolution of naval technology in modern times, such as the GS (gas turbine system technician).



**AB**  
Aviation Boatswain's Mate  
**ABE** - Equipment  
**ABF** - Fuels  
**ABH** - Handling



**AC**  
Air-Traffic Controller



**AT**  
Aviation Electronics Technician



**AW**  
Naval Aircrewman  
**AWF** - Mechanical  
**AWO** - Operator  
**AWR** - Tactical Helicopter  
**AWS** - Helicopter  
**AWV** - Avionics



**AZ**  
Aviation Maintenance Administrationman



**BM**  
Boatswain's Mate



**BU**  
Builder



**CE**  
Construction Electrician



**EN**  
Engineman



**EO**  
Equipment Operator



**EOD**  
Explosive Ordnance Disposal



**ET**  
Electronics Technician



**FC**  
Fire Controlman



**FT**  
Fire Control Technician



**IT**  
Information Systems Technician



**LN**  
Legalman



**LS**  
Logistics Specialist



**MA**  
Master-at-Arms



**MC**  
Mass Communication Specialist



**MM**  
Machinist's Mate



**MU**  
Musician



**NC**  
Navy Counselor



**ND**  
Navy Diver



**OS**  
Operations Specialist



**PR**  
Aircrew Survival Equipmentman



**PS**  
Personnel Specialist



**SH**  
Ship's Serviceman



**SO**  
Special Warfare Operator



**ST**  
Sonar Technician  
**STG** - Surface  
**STS** - Submarine



**SW**  
Steelworker



**UT**  
Utilitiesman



**YN**  
Yeoman



**AD**

Aviation Machinist's Mate



**AE**

Aviation Electrician's Mate



**AG**

Aerographer's Mate



**AM**

Aviation Structural Mechanic  
**AME** - Equipment



**AO**

Aviation Ordnanceman



**AS**

Aviation Support  
Equipment Technician



**CM**

Construction Mechanic



**CS**

Culinary Specialist



**CT**

Cryptologic Technician  
**CTI** - Interpretive  
**CTM** - Maintenance  
**CTN** - Networks  
**CTR** - Collection  
**CTT** - Technical



**DC**

Damage Controlman



**EA**

Engineering Aide



**EM**

Electrician's Mate



**GM**

Gunner's Mate



**GS**

Gas Turbine System  
Technician  
**GSE** - Electrical  
**GSM** - Mechanical



**HM**

Hospital Corpsman



**HT**

Hull Maintenance Technician



**IC**

Interior Communications  
Electrician



**IS**

Intelligence Specialist



**MN**

Mineman



**MR**

Machinery Repairman



**MT**

Missile Technician



**QM**

Quartermaster



**RP**

Religious Programs  
Specialist



**SB**

Special Warfare  
Boat Operator



**AN\*\***

Airman



**FN\*\***

Fireman



**SN\*\***

Seaman

\*\* General Apprenticeship





**Naval Astronaut**



**Naval Astronaut (NFO)**



**Naval Aviator (Pilot)**



**Naval Flight Officer**



**Aerospace Experimental Psychologist and Aerospace Physiologist**



**Aviation Warfare Specialist (enlisted)**



**Naval Aviation Supply Corps**



**Naval Aircrew Warfare Specialist**



**Surface Warfare (officer)**



**Surface Warfare (enlisted)**



**Surface Warfare Nurse Corps**



**Surface Warfare Medical Corps**



**Submarine (enlisted)**



**Submarine Medical**



**Submarine Engineering Duty**



**Submarine Supply**



**Seabee Combat Warfare Specialist (enlisted)**



**Naval Parachutist**



**Basic Parachutist**



**Naval Reserve Merchant Marine**



**Integrated Undersea Surveillance System (enlisted)**



**Fleet Marine Force (officer)**



**Fleet Marine Force Chaplain**



**Fleet Marine Force (enlisted)**



**First Class Diver**



**Second Class Diver**



**Scuba Diver**



**Deep Submergence (officer)**



**Basic Explosive Ordnance Disposal**



**Small Craft (officer)**



**Small Craft (enlisted)**



**Craftmaster**



**Vice Presidential Service Badge**



**Office of the Secretary of Defense**



**Joint Chiefs of Staff**



**Recruiting Command for Excellence**



**Master Chief Petty Officer of the Navy**



**Fleet Master Chief Petty Officer**



**Force Master Chief Petty Officer**



**Command Master Chief Petty Officer**



**U.S. Navy Police (officer)**



**Professional Aviation Maintenance Officer**



**Naval Aviation Observer and Flight Meteorologist**



**Flight Surgeon**



**Flight Nurse**



**Marine Corps Combat Aircrew**



**Special Warfare (SEAL)**



**Special Operations**



**Special Warfare Combatant-Craft Crewman**



**Surface Warfare Dental Corps**



**Surface Warfare Medical Service Corps**



**Surface Supply Corps**



**Submarine (officer)**



**Submarine Combat Patrol**



**SSBN Deterrent Patrol**



**SSBN Deterrent Patrol (20 patrols)**



**Seabee Combat Warfare Specialist (officer)**



**Enlisted Expeditionary Warfare Specialist**



**Information Dominance Warfare (officer)**



**Information Dominance Warfare (enlisted)**



**Integrated Undersea Surveillance System (officer)**



**Diving (officer)**



**Diving (medical)**



**Master Diver**



**Diver (Medical Technician)**



**Deep Submergence (enlisted)**



**Explosive Ordnance Disposal (officer)**



**Master Explosive Ordnance Disposal**



**Senior Explosive Ordnance Disposal**



**Command-at-Sea**



**Command Ashore/Project Manager**



**Presidential Service Badge**



**Recruiter**



**Career Counselor**



**Division Commander for Excellence**



**Division Commander**



**U.S. Navy Police (enlisted)**



**U.S. Navy Security**



**U.S. Navy Corrections**



**U.S. Navy Guard**



**U.S. Navy Master-at-Arms**

# Order of Precedence and Devices



Medal Of Honor



Navy Cross



Defense Distinguished Service Medal



Distinguished Service Medal



Navy/Marine Corps Medal



Bronze Star



Purple Heart



Defense Meritorious Service Medal



Joint Service Achievement Medal



Navy/Marine Corps Achievement Medal



Combat Action Ribbon



Presidential Unit Citation



Pow Medal



Good Conduct Medal



Navy Reserve Meritorious Service Medal



Navy Fleet Marine Force Ribbon



Armed Forces Expeditionary Medal



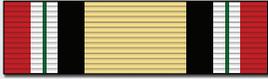
Vietnam Service Medal



Southwest Asia Service Medal



Kosovo Campaign Medal



Iraq Campaign Medal



Global War On Terrorism Expeditionary Medal



Global War On Terrorism Service Medal



Korea Defense Service Medal



Humanitarian Service Medal



Military Outstanding Volunteer Service Medal



Sea Service Deployment Ribbon



Navy Arctic Service Ribbon



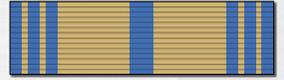
Navy/Marine Corps Overseas Service Ribbon



Navy Recruiting Service Ribbon



Navy Recruit Training Service Medal



Armed Forces Reserve Medal



Philippine Presidential Unit Citation



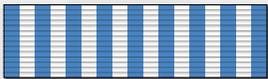
Republic Of Korea Presidential Unit Citation



Republic Of Vietnam Presidential Unit Citation



Republic Of Vietnam Gallantry Cross Unit Citation



United Nations Service Medal



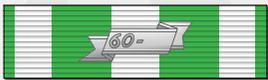
United Nations Medal



Nato Medals



Multinational Force And Observers Medal



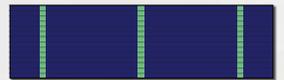
Republic Of Vietnam Campaign Medal



Kuwait Liberation Medal (Kingdom Of Saudi Arabia)



Kuwait Liberation (Kuwait)



Rifle Marksmanship Medal



Silver Star



Defense Superior Service Medal



Legion Of Merit



Distinguished Flying Cross



Meritorious Service Medal



Air Medal



Joint Service Commendation Medal



Navy/Marine Corps Commendation Medal



Joint Meritorious Unit Award



Navy Unit Commendation



Meritorious Unit Commendation



Navy "E" Ribbon



Navy Expeditionary Medal



National Defense Service Medal



Korean Service Medal



Antarctica Service Medal



Afghanistan Campaign Medal



Armed Forces Service Medal



Navy Reserve Sea Service Ribbon



Navy Reserve Medal



Republic Of Vietnam Civil Actions Unit Citation



Inter American Defense Board Medal



Pistol Marksmanship Medal



Gold Star

Denotes subsequent awards of the same Navy decoration.



Silver Star

Worn in lieu of five gold stars.



Bronze Star

Represents participation in campaigns or operations, multiple qualifications or an additional award to any of the various ribbons on which it is authorized. Also worn to denote first award of the single-mission Air Medal after Nov. 22, 1989.



Silver Service Star

Worn in lieu of five bronze stars.



Bronze Oak Leaf Cluster

Represents second and subsequent entitlements of awards.



Silver Oak Leaf Cluster

Worn for the 6th, 11th, or in lieu of five bronze oak leaf clusters.



Battle "E" Device



"V" Device

Authorized for acts or service involving direct participation in combat operations.



Fleet Marine Force Combat Operations Insignia

For Navy personnel attached to Fleet Marine Force units participating in combat operations.



Silver "E"

Denotes Expert Marksman qualification.



Bronze "S"

Denotes Sharpshooter Marksman qualification.



"M" Device

Denotes Naval Reserve mobilization in support of certain operations.



Hourglass

Issued for each succeeding award of the Armed Forces Reserve Medal.



WINTERED OVER

Wintered Over

For wintering over on Antarctica continent - a clasp for Antarctica Service Medal; a suspension ribbon and a disc for the service ribbon; bronze for the first winter; gold for the second winter; and silver for the third.



"3/16" Palm

Worn on the Republic of Vietnam Gallantry Cross Unit Citation and Republic of Vietnam Civil Actions Unit Citation ribbons.



Strike/Flight Device

Bronze Arabic numeral denotes the total number of strike/flight awards of the Air Medal earned subsequent to April 9, 1962.



Europe And Asia Clasps

Worn on the suspension ribbon of the Navy Occupation Service Medal.



Kuwait Liberation Cluster



## The mission of the Navy Reserve is to provide strategic depth and deliver operational capabilities to our Navy and Marine Corps team, and joint forces, from peace to war.

*Because our Navy Reserve is ready, innovative and agile, we can assign capabilities and missions to our Reserve Component with confidence. Navy Reserve should be a regular part of our worldwide deployment cycle, as well as performing the Navy's predictable, part-time missions, where appropriate.*

— Adm. Jonathan Greenert,  
Chief of Naval Operations

### A Vital Part of the Navy Total Force

Whether working in the United States or abroad, ashore, at sea or in the air, today's Navy Reserve is an integral part of the Navy Total Force. Navy Reserve Sailors uphold the core values of honor, courage and commitment and prove that it's one Navy, one mission. Together, active and Reserve component Sailors make up one of the most capable forces the world has ever seen.

Navy Reserve personnel are fully integrated into global operations and planning. Like their motto says: Navy Reserve Sailors are Ready Now. Anytime, Anywhere!

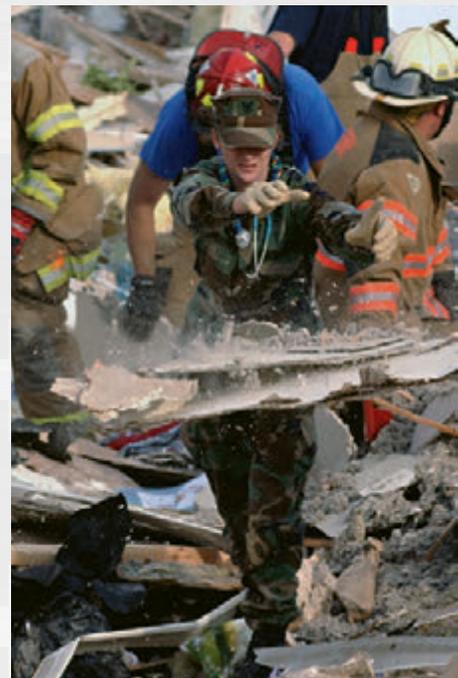
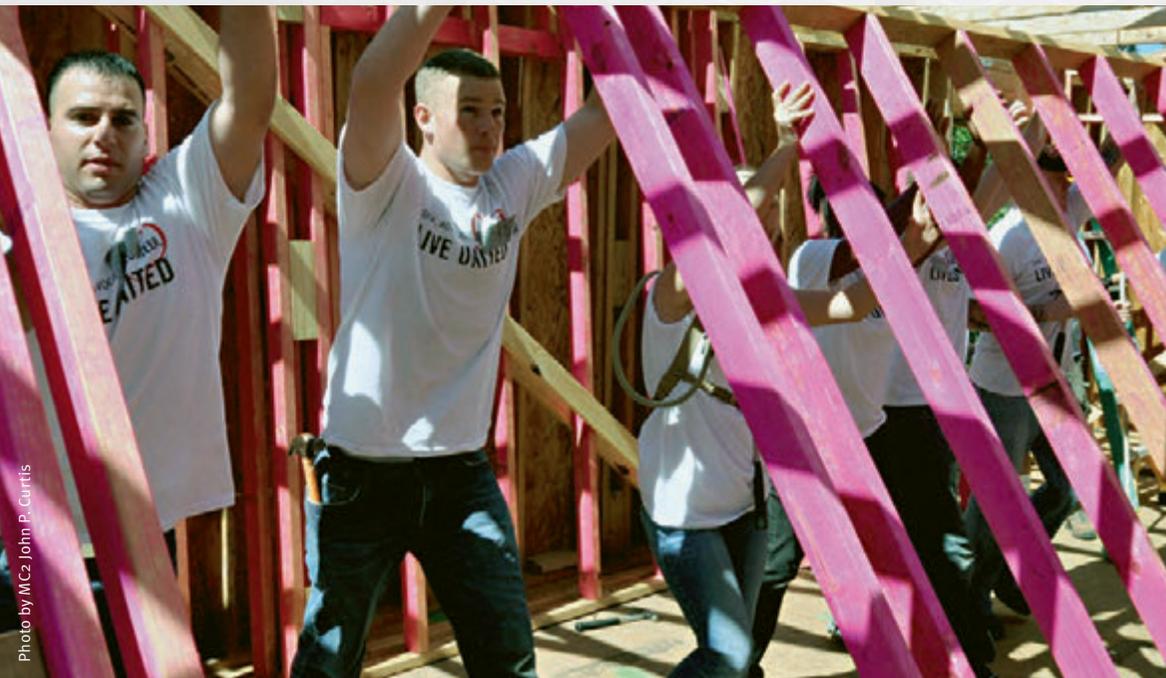
### An Enduring Mission

The mission of the Navy Reserve is to provide strategic depth and deliver operational capabilities to the Navy and Marine Corps team as well as to joint forces, from peace to war.

Established in 1915, the Navy Reserve has played an important role in every conflict since then. Today, at the tip of the spear, 6,500 mobilized or deployed Navy Reserve Sailors are providing about half of the Navy's ground forces serving in the U.S. Central Command and in other critical roles worldwide.

The Navy Reserve also responds to urgent requirements. For example, when an earthquake struck Haiti in 2010, Navy Reserve air crews and fleet logistics aircraft delivered urgently needed food, medical supplies and water. Navy Reserve doctors, nurses and hospital corpsmen provided care to the wounded, and Reserve Seabees, ground crews, logisticians and communicators provided "on-demand expertise" to bring in aid.

And every day, the Navy Reserve provides critical operational support. Reserve Sailors support ship maintenance, fly training and aggressor sorties, provide global intelligence support and much more.



## What's in it for me?

Reserve Sailors enjoy a full array of benefits. But there's more: professional growth, personal pride, meaningful challenges and a greater cause.

## Advance Your Professional Career

Navy Reserve Sailors continue to train and advance. Navy training, leadership and experience provides Reserve Sailors with skills that civilian employers find highly valuable. The Navy Reserve can bolster a resumé, finance an education and provide state-of-the-art training – all while providing additional income.

## Take Pride in the Company You Keep

Reserve Sailors stay connected to what they love about the Navy – the people. They share a common bond and a camaraderie that only exists among those who serve.

## The Navy Reserve enables the continuum of service philosophy: recruit Sailors once and retain them for life through flexible service options that provide opportunities for meaningful and valued work across a career.

## Your Commitment is Honored

The contribution of each and every Sailor is valuable. Service can and does vary from a few days per year to full-time service. As a Reserve Sailor, service matters.

## Enjoy Exciting New Challenges

Sailors who want to take their skills to another level, be part of something bigger and make an impact on the world can do it in the Navy Reserve – while staying close to home, family and friends.

## Strike A Balance

The Navy Reserve makes it possible to lead a balanced life and enjoy the best of both worlds. When Sailors continue serving in the Navy Reserve, they stay connected to the things that matter most – at home and on duty.

## Unbeatable Benefits Provide Security and Flexibility

Navy Reserve benefits provide security while enabling Sailors to pursue career and

education opportunities – benefits that are hard to match.

## Health Care and Life Insurance

Reserve component Sailors and their families are eligible for highly affordable TRICARE Reserve Select medical care and dental benefits, as well as affordable Serviceman's Group Life Insurance for Sailors, spouses and children. Having this health and life insurance gives Reserve Sailors the flexibility to change jobs, go to school, start a family – on their terms.

## Great Pay and Benefits

Navy Reserve Sailors earn pay and retirement credit, making it one of the only part-time jobs that provides a chance to earn a retirement. Reserve Sailors continue to compete for advancement and enjoy a wide variety of training, education, and travel opportunities

(both duty and Space "A"). Reserve Sailors and their families have access to commissaries, exchanges, Morale, Welfare and Recreation facilities, activities, gyms and clubs.

## Life in the Navy Reserve

Traditionally, serving in the Navy Reserve requires a minimum of one weekend a month and two weeks a year. And there are many ways to fit the Navy Reserve into civilian life.

Reserve Sailors train at the nearest Navy Operational Support Center – there's one in every state, in Puerto Rico and Guam – or they may train at an active-duty Navy, Marine Corps or joint command. Exercises and other duty can take Reserve Sailors across the United States or around the globe.

Flexible drilling may be an option. Some fulfill their service commitment in a single, extended mission or serve on weekdays. There are many ways to serve that also support civilian careers or school schedules.

## How Do I Get Started?

It's easier than ever to keep serving – it's like changing lanes from the active compo-



Photo by MC2 Tony D. Curtis



Photo by MC2 Nicolas C. Lopez



Photo by MC2 Jason Johnson



Photo by MC2 Charles E. Alvarado

ment to the Reserve component. Plan early and make informed decisions!

The Navy Reserve offers affiliation bonuses of up to \$20,000. Programs like the Career Transition Office, Career Management System Interactive Detailing and Perform to Serve with Selected Reserve option, show the options. Command career counselors have all the latest details.

With a Reserve billet and unit identified before leaving active duty, Sailors who change lanes can start serving immediately, even while attending school, embarking on a new career, or starting a family. Stay Navy!

For more information, go to [www.navyreserve.com](http://www.navyreserve.com). 



Photo by MCC Joe Kane

## Cruisers

Modern U.S. Navy guided-missile cruisers perform primarily in a battle force role. These ships are multimission, anti-air warfare (AAW), anti-submarine warfare (ASUW), long-range strike and anti-surface warfare (ASW) surface combatants capable of supporting carrier and expeditionary strike groups, amphibious forces, or operating independently and as flagships of surface strike groups.

### Ticonderoga-class

- USS *Bunker Hill* (CG 52)
- USS *Mobile Bay* (CG 53)
- USS *Antietam* (CG 54)
- USS *Leyte Gulf* (CG 55)
- USS *San Jacinto* (CG 56)
- USS *Lake Champlain* (CG 57)
- USS *Philippine Sea* (CG 58)
- USS *Princeton* (CG 59)
- USS *Normandy* (CG 60)
- USS *Monterey* (CG 61)
- USS *Chancellorsville* (CG 62)
- USS *Cowpens* (CG 63)
- USS *Gettysburg* (CG 64)
- USS *Chosin* (CG 65)
- USS *Hue City* (CG 66)

- USS *Shiloh* (CG 67)
- USS *Anzio* (CG 68)
- USS *Vicksburg* (CG 69)
- USS *Lake Erie* (CG 70)
- USS *Cape St. George* (CG 71)
- USS *Vella Gulf* (CG 72)
- USS *Port Royal* (CG 73)

## Destroyers

Guided-missile destroyers are multimission AAW, ASW and ASUW surface combatants. They operate independently for support of carrier and expeditionary strike groups and surface strike groups.

### Arleigh Burke-class

- USS *Arleigh Burke* (DDG 51)
- USS *Barry* (DDG 52)
- USS *John Paul Jones* (DDG 53)
- USS *Curtis Wilbur* (DDG 54)
- USS *Stout* (DDG 55)
- USS *John S. McCain* (DDG 56)
- USS *Mitscher* (DDG 57)
- USS *Laboon* (DDG 58)
- USS *Russell* (DDG 59)
- USS *Paul Hamilton* (DDG 60)
- USS *Ramage* (DDG 61)
- USS *Fitzgerald* (DDG 62)
- USS *Stethem* (DDG 63)
- USS *Carney* (DDG 64)
- USS *Benfold* (DDG 65)
- USS *Gonzalez* (DDG 66)
- USS *Cole* (DDG 67)
- USS *The Sullivans* (DDG 68)
- USS *Milius* (DDG 69)
- USS *Hopper* (DDG 70)
- USS *Ross* (DDG 71)
- USS *Mahan* (DDG 72)
- USS *Decatur* (DDG 73)
- USS *McFaul* (DDG 74)
- USS *Donald Cook* (DDG 75)
- USS *Higgins* (DDG 76)
- USS *O'Kane* (DDG 77)
- USS *Porter* (DDG 78)
- USS *Oscar Austin* (DDG 79)
- USS *Roosevelt* (DDG 80)
- USS *Winston S. Churchill* (DDG 81)
- USS *Lassen* (DDG 82)
- USS *Howard* (DDG 83)
- USS *Bulkeley* (DDG 84)
- USS *McCampbell* (DDG 85)
- USS *Shoup* (DDG 86)
- USS *Mason* (DDG 87)
- USS *Preble* (DDG 88)

USS *Mustin* (DDG 89)  
 USS *Chafee* (DDG 90)  
 USS *Pinckney* (DDG 91)  
 USS *Momsen* (DDG 92)  
 USS *Chung-Hoon* (DDG 93)  
 USS *Nitze* (DDG 94)  
 USS *James E. Williams* (DDG 95)  
 USS *Bainbridge* (DDG 96)  
 USS *Halsey* (DDG 97)  
 USS *Forrest Sherman* (DDG 98)  
 USS *Farragut* (DDG 99)  
 USS *Kidd* (DDG 100)  
 USS *Gridley* (DDG 101)  
 USS *Sampson* (DDG 102)  
 USS *Truxtun* (DDG 103)  
 USS *Sterett* (DDG 104)  
 USS *Dewey* (DDG 105)  
 USS *Stockdale* (DDG 106)  
 USS *Gravelly* (DDG 107)  
 USS *Wayne E. Meyer* (DDG 108)  
 USS *Jason Dunham* (DDG 109)  
 USS *William P. Lawrence* (DDG 110)  
 USS *Spruance* (DDG 111)  
 PCU *Michael Murphy* (DDG 112)\*

### Zumwalt-class

Zumwalt (DDG 1000)\*  
 Michael Monsoor (DDG 1001)\*

## Frigates

Frigates fulfill a protection-of-shipping mission as ASW combatants for amphibious expeditionary forces, underway replenishment groups and merchant convoys.

### Oliver Hazard Perry-class

USS *Boone* (FFG 28)\*\*\*  
 USS *Stephen W. Groves* (FFG 29)\*\*\*  
 USS *John L. Hall* (FFG 32)  
 USS *Jarrett* (FFG 33)  
 USS *Underwood* (FFG 36)  
 USS *Crommelin* (FFG 37)\*\*\*  
 USS *Curtis* (FFG 38)\*\*\*  
 USS *Doyle* (FFG 39)\*\*\*  
 USS *Halyburton* (FFG 40)  
 USS *McClusky* (FFG 41)\*\*\*  
 USS *Klasking* (FFG 42)\*\*\*  
 USS *Thach* (FFG 43)  
 USS *DeWert* (FFG 45)  
 USS *Rentz* (FFG 46)  
 USS *Nicholas* (FFG 47)  
 USS *Vandegrift* (FFG 48)  
 USS *Robert G. Bradley* (FFG 49)  
 USS *Taylor* (FFG 50)  
 USS *Gary* (FFG 51)

USS *Carr* (FFG 52)  
 USS *Hawes* (FFG 53)  
 USS *Ford* (FFG 54)  
 USS *Elrod* (FFG 55)  
 USS *Simpson* (FFG 56)\*\*  
 USS *Reuben James* (FFG 57)  
 USS *Samuel B. Roberts* (FFG 58)  
 USS *Kauffman* (FFG 59)  
 USS *Rodney M. Davis* (FFG 60)\*\*\*  
 USS *Ingraham* (FFG 61)

## Amphibious Assault

Operating as part of the modern U.S. Navy, amphibious assault ships project power and maintain presence by serving as the cornerstone of the expeditionary strike groups. These ships use air cushion landing craft, (LCAC), conventional landing craft and helicopters to move Marine assault forces ashore.

In a secondary role, using AV-8B *Harrier* aircraft and ASUH helicopters, these ships perform sea control and limited power projection missions.

### Tarawa-class

USS *Nassau* (LHA 4)  
 USS *Peleliu* (LHA 5)

### Wasp-class

USS *Wasp* (LHD 1)  
 USS *Essex* (LHD 2)  
 USS *Kearsarge* (LHD 3)  
 USS *Boxer* (LHD 4)  
 USS *Bataan* (LHD 5)  
 USS *Bonhomme Richard* (LHD 6)  
 USS *Iwo Jima* (LHD 7)  
 USS *Makin Island* (LHD 8)

### America-class

PCU *America* (LHA 6)\*\*

## Amphibious Transport Dock

Amphibious transport dock ships are used to transport and land elements of a landing force for a variety of expeditionary warfare missions. These ships are used to transport Marines, their equipment and supplies by embarked air cushion or conventional landing craft or amphibious vehicles, augmented by helicopters or vertical take off and landing aircraft in amphibious assault, special operations, or expeditionary warfare missions.

### Austin-class

USS *Cleveland* (LPD 7)  
 USS *Dubuque* (LPD 8)  
 USS *Denver* (LPD 9)  
 USS *Ponce* (LPD 15)

### San Antonio-class

USS *San Antonio* (LPD 17)  
 USS *New Orleans* (LPD 18)  
 USS *Mesa Verde* (LPD 19)  
 USS *Green Bay* (LPD 20)  
 USS *New York* (LPD 21)  
 USS *San Diego* (LPD 22)\*  
 USS *Anchorage* (LPD 23)\*\*  
 USS *Arlington* (LPD 24)\*  
 USS *Somerset* (LPD 25)\*\*

## Amphibious Dock Landing

Dock landing ships support amphibious operations including landings via air, LCAC and conventional landing craft, onto hostile shores.

### Whidbey Island-class

USS *Whidbey Island* (LSD 41)  
 USS *Germantown* (LSD 42)  
 USS *Fort McHenry* (LSD 43)  
 USS *Gunston Hall* (LSD 44)  
 USS *Comstock* (LSD 45)  
 USS *Tortuga* (LSD 46)  
 USS *Rushmore* (LSD 47)  
 USS *Ashland* (LSD 48)

### Harpers Ferry-class

USS *Harpers Ferry* (LSD 49)  
 USS *Carter Hall* (LSD 50)  
 USS *Oak Hill* (LSD 51)  
 USS *Pearl Harbor* (LSD 52)

## Amphibious Command

Amphibious command ships provide command and control for fleet commanders. Commissioned in 1970, these are the only ships to be designed initially for an amphibious command ship role. Earlier amphibious command ships lacked sufficient speed to keep up with a 20-knot amphibious force. USS *Blue Ridge* (LCC 19) became the 7th Fleet command ship in 1979, and USS *Mount Whitney* (LCC/JCC 20) became the 6th Fleet command ship in 2005. *Mount Whitney* was transferred to Military Sealift Command, but is still in commission.



Photo by M/C1 Joshua Lee Kelsey

**Blue Ridge-class**

- USS *Blue Ridge* (LCC 19)
- USS *Mount Whitney* (LCC/JCC 20)

**Mine Countermeasures Ships**

*Avenger*-class ships are designed as mine hunter-killers capable of finding, classifying and destroying moored and bottom mines. The last three MCM ships were purchased in 1990, bringing the total to 14 fully deployable, oceangoing *Avenger*-class ships. These ships use sonar and video systems, cable cutters and a mine detonating device that can be released and detonated by remote control. They are also capable of conventional sweeping measures.

**Avenger-class**

- USS *Avenger* (MCM 1)
- USS *Defender* (MCM 2)

- USS *Sentry* (MCM 3)
- USS *Champion* (MCM 4)
- USS *Guardian* (MCM 5)
- USS *Devastator* (MCM 6)
- USS *Patriot* (MCM 7)
- USS *Scout* (MCM 8)
- USS *Pioneer* (MCM 9)
- USS *Warrior* (MCM 10)
- USS *Gladiator* (MCM 11)
- USS *Ardent* (MCM 12)
- USS *Dextrous* (MCM 13)
- USS *Chief* (MCM 14)

**Coastal Patrol Ships**

The primary mission of these ships is coastal patrol and interdiction surveillance, an important aspect of littoral operations.

These ships provide the U.S. Navy with a fast, reliable platform that can respond to emergent requirements in a shallow water environment. Five of these ships have been

forward-deployed to the Gulf region in support of the war on terrorism.

The *Cyclone*-class have all been employed jointly with the U.S. Coast Guard to help protect the nation's coastline. The Navy and Coast Guard signed an agreement in August 2004 that allowed five ships to be under the operational command of the Coast Guard beginning in October 2004. Two of five ships returned to the Navy in 2008; the remainder will return in 2011. In 2009, the ships began a sustainment program to update their communication, engineering and support systems.

**Cyclone-class**

- USS *Tempest* (PC 2)
- USS *Hurricane* (PC 3)
- USS *Monsoon* (PC 4)
- USS *Typhoon* (PC 5)
- USS *Sirocco* (PC 6)
- USS *Squall* (PC 7)

- USS *Chinook* (PC 9)
- USS *Firebolt* (PC 10)
- USS *Whirlwind* (PC 11)
- USS *Thunderbolt* (PC 12)

## Littoral Combat Ship

The Littoral Combat Ship (LCS) is a fast craft designed to operate in hostile near-shore environments yet capable of open-ocean operations. It is designed to defeat asymmetric “anti-access” threats such as mines, quiet diesel submarines and fast surface craft. LCS-class consists of two different hull forms – *Freedom*-variant, a semi-planing monohull and *Independence*-variant, an aluminum trimaran. Both have reconfigurable payloads for interchangeable mission packages that focus on antisubmarine, mine and surface warfare.

### *Freedom*-variant

- USS *Freedom* (LCS 1)
- Fort Worth (LCS 3)\*

### *Independence*-variant

- USS *Independence* (LCS 2)
- Coronado (LCS 4)\*

## Submarine Tenders

Submarine tenders furnish maintenance and logistic support for nuclear-powered attack submarines and are the largest of the active auxiliaries. Their crews are made up mostly of technicians and repair personnel.

### *Emory S. Land*-class

- USS *Emory S. Land* (AS 39)
- USS *Frank Cable* (AS 40)

## Joint High Speed Vessel

The JHSV program is procuring high-speed transport vessels for the Army and the Navy. These vessels will be used for fast intra-theater transportation of troops, military vehicles and equipment. JHSV will be capable of transporting 600 short tons 1,200 nautical miles at an average speed of 35 knots. The ships will be capable of operating in shallow-draft ports and waterways, interfacing with roll-on/roll-off discharge facilities, and on/off-loading a combat-loaded Abrams Main Battle Tank (M1A2). Other joint requirements include an aviation flight deck to support day and night air vehicle launch and recovery operations. As

a non-combatant sealift ship, the Navy variant of JHSV will be crewed by civilian mariners, either employed by or under contract to the Navy’s Military Sealift Command. U.S. Army vessels will be crewed by Army craft masters.

### *Spearhead*-class

- Spearhead* (JHSV 1)\*
- Choctaw County* (JHSV 2)\*\*
- Fortitude* (JHSV 3)\*\*
- Fall River* (JHSV 4)\*\*
- Resolute* (JHSV 5)\*\*
- Not Named (JHSV 6)\*\*
- Not Named (JHSV 7)\*\*

- Not Named (JHSV 8)\*\*
- Not Named (JHSV 9)\*\*

## Other Ships In Commission

- USS *Constitution*
- USS *Pueblo* (AGER 2)
- Self Defense Test Ship* (EDDG 31)

- \* Expected delivery 2012
- \*\* Under construction or authorized for construction
- \*\*\* Navy Reserve Force

(Source: Naval Sea Systems Command) 



Photo by M/C Jeffrey Tighman Williams



Photo by M.C. Kim Williams

## Military Sealift Command

**M**ilitary Sealift Command (MSC) operates approximately 110 noncombatant, civilian-crewed ships that replenish U.S. Navy ships, conduct specialized missions, strategically preposition combat cargo at sea around the world and move military equipment and supplies used by deployed U.S. forces. In wartime, more than 90 percent of all equipment and supplies needed by U.S. military forces are carried by sea.

MSC, headquartered in Washington, D.C., has six major subordinate commands worldwide. Military Sealift Fleet Support Command in Norfolk crews, trains, equips and maintains MSC's government-

owned, government-operated ships around the globe. In addition, five area commands are located in Norfolk; San Diego; Naples, Italy; Manama, Bahrain; and Singapore.

## Naval Fleet Auxiliary Force

The ships of MSC's Naval Fleet Auxiliary Force (NFAF) are the supply lines to U.S. Navy ships at sea. These ships provide virtually everything that Navy ships need, including fuel, food, ordnance, spare parts, mail and other supplies. All NFAF ships are government-owned and crewed by civil service mariners. Some of the ships also have a small contingent of Navy personnel aboard for operations support, supply coordination and helicopter operations. When needed, some NFAF ships also carry military or civilian helicopter detachments.



Photo by MC2 Julia A. Casper

### Fleet Ocean Tugs (T-ATF)

- USNS *Catawba* (T-ATF 168)
- USNS *Navajo* (T-ATF 169)
- USNS *Sioux* (T-ATF 171)
- USNS *Apache* (T-ATF 172)

### Rescue and Salvage Ships (T-ARS)

- USNS *Safeguard* (T-ARS 50)
- USNS *Grasp* (T-ARS 51)
- USNS *Salvor* (T-ARS 52)
- USNS *Grapple* (T-ARS 53)

### Special Mission Ships

MSC's Special Mission Program provides operating platforms and services for a wide variety of U.S. military and other U.S. government missions. Oceanographic and hydrographic surveys, underwater surveillance, missile tracking, command and control, and submarine support are just a few of the specialized capabilities this program provides.

### Cable Laying/Repair Ship (T-ARC)

- USNS *Zeus* (T-ARC 7)

### Command Ship (LCC)

- USS *Mount Whitney* (LCC 20)

### Missile Range Instrumentation Ships (TAGM)

- USNS *Observation Island* (T-AGM 23)
- USNS *Invincible* (T-AGM 24)
- USNS *Howard O. Lorenzen* (T-AGM 25)

### Ammunition Ships (T-AE)

- USNS *Flint* (T-AE 32)

### Fast Combat Support Ships (T-AOE)

- USNS *Supply* (T-AOE 6)
- USNS *Rainier* (T-AOE 7)
- USNS *Arctic* (T-AOE 8)
- USNS *Bridge* (T-AOE 10)

### Hospital Ships (T-AH)

- USNS *Mercy* (T-AH 19)
- USNS *Comfort* (T-AH 20)

- USNS *Walter S. Diehl* (T-AO 193)
- USNS *John Ericsson* (T-AO 194)
- USNS *Leroy Grumman* (T-AO 195)
- USNS *Kanawha* (T-AO 196)
- USNS *Pecos* (T-AO 197)
- USNS *Big Horn* (T-AO 198)
- USNS *Tippecanoe* (T-AO 199)
- USNS *Guadalupe* (T-AO 200)
- USNS *Patuxent* (T-AO 201)
- USNS *Yukon* (T-AO 202)
- USNS *Laramie* (T-AO 203)
- USNS *Rappahannock* (T-AO 204)

### Dry Cargo/Ammunition Ships (T-AKE)

- USNS *Lewis and Clark* (T-AKE 1)
- USNS *Sacagawea* (T-AKE 2)
- USNS *Alan Shepard* (T-AKE 3)
- USNS *Richard E. Byrd* (T-AKE 4)
- USNS *Robert E. Peary* (T-AKE 5)
- USNS *Amelia Earhart* (T-AKE 6)
- USNS *Carl Brashear* (T-AKE 7)
- USNS *Wally Schirra* (T-AKE 8)
- USNS *Matthew Perry* (T-AKE 9)
- USNS *Charles Drew* (T-AKE 10)
- USNS *Washington Chambers* (T-AKE 11)
- USNS *William McLean* (T-AKE 12)
- USNS *Medgar Evers* (T-AKE 13)\*
- USNS *Cesar Chavez* (T-AKE 14)\*

### Fleet Replenishment Oilers (T-AO)

- USNS *Henry J. Kaiser* (T-AO 187)
- USNS *Joshua Humphreys* (T-AO 188)
- USNS *John Lenthall* (T-AO 189)



Photo by MC1 Nathanael Miller



- USNS 2ND LT John P. Bobo (T-AK 3008)
- USNS PFC Dewayne T. Williams (T-AK 3009)
- USNS 1ST LT Baldomero Lopez (T-AK 3010)
- USNS 1ST LT Jack Lummus (T-AK 3011)
- USNS SGT William R. Button (T-AK 3012)
- USNS 1ST LT Harry L. Martin (T-AK 3015)
- USNS LCPL Roy M. Wheat (T-AK 3016)
- USNS GYSGT Fred W. Stockham (T-AK 3017)
- USNS Seay (T-AKR 302)
- USNS Sisler (T-AKR 311)
- USNS Dahl (T-AKR 312)

### Offshore Petroleum Distribution System (T-AG)

- MV VADM K.R. Wheeler (T-AG 5001)

### Navigation Test Support Ships (T-AGS)

- USNS Waters (T-AGS 45)
- USNS Maury (T-AGS 66)

### Ocean Surveillance Ships (T-AGOS)

- USNS Victorious (T-AGOS 19)
- USNS Able (T-AGOS 20)
- USNS Effective (T-AGOS 21)
- USNS Loyal (T-AGOS 22)
- USNS Impeccable (T-AGOS 23)

### Oceanographic Survey Ships (T-AGS)

- USNS Pathfinder (T-AGS 60)
- USNS Sumner (T-AGS 61)
- USNS Bowditch (T-AGS 62)
- USNS Henson (T-AGS 63)
- USNS Bruce C. Heezen (T-AGS 64)
- USNS Mary Sears (T-AGS 65)

### Submarine and Special Warfare Support Ships

- MV C-Commando
- MV C-Champion
- MV Dolores Chouest
- MV Kellie Chouest
- MV HOS Arrowhead
- MV HOS Eagle View
- MV HOS Black Powder
- MV HOS Westwind
- MV HOS Dominator

### Submarine Tender (AS)

- USS Emory S. Land (AS 39)

USS Frank Cable (AS 40)

### Sea-Based, X-band Radar Program

- SBX-1 platform
- MV Dove support vessel

## Prepositioning

The MSC Prepositioning Program supports the U.S. Army, U.S. Navy, U.S. Air Force, U.S. Marine Corps and Defense Logistics Agency. Afloat prepositioning strategically places military equipment and supplies aboard ships located in key ocean areas to ensure rapid availability to U.S. combat troops during a conflict, a humanitarian operation or other contingency. In addition, two high-speed vessels support geographic combatant command and service requirements for intra-theater lift and theater security cooperation.

### Air Force Container Ships (T-AK)

- MV CAPT Steven L. Bennett (T-AK 4296)
- MV TSGT John A. Chapman (T-AK 323)

### Army Container Ships (T-AK)

- MV LTC John U.D. Page (T-AK 4543)
- MV SSGT Edward A. Carter Jr. (T-AK 4544)

### Maritime Prepositioning and Force Container Roll-on/Roll-off and Tanker (T-AK, T-AKR and T-AOT)

- USNS Lawrence H Gianella (T-AOT 1125)
- USNS SGT Matej Kocak (T-AK 3005)
- USNS PFC Eugene A. Obregon (T-AK 3006)
- USNS MAJ Stephen W. Pless (T-AK 3007)

### Aviation Logistics Support Ships (T-AVB)

- SS Wright (T-AVB 3)
- SS Curtiss (T-AVB 4)

### Large, Medium-speed Roll-on/Roll-off Ships (T-AKR)

- USNS Watson (T-AKR 310)
- USNS Red Cloud (T-AKR 313)
- USNS Charlton (T-AKR 314)
- USNS Watkins (T-AKR 315)
- USNS Pomeroy (T-AKR 316)
- USNS Soderman (T-AKR 317)

### High-Speed Vessel (HSV)

- HSV Westpac Express (HSV 4676)
- HSV Swift (HSV 2)

(Note: See Naval Fleet Auxiliary Force section about T-AKE transfers between NFAF and MPF)

## Sealift Force

MSC's Sealift Program provides high-quality, efficient and cost-effective ocean transportation for DoD and other federal agencies during peacetime and war.

### Large, Medium-speed Roll-on/Roll-off Ships (T-AKR)

- USNS Shughart (T-AKR 295)
- USNS Gordon (T-AKR 296)
- USNS Yano (T-AKR 297)
- USNS Gilliland (T-AKR 298)
- USNS Bob Hope (T-AKR 300)
- USNS Fisher (T-AKR 301)
- USNS Mendonca (T-AKR 303)

USNS *Pililaau* (T-AKR 304)  
USNS *Brittin* (T-AKR 305)  
USNS *Benavidez* (T-AKR 306)

### Tankers T-AOT

MT *Empire State* (T-AOT 5193)  
MT *Evergreen State* (T-AOT 5205)  
Maersk *Peary* (T-AOT 5246)

### Dry Cargo Ships

MV *Mohegan* (T-AK 5158)  
MV *Green Wave* (T-AK 5265)  
T/B *Megan Beyel*/MOBRO 1210

### Joint, High-speed vessel

USNS *Spearhead* (JHSV-1)  
USNS *Choctaw County* (JSHV-2)

(Source: Military Sealift Command) 



Photo by MC1 Nathanael Miller



Photo by MC1 Nathanael Miller

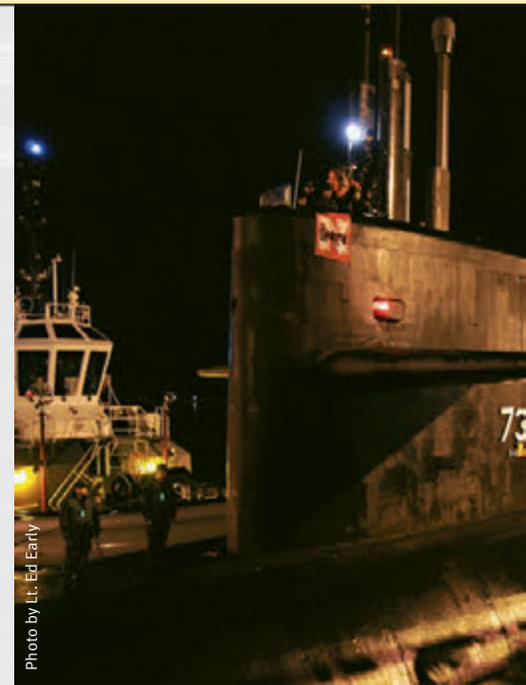


Photo by MCC John Osborne

Photo by Lt. Ed Early

## Attack Submarines

**A**ttack submarines are designed to seek and destroy enemy submarines and surface ships; project power ashore with *Tomahawk* cruise missiles and special operations forces (SOF); carry out intelligence, surveillance and reconnaissance (ISR) missions; conduct irregular warfare (IW) missions; and engage in mine warfare.

There are three classes of attack submarines (SSN). The *Los Angeles*-class is the backbone of the submarine force with 425 subs now in commission.

The *Seawolf*-class submarine is designed to be exceptionally quiet, fast and well-armed, with advanced sensors. It is a multi-mission vessel, capable of deploying to forward ocean areas to search out and destroy enemy submarines and surface ships and to fire missiles in support of other forces.

The *Virginia*-class is the Navy's latest next generation SSN and is built to excel in a wide variety of missions including anti-submarine and surface ship warfare; special operations forces; strike; ISR; irregular warfare; and mine warfare.

### *Los Angeles*-class

- USS *Los Angeles* (SSN 688)
- USS *Philadelphia* (SSN 690)

- USS *Memphis* (SSN 691)
- USS *Bremerton* (SSN 698)
- USS *Jacksonville* (SSN 699)
- USS *Dallas* (SSN 700)
- USS *La Jolla* (SSN 701)
- USS *City of Corpus Christi* (SSN 705)
- USS *Albuquerque* (SSN 706)
- USS *San Francisco* (SSN 711)
- USS *Houston* (SSN 713)
- USS *Norfolk* (SSN 714)
- USS *Buffalo* (SSN 715)
- USS *Olympia* (SSN 717)
- USS *Providence* (SSN 719)
- USS *Pittsburgh* (SSN 720)
- USS *Chicago* (SSN 721)
- USS *Key West* (SSN 722)
- USS *Oklahoma City* (SSN 723)
- USS *Louisville* (SSN 724)
- USS *Helena* (SSN 725)
- USS *Newport News* (SSN 750)
- USS *San Juan* (SSN 751)
- USS *Pasadena* (SSN 752)
- USS *Albany* (SSN 753)
- USS *Topeka* (SSN 754)
- USS *Miami* (SSN 755)
- USS *Scranton* (SSN 756)
- USS *Alexandria* (SSN 757)
- USS *Asheville* (SSN 758)
- USS *Jefferson City* (SSN 759)
- USS *Annapolis* (SSN 760)
- USS *Springfield* (SSN 761)
- USS *Columbus* (SSN 762)
- USS *Santa Fe* (SSN 763)
- USS *Boise* (SSN 764)

- USS *Montpelier* (SSN 765)
- USS *Charlotte* (SSN 766)
- USS *Hampton* (SSN 767)
- USS *Hartford* (SSN 768)
- USS *Toledo* (SSN 769)
- USS *Tucson* (SSN 770)
- USS *Columbia* (SSN 771)
- USS *Greeneville* (SSN 772)
- USS *Cheyenne* (SSN 773)

### *Seawolf*-class

- USS *Seawolf* (SSN 21)
- USS *Connecticut* (SSN 22)
- USS *Jimmy Carter* (SSN 23)

### *Virginia*-class

- USS *Virginia* (SSN 774)
- USS *Texas* (SSN 775)
- USS *Hawaii* (SSN 776)
- USS *North Carolina* (SSN 777)
- USS *New Hampshire* (SSN 778)
- USS *New Mexico* (SSN 779)
- USS *Missouri* (SSN 780)
- USS *California* (SSN 781)
- PCU *Mississippi* (SSN 782)\*\*
- PCU *Minnesota* (SSN 783)\*\*
- PCU *North Dakota* (SSN 784)\*\*
- PCU *John Warner* (SSN 785)\*\*
- Not named (SSN 786)\*\*
- Not named (SSN 787)\*\*
- Not named (SSN 788)\*\*
- Not named (SSN 789)\*\*
- Not named (SSN 790)\*\*
- Not named (SSN 791)\*\*



Photo by MCA Kevin S. O'Brien

## Ballistic Missile Submarines

Strategic deterrence has been the sole mission of the fleet ballistic missile submarine (SSBN) since its inception in 1960. The SSBN provides the nation's most survivable and enduring nuclear strike capability. The *Ohio*-class submarine replaced aging fleet ballistic missile submarines built in the 1960s and is far more capable. *Ohio*-class/*Trident* ballistic missile submarines provide the sea-based "leg" of the nuclear deterrence triad. *Ohio* class SSBNs have the capability to carry up to 24 *Trident* II (D5) submarine-launched ballistic missiles (SLBMs) with multiple independently-targeted warheads. The first four *Ohio*-class submarines have been converted to conventionally guided-missile submarines (SSGN) with an additional capability to transport and support Navy special operations forces.

### Ohio-class

- USS *Henry M. Jackson* (SSBN 730)
- USS *Alabama* (SSBN 731)
- USS *Alaska* (SSBN 732)
- USS *Nevada* (SSBN 733)
- USS *Tennessee* (SSBN 734)
- USS *Pennsylvania* (SSBN 735)
- USS *West Virginia* (SSBN 736)
- USS *Kentucky* (SSBN 737)
- USS *Maryland* (SSBN 738)
- USS *Nebraska* (SSBN 739)
- USS *Rhode Island* (SSBN 740)

- USS *Maine* (SSBN 741)
- USS *Wyoming* (SSBN 742)
- USS *Louisiana* (SSBN 743)

## Guided Missile Submarines

The 1994 Nuclear Posture Review determined that the United States needed only 14 SSBNs to meet the nation's strategic force needs. The decision was made to transform four *Ohio*-class submarines into conventional land attack and special operations forces (SOF) platforms. This allowed the Navy to leverage existing submarine technology while expanding capability to meet the current and future needs of U.S. combatant commanders.

The SSGN Program Office converted the first four *Ohio* class SSBNs into SSGNs in a little more than five years at a significantly lower cost than building a new platform.

- USS *Ohio* (SSGN 726)
- USS *Michigan* (SSGN 727)
- USS *Florida* (SSGN 728)
- USS *Georgia* (SSGN 729)

## Submarine Rescue Diving and Recompression System

The Submarine Rescue Diving and Recompression System (SRDRS) is a rapidly deployable rescue asset that can be delivered by air or ground, installed on pre-screened military or commercial vessels of opportu-

nity (VOO) via a ship interface template, and mated to a distressed submarine within 72 hours of first notification. SRDRS' rescue module - *Falcon* - can conduct rescue operations to a depth of 2,000 feet, can mate to a disabled submarine at a list and trim of up to 45 degrees, and can transfer up to 16 personnel at a time.

## Large Scale Vehicle 2 (LSV 2)

LSV 2 *Cutthroat*, the world's largest unmanned autonomous submarine, offers the capability to conduct a wide variety of studies, dramatically improving the acoustic and operational performance of future submarines. *Cutthroat*, a 205-ton, large-scale submarine test vehicle, is used to affordably explore and test emerging technologies and to conduct physics-based experiments. Specific emphasis will be on stealth, hydrodynamics, hydro-acoustics and propulsion designs to permit technology insertion into current and future submarines.

*Cutthroat* (LSV 2)

\* Delivery in 2012

\*\* Under construction, authorized for construction, or under contract

(Source: Naval Sea Systems Command) 

Photo by MC2 Correy W. Lee



**A**ircraft carriers are the centerpiece of America's naval forces. On any given day, aircraft carriers exercise the Navy core capabilities of power projection, forward presence, humanitarian assistance, deterrence, sea control and maritime security. In times of crisis, the first question leaders ask is: "Where are the carriers?"

USS *Enterprise* (CVN 65) and 10 ships of the *Nimitz*-class make up the fleet of active aircraft carriers and will be replaced by the *Gerald R. Ford* class. The namesake of the

class is scheduled to be delivered in 2015. These in-service carriers, and *Gerald R. Ford*-class (under construction) are each designed for a service life of approximately 50 years with one mid-life refueling.

### ***Enterprise*-class**

USS *Enterprise* (CVN 65)\*

### ***Nimitz*-class**

USS *Nimitz* (CVN 68)  
USS *Dwight D. Eisenhower* (CVN 69)  
USS *Carl Vinson* (CVN 70)  
USS *Theodore Roosevelt* (CVN 71)

USS *Abraham Lincoln* (CVN 72)  
USS *George Washington* (CVN 73)  
USS *John C. Stennis* (CVN 74)  
USS *Harry S. Truman* (CVN 75)  
USS *Ronald Reagan* (CVN 76)  
USS *George H.W. Bush* (CVN 77)

### ***Gerald R. Ford*-class**

*Gerald R. Ford* (CVN 78)\*\*

\* Scheduled for decommission in 2012.  
\*\* Under construction.

(Source: Naval Air Forces) 



## EA-6B Prowler

The EA-6B *Prowler*, a twin-engine, mid-wing aircraft designed for carrier and advanced base operations, provides an umbrella of protection for strike aircraft, ground troops and ships by jamming communications. The primary mission of the EA-6B *Prowler* is suppression of enemy air defenses in support of strike aircraft and ground troops by interrupting enemy electronic activity and obtaining tactical electronic intelligence within the combat area.

### Squadrons

- VAQ-131 *Lancers*
- VAQ-133 *Wizards*
- VAQ-134 *Garudas*
- VAQ-135 *Black Ravens*
- VAQ-136 *Gauntlets*
- VAQ-137 *Rooks*
- VAQ-139 *Cougars*
- VAQ-140 *Patriots*
- VAQ-142 *Gray Wolves*
- VAQ-209 (USNR) *Star Warriors*

## Carrier Based

### EA-18G Growler

A variant of the U.S. Navy F/A-18F two-crew strike fighter, the EA-18G combines the combat-proven F/A-18F strike fighter with the proven Improved Capability III (ICAP III) Airborne Electronic Attack suite.

### Squadrons

- VAQ-129 *Vikings*
- VAQ-132 *Scorpions*
- VAQ-138 *Yellowjackets*
- VAQ-141 *Shadowhawks*
- VAQ-130 *Zappers*

### F/A-18E/F Super Hornet

The F/A-18E/F provides the carrier strike group with a strike fighter that has significant growth potential and increased range, endurance and ordnance-carrying capabilities.

### Squadrons

- VFA-2 *Bounty Hunters*
- VFA-11 *Red Rippers*
- VFA-14 *Tophatters*
- VFA-22 *Fighting Redcocks*
- VFA-27 *Royal Maces*
- VFA-31 *Tomcatters*
- VFA-32 *Swordsmen*
- VFA-41 *Black Aces*
- VFA-81 *Sunliners*
- VFA-102 *Diamondbacks*
- VFA-103 *Jolly Rogers*
- VFA-105 *Gunslingers*
- VFA-115 *Eagles*
- VFA-122 *Flying Eagles*
- VFA-131 *Wildcats*

- VFA-136 *Knighthawks*
- VFA-137 *Kestrels*
- VFA-143 *Pukin' Dogs*
- VFA-147 *Argonauts*
- VFA-154 *Black Knights*
- VFA-211 *Fighting Checkmates*
- VFA-213 *Black Lions*

### F/A-18 Hornet

The F/A-18 is an all-weather, attack aircraft that can also be used as a fighter. In its fighter mode, the F/A-18 is used primarily as an escort and for fleet air defense. In its attack mode, it is used for force projection, interdiction and close- and deep-air support.

### Squadrons

- Blue Angels*
- VFA-15 *Valions*
- VFA-25 *Fist of the Fleet*
- VFA-34 *Blue Blasters*
- VFA-37 *Bulls*
- VFA-83 *Rampagers*
- VFA-86 *Sidewinders*
- VFA-87 *Golden Warriors*
- VFA-94 *Mighty Shrikes*
- VFA-97 *Warhawks*
- VFA-106 *Gladiators*
- VFA-113 *Stingers*
- VFA-125 *Rough Raiders*
- VFA-146 *Blue Diamonds*
- VFA-151 *Vigilantes*
- VFA-192 *Golden Dragons*
- VFA-195 *Dambusters*
- VFA-204 (USNR) *River Rattlers*
- VFC-12 (USNR) *Fighting Omars*

### E-2C Hawkeye

The E-2C *Hawkeye* is the Navy's all-weather, carrier-based tactical battle management airborne early warning, command and control aircraft. The *Hawkeye* provides all-weather airborne early warning, airborne battle management and command and control functions for the carrier strike group and joint force commander.

Additional missions include surface surveillance coordination, air interdiction, offensive and defensive counter air control, close air support coordination, time critical strike coordination, search and rescue airborne coordination and communications relay.

### Squadrons

- VAW-77 (USNR) *Nightwolves*
- VAW-112 *Golden Hawks*
- VAW-113 *Black Eagles*
- VAW-115 *Liberty Bells*
- VAW-116 *Sun Kings*
- VAW-117 *Wallbangers*
- VAW-120 *Grey Hawks*
- VAW-121 *Bluetails*
- VAW-123 *Screwtops*
- VAW-124 *Bear Aces*
- VAW-125 *Tigertails*
- VAW-126 *Seahawks*



### C-2A Greyhound

The C-2A provides critical logistics support to carrier strike groups. Its primary mission is the transport of high-priority cargo, mail and passengers between carriers and shore bases and can deliver a combined payload of 10,000 pounds over a distance of more than 1,000 nautical miles. The interior arrangement of the cabin can readily accommodate cargo, passengers and litter patients.

Priority cargo such as jet engines can be transported from shore to ship in a matter of hours. A cargo cage system or transport stand provides restraint for loads during launches and landings.

#### Squadrons

- VRC-30 Providers
- VRC-40 Rawhides

### Shore Based

#### E-6B Mercury

The E-6B Mercury aircraft provides a survivable communications link between national decision makers and the country's arsenal of strategic nuclear weapons. The E-6B enables the president of the United States and the

secretary of defense to directly contact submarines, bombers and missile silos protecting our national security through deterrence.

#### Squadrons

- VQ-3 Ironman
- VQ-4 Shadows
- VQ-7 Roughnecks

#### P-3C Orion/EP-3E Aries II

Originally designed as a land-based, long-range, anti-submarine warfare patrol aircraft, the P-3C's mission has evolved in the late 1990s and early 21st century to include surveillance of the battle space, either at sea or over land. Its long-range and long-loiter time have proved invaluable assets during Operation Iraqi Freedom as it can view the battlespace and instantaneously provide that information to ground troops, especially U.S. Marines.

The P-3C has advanced submarine detection sensors such as directional frequency and ranging sonobuoys and magnetic anomaly detection equipment. The P-3C can carry a mixed payload of weapons internally and on wing pylons. The EP-3E Aries II (Airborne Reconnaissance Integrated Electronic System II) is the Navy's only land-based signals intelligence (SIGINT) reconnaissance aircraft. The

11 aircraft in the Navy's inventory are based on the Orion P-3 airframe and provide fleet and theater commanders worldwide with near real-time tactical SIGINT. With sensitive receivers and high-gain dish antennas, the EP-3E exploits a wide range of electronic emissions from deep within targeted territory.

#### Squadrons

- VP-1 Screaming Eagles
- VP-4 Skinny Dragons
- VP-5 Mad Foxes
- VP-8 Tigers
- VP-9 Golden Eagles
- VP-10 Lancers
- VP-16 War Eagles
- VP-26 Tridents
- VP-30 Pro's Nest
- VP-40 Fighting Marlins
- VP-45 Pelicans
- VP-46 Grey Knights
- VP-47 Golden Swordsmen
- VP-62 (USNR) Broad Arrows
- VP-69 (USNR) Totems
- VQ-1 World Watchers
- VQ-2 Sandeman
- VPU-1 Old Buzzards
- VPU-2 Wizards

## C-130T Hercules

The C-130T is the workhorse of the fleet and its primary mission is to satisfy Navy-specific fleet essential airlift requirements worldwide, to include flexible response to the fleet and short notice operational requirements for both training and deployed units. The C-130T operates from shore installations to provide intra-theater logistics support for all aspects of naval power. It is a four-engine, turbo-prop aircraft capable of landing and taking off from short, rough dirt runways. It can transport up to 92 personnel, or 42,000 pounds of cargo, and can be configured to perform air medical evacuation missions carrying up to 70 litters.

### Squadrons

VR-53 (USNR) *Capital Express*  
VR-54 (USNR) *Revelers*  
VR-55 (USNR) *Minutemen*  
VR-62 (USNR) *Nomads*  
VR-64 (USNR) *Condors*

## C-9B/DC-9 Skytrain II

The C-9B fleet is located throughout CONUS, Europe and Asia. The C-9B aircraft provides cargo and passenger transportation, as well as forward deployment logistics support.

### Squadrons

VR-46 (USNR) *Eagles*  
VR-52 (USNR) *Task Masters*  
VR-56 (USNR) *Globe Masters*  
VR-61 (USNR) *Islanders*

## C-40A Clipper

The C-40A *Clipper* provides critical logistics support to the Navy. Its flight deck features a flight management computer system with an integrated GPS. The Navy Reserve, which operates and maintains the aircraft, is the first customer for the newest member of the Boeing next-generation 737 family.

The *Clipper* was ordered by the Navy to replace its fleet of aging C-9B *Skytrains*. The C-40A is the first new logistics aircraft in 19 years to join the Navy Reserve. Currently, the Navy Reserve provides 100 percent of the Navy's worldwide in-theater medium and heavy airlift.

### Squadrons

VR-57 (USNR) *Conquistadors*  
VR-58 (USNR) *Sunseekers*  
VR-59 (USNR) *Lonestar Express*

## C-12 Huron

The C-12 *Huron* is the military variant of the commercial *King Air* series aircraft. It is an all-metal, low-wing, T-Tail monoplane with two turboprop engines. The flight deck and cabin are pressurized for high altitude flight. This aircraft incorporates a cargo door with an integral air-stair door to permit easy entry and egress. With an effective payload capacity of up to 4,215 pounds, the cabin can readily be configured to accommodate passengers, cargo or both.

The mission of the C-12 *Huron* is to provide rapid, high priority movement of personnel and cargo; range clearance, courier flights, medical evacuation and humanitarian rescue; multi-engine pilot training; and testing assets.

C-12 *Huron*'s are located at Naval Air Station (NAS) North Island, Calif.; NAS Norfolk; NAS Patuxent River, Md.; NAS Joint Reserve Base (JRB) Willow Grove, Pa.; NAS JRB New Orleans; NAS Fort Worth; NAS Jacksonville, Fla.; NAS Corpus Christi, Texas; Naval Air Facility (NAF) Andrews Air Force Base, Washington, D.C.; Marine Corps Airstation (MCAS) Yuma, Ariz.; MCAS Miramar, Calif.; MCAS Beaufort, S.C.; MCAS New River, N.C.; MCAS Iwakuni, Japan; MCAS Futenma, Japan; Naval Station Guantanamo Bay, Cuba; Naval Support Activity Bahrain; NAF Atsugi, Japan; NAF Kadena, Japan; and NAF Misawa, Japan.

## C-20A/D

The C-20A and D are commercial derivative Gulfstream III aircraft that provide worldwide airlift for senior leadership and dignitaries.

### Squadrons

Fleet Logistics Support Wing Det.,  
Sigonella, Italy (C-20A)  
VR-1 (USNR) *Starlifters*, Andrews AFB,  
Washington, D.C. (C-20D)

## C-20G

The C-20G is a commercial derivative Gulfstream IV aircraft that provides long-range, medium airlift logistics support for fleet battle groups. The C-20G is a Gulfstream IV variant with a cargo door providing long-range, medium-lift capability.

## Squadrons

VR-48 (USNR) *Skyliners*  
VR-51 (USNR) *Windjammers*  
VMR Det. MCAF Kaneohe Bay,  
Hawaii (USMC)

## C-26

The C-26 is the military variant of the commercial Model SA-227-DC (Metro 23) aircraft series manufactured by Fairchild Aircraft Corporation. It's an all-metal, low-wing, cabin-class aircraft with two Allied Signal TPE331-12 turbo-prop engines. With a maximum payload capacity of 5,020 pounds, the cabin can be configured to accommodate up to 19 passengers, cargo or a combination of both.

The four European-based aircraft provide rapid response cargo and passenger transportation as well as forward deployment logistics support, and the two RC-26D aircraft and one EC-26D aircraft in Hawaii support range operations at Pacific Missile Range Facility (PMRF) Barking Sands, Kauai.

NAF *Sigonella*  
NAF *Naples*  
PMRF *Kauai*

## C-37

The C-37A/B is a Gulfstream 5/550 respectively, providing executive transport to the Secretary of the Navy and chief of naval operations and other executive level personnel.

### Squadrons

VR-1 ETD (USNR) *Pacific Starlifters*,  
Hickham AFB, Hawaii (C-37A)  
VR-1 (USNR) *Starlifters*, Andrews AFB,  
Washington, D.C. (C-37B)

## F-5N/F Tiger

The F-5N is a single seat, twin-engine, tactical fighter providing air-to-air combat training for carrier air wings. The F-5F aircraft is a dual-seat version, twin-engine, tactical fighter trainer commonly used for training adversary pilots. The F-5F can also be used in the adversary mission. Both aircraft serve in an adversary-training role with simulation capability of current threat aircraft in air-to-air combat mode.

### Squadrons

VFC-13 *Saints*  
VFC-111 *Sundowners*

## Test and Evaluation (TE) Squadrons

TE squadrons thoroughly test new and modified fixed-wing, rotary and unmanned aircraft headed to the fleet. Avionics, weapons, flying qualities, software and ergonomics are just a few out of the long list of aircraft aspects tested. Successful completion of TE is normally required for full-rate acquisition approval.

### Squadrons

VX-1 *Pioneers*  
VX-20 *Force*  
VX-23 *Salty Dogs (Growlers)*  
VX-30 *Bloodhounds*  
VX-31 *Dust Devils*  
HX-21 *Blackjack*

## Helicopters

### SH-60F/HH-60H *Sea Hawk*

The *Sea Hawk* is a twin-engine helicopter used for anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift, and special operations. The Navy's SH-60B *Sea Hawk* is an airborne platform based aboard cruisers, destroyers, and frigates and deploys sonobuoys (sonic detectors) and torpedoes in an antisubmarine role. They also extend the range of the ship's radar capabilities. The Navy's SH-60F is carrier-based.

### Squadrons

HS-3 *Tridents*  
HS-4 *Black Knights*  
HS-5 *Nightdippers*  
HS-6 *Indians*  
HS-7 *Dusty Dogs*  
HS-10 *Warhawks*  
HS-11 *Dragonslayers*  
HS-14 *Chargers*  
HS-15 *Red Lions*  
HSC-84 (USNR) *Red Wolves*

### SH-60B/MH-60R *Sea Hawk*

The MH-60R continues the legacy of the SH-60B mission by conducting ASW and ASUW from the decks of cruisers, destroyers and frigates and also deploys as a carrier-based squadron. The MH-60R adds a dipping sonar, multimode Inverse Synthetic Aperture Radar, enhanced Electronic Support Measures, self-defense suite digital torpedos and air-to-ground weapons.

## Squadrons

HSL-37 *Easy Riders*  
HSL-40 *Airwolves*  
HSL-42 *Proud Warriors*  
HSL-43 *Battle Cats*  
HSL-44 *Swamp Foxes*  
HSL-45 *Wolfpack*  
HSL-46 *Grandmasters*  
HSL-48 *Vipers*  
HSL-49 *Scorpions*  
HSL-51 *Warlords*  
HSL-60 (USNR) *Jaguars*  
HSM-41 *Seahawks (MH-60R)*  
HSM-71 *Raptors (MH-60R)*  
HSM-77 *Saberhawks (MH-60R)*  
HSM-78 *Bluehawks (MH-60R)*

### MH-60S *Sea Hawk*

The MH-60S is a twin-engine helicopter used for logistics support, vertical replenishment, search and rescue, naval special warfare support and future missions to include organic airborne mine countermeasures and combat search and rescue.

### Squadrons

HSC-2 *Fleet Angels*  
HSC-3 *Merlins*  
HSC-8 *Eightballers*  
HSC-12 *Golden Falcons*  
HSC-21 *Blackjacks*  
HSC-22 *Sea Knights*  
HSC-23 *Wild Cards*  
HSC-25 *Island Knights*  
HSC-26 *Chargers*  
HSC-28 *Dragon Whales*  
HSC-85 *High Rollers*

### VH-60N *Night Hawk*

The VH-60N is a twin engine, all-weather helicopter flown by Marine Helicopter Squadron 1 and supports the executive transport mission for the president of the United States. The VH-60N is an executive transport helicopter derived from both the U.S. Army's UH-60 *Black Hawk* and the U.S. Navy's SH-60 *Sea Hawk* aircraft. The H-60 family of helicopters is widely used throughout DoD for anti-submarine warfare, search and rescue, drug interdiction, anti-ship warfare, cargo lift and special operations. The VH-60N was first delivered to HMX-1 in 1989 as a replacement for the VH-1N.

### Squadrons

HMX-1 *The Nighthawks*

## MH-53E *Sea Dragon*

The MH-53E, a mine-countermeasures derivative of the CH-53E *Super Stallion*, is heavier and has a greater fuel capacity than the *Super Stallion*. Capable of transporting up to 55 troops, the MH-53E can carry a 16-ton payload 50 nautical miles, or a 10-ton payload 500 nautical miles. In its primary mission of airborne mine countermeasures, the MH-53E is capable of towing a variety of mine countermeasures systems.

### Squadrons

HM-14 (USNR) *Vanguard*  
HM-15 (USNR) *Blackhawks*

## Unmanned Aircraft Vehicle (UAV)

### RQ-7B *Shadow* Unmanned Aerial Vehicle (UAV)

The *Shadow* is a joint UAV employed by the Marine Corps' VMU squadrons (VMU-1, VMU-2 and VMU-3) to provide Marine Air Ground Task Force commanders with both planned and immediate air reconnaissance. Each VMU operates three systems and each system possesses four air vehicles. The RQ-7B carries electro-optical and infrared sensors to provide day and night imagery as well as a laser spotter to support targeting. It serves in the air reconnaissance function to produce intelligence, target acquisition and battle damage assessment. It also supports the command and control function by serving as a platform for airborne communications relay.

### MQ-8B *Navy Fire Scout*

*Fire Scout* has the ability to autonomously take-off from and land on any ship control station equipped aviation-capable warship and also at unprepared landing zones close to the forward edge of the battle area (FEBA). It can carry out surveillance, find tactical targets, track and designate targets and provide accurate targeting data to strike platforms such as strike aircraft, helicopters and ships. The UAV is also able to carry out battle damage assessment.

## Trainers

### T-6A *Texan II*

The T-6A *Texan II* is a tandem-seat, turbo-prop trainer whose mission is to train Navy and Marine Corps pilots and naval flight offi-



Photo by MC3 Betsy Knapper

cers. The aircraft is one component of the Joint Primary Aircraft Training System along with simulators, computer-aided academics and a Training Integration Management System.

The joint program, that will replace Navy T-34C aircraft, uses commercial off-the-shelf subsystems to the maximum extent possible. The Navy's total T-6A requirement is 315 aircraft. The Navy aircraft and ground-based training systems will be completely supported and maintained by commercial vendors with intermediate maintenance provided for selected systems at the operating site.

**Squadrons**

- VT-4 Warbucks
- VT-10 Wildcats

**T-34C Turbomentor**

The T-34C is used to provide primary flight training for student pilots. As a second-

ary mission, approximately 10 percent of the aircraft provide pilot proficiency and other aircraft support services to Commander, Naval Air Force, U.S. Atlantic Fleet; Commander, Naval Air Force, U.S. Pacific Fleet; and Naval Air Systems Command's "satellite sites" operated throughout CONUS. The T-34C was procured as a commercial derivative aircraft certified under an FAA-Type Certificate. Throughout its life, the aircraft has been operated and commercially supported by the Navy using FAA processes, procedures and certifications.

**Squadrons**

- VT-2 Doer Birds
- VT-3 Red Knights
- VT-6 Shooters
- VT-27 Boomers
- VT-28 Rangers

**T-45A/C Goshawk**

The T-45A, the Navy version of the British Aerospace Hawk aircraft, is used for intermediate and advanced portions of the Navy/Marine Corps pilot training program for jet carrier aviation and tactical strike missions. The T-45 includes an integrated training system that includes the aircraft, operations and instrument fighter simulators, academics and training integration system. There are two versions of T-45 aircraft currently in operational use at this time, the T-45A and T-45C derivatives. The T-45A, which became operational in 1991, contains an analog design cockpit while the new T-45C (delivery began in 1997) is built around a new digital "glass cockpit" design.

**Squadrons**

- VT-7 Eagles
- VT-9 Tigers



VT-21 *Redhawks*  
VT-22 *Golden Eagles*

**T-44A *Pegasus* and the TC-12 *Huron***

The T-44A and the TC-12 are used to train Navy and Air Force pilots to fly multi-engine, turbo-prop aircraft such as the P-3 and the C-130.

**Squadrons**

VT-31 *Wise Owls* (T-44A)  
VT-35 *Stingrays* (TC-12)

**T-39N/G *Sabreliner***

The T-39N *Sabreliner* is a multipurpose, low-wing, twin-jet aircraft. The 14 T-39Ns – derivatives of the commercial *Sabre* model 265-40 – are used for training undergraduate military flight officer students in radar navigation and airborne radar-intercept procedures. The eight T-39Gs – derivatives of the

commercial *Sabre* model 265-60 – are used for student non-radar training.

**Squadrons**

VT-4 *Mighty Warbucks*  
VT-86 *Sabre Hawks*

**TH-57 *Sea Ranger***

The TH-57 *Sea Ranger* is a derivative of the commercial *Bell Jet Ranger* 206 and its primary mission is to provide advanced rotary-wing training to Navy and Marine Corps pilots. The TH-57 has two variants – TH-57B and TH-57C models. The TH-57B is used for primary visual flight rules training and the TH-57C is used for advanced instrument flight rules training.

**Squadrons**

HT-8 *Eightballers*  
HT-18 *Vigilant Eagles*

**Special Squadrons**

VC-6 *Firebees*  
VC-8 *Redtails*

VX-1 *Pioneers*  
VX-9 *Vampires*  
TACRON-11 *Dirigimi*  
TACRON-12 *Talons*  
TACRON-21 *Blackjacks*  
TACRON-22 *Skylords*

**F-5N/F *Tiger***

The F-5N is a single seat, twin-engine, tactical fighter providing air-to-air combat training for carrier air wings. The F-5F aircraft is a dual-seat version, twin-engine, tactical fighter trainer commonly used for training adversary pilots. The F-5F can also be used in the adversary mission. Both aircraft serve in an adversary-training role with simulation capability of current threat aircraft in air-to-air combat mode.

**Squadrons**

VMFT-401 *Snipers*

(Source: Naval Air Forces) 

## Strategic Strike

### *Trident II (D-5)*

Larger and with longer range than *Trident I*, the *Trident II* was first tested aboard a submarine in March 1989 and deployed in 1990.

## General-Purpose Bombs

The MK-80 series general-purpose bomb family was created in the late 1940s and has been the standard air-launched bomb for the services ever since. The general-purpose bomb family is designed to provide blast and fragmentation effects and is used extensively in a number of configurations including laser-guided bombs, joint direct attack munitions (JDAM) and air-delivered mining applications. The unguided versions of the general-purpose bomb can also be delivered in freefall or delayed modes depending upon mission requirements. There were three basic versions of these bombs in inventory for many years:

- MK 82/BLU 111 - 2,500 pound
- MK 83/BLU 110 - 1,000 pound
- MK 84/BLU 117 - 2,000 pound

The remaining versions of the MK 80 series bombs are being converted from the MK designation to the bomb-live unit (BLU) designation during new production.

The Navy's MK 80 series bombs remaining in inventory are filled with H-6 high explosive the newer BLU series bombs incorporate a PBXN-109 explosive that provides less sensitive characteristics and is considered safer to handle and stow.

The Navy's newest member to the BLU series is the BLU-126 low-collateral warhead. It is identical to the BLU-111 with the exception of the amount of PBXN-109 explosive filler. The aft end of the BLU-126 bomb is packed with approximately 27 pounds of explosive filler with the remainder of the bomb being filled with inert material.

### Laser-Guided Bomb Kits (LGB)

LGBs were developed to enhance the terminal accuracy of air-launched, general-purpose bombs and entered the fleet's inventory in 1968. An LGB kit consists of a Computer Control Group (CCG) and Air Foil Group (AFG) normally attached to a general-purpose bomb to form an LGB.

The dual mode laser guided kit enhances existing LGB kits by adding global positioning system/inertial navigation system (GPS/INS) capabilities. Like the LGB it consists of a CCG and an AFG.

### Joint Direct Attack Munition (JDAM)

JDAM kits were jointly developed with the U.S. Air Force to provide increased accuracy for air-launched bombs. The JDAM kit consists of a tail kit and mid-body strakes attached to a general purpose or penetrator bomb body - 500, 1,000 and 2,000 pounds.

Guidance and control is provided by a GPS/INS.

### Laser Joint Direct Attack Munition (LJDAM)

LJDAM is a precision guided bomb, consisting of a modular laser sensor integrated with inventory JDAM kits to provide moving target kill capability. The laser sensor kit is field-installed on the 500-pound version of JDAM.

### Joint Stand-off Weapon (JSOW)

The JSOW is an air-launched "drop-and-forget" weapon that is capable of approximately 60 nautical mile stand-off ranges. JSOW variants provide the fleet with a strike interdiction capability against soft and hardened targets such as fixed and relocatable air defense elements, parked aircraft, command and control facilities, light combat vehicles, industrial elements, bunkers, personnel and, beginning in FY10, enemy surface ships.

Currently, two variants of JSOW are in the fleet: AGM-154A, which uses GPS/INS guidance and general purpose submunitions, and AGM-154C, which adds a terminal imaging infrared seeker and a two-stage *Breach* warhead.

### HARM (High-Speed Anti-Radar Missile)

HARM is the standard anti-radar missile in the U.S. inventory. It's used as both a strike-protection and anti-ship weapon. First deployed aboard USS *Kitty Hawk* (CV 63) in January 1984, it was first used in combat in April 1986 during raids on Libya.

### Harpoon/Stand-Off Land Attack Missile - Expanded Response (SLAM-ER)

The *Harpoon/SLAM-ER* missiles are derivatives from the original *Harpoon*, that was conceived in 1965.

### Harpoon

The *Harpoon* Block 1C is an air or surface-launched, anti-ship, all-weather cruise missile which employs an autonomous active radar seeker to attack a wide variety of surface ship targets from standoff ranges. The *Harpoon*, which entered service in 1977, is currently carried by F/A-18 and P-3C aircraft as well as a portion of the DDG 51 and CG 47 surface ship classes for the U.S. Navy.

Numerous air, surface and submarine platforms currently deploy *Harpoon* for 27 foreign military sales (FMS) international customers. *Harpoon* Block III is a retrofit kit currently under development to add a Network Enabled Weapon (NEW) datalink and GPS guidance to provide target selectivity to the combat proven *Harpoon* missile.

### SLAM-ER

*SLAM-ER* is an upgrade to the *SLAM* missile which adds *Tomahawk* derivative planar wings to increase flight range to more than 150 nautical miles and a titanium warhead for increased hardened target penetration. *SLAM-ER* also includes software improvements which allow the pilot to precisely select a target impact point from a cockpit display of the infrared image of the target. Improved mission planning is provided to simplify and shorten operator mission planning timelines.

*SLAM-ER* is used to attack critical nodes of high value fixed and relocatable land targets as well as surface ship targets underway or pierside. *SLAM-ER* is currently deployed from F/A-18 and P-3C aircraft and is planned for the P-8A aircraft. *SLAM-ER* is currently in production for FMS international customers.

### Maverick

The *Maverick* is a short-range, air-to-surface, tactical missile. The version used by the Navy carries a warhead designed to penetrate large, hard targets. First deployed in August 1972.



### Tomahawk Cruise Missile

An all-weather, ship- or submarine-launched, cruise missile, *Tomahawks* have proven to be highly survivable weapons due to their low radar detectability and terrain/wave-skimming flight. It was first deployed in 1986.

The *Tomahawk* Land-Attack Missile (TLAM) is an all-weather subsonic cruise

missile that can be fired from surface or submarine launch platforms. The *Tomahawk* carries a nuclear or conventional payload. The conventional, land-attack, unitary variant carries a 1,000-pound-class warhead (TLAM-C) while the sub-munitions dispenser variant carries 166 combined-effects bomblets (TLAM-D). The Block III version incorporates engine improvements, an insensitive extended range warhead, time-of-arrival control and navigation capability using an improved Digital Scene Matching Area Correlator and GPS – which can significantly reduce mission-planning time and increase navigation and terminal accuracy.

The *Tomahawk* was used operationally for the first time during Operation *Desert Storm*. *Tomahawks* were fired against targets in Afghanistan in October 2001 during Operation *Enduring Freedom*. During Operation *Iraqi Freedom* in March 2003, 802 *Tomahawks* were fired against Iraq.

*Tomahawk* Block IV (TLAM-E) or “*Tactical Tomahawk*,” has capability enhancements that include (a) increased flexibility using two-way satellite communications to reprogram the missile in-flight to a new aimpoint or preplanned mission, send a new mission to the missile en route to a new target and missile health and status messages during the flight; (b) increased responsiveness with faster launch timelines, mission-planning capability aboard the launch platform, loiter capability in the area of emerging targets, the ability to provide battle-damage indication in the target area and the capability to provide a single-frame image of the target or other area of interest along the missile flight path; and (c) improved affordability: Full-rate production of the *Tactical Tomahawk* began in July 2004.

### Anti-Air Warfare (AAW) Aircraft Guns M-61-A1

This 20mm Gatling gun, which also forms the basis for the *Phalanx* Close-In Weapon System is mounted aboard the F/A-18 *Hornet*.

### Surface-To-Air Missiles

#### RIM-116 Rolling Airframe Missile (RAM)

Developed jointly with the Federal Republic of Germany, RAM provides ships with a low-cost, self-defense system against

anti-ship missiles and asymmetric air and surface threats.

### Standard Missile

Standard Missile 2 (SM-2) is the Navy’s primary surface-to-air defense weapon. It is an integral part of the *Aegis* Weapons System aboard *Ticonderoga* and *Arleigh Burke*-class destroyers SM-2 MR (Block III, IIIA, IIIB).

### Air-To-Air Missiles

#### Advanced, Medium-Range, Air-to-Air Missile (AMRAAM)

An all-weather, all-environment, radar-guided missile developed as a follow-on to the *Sparrow* missile series. AMRAAM is smaller, faster, lighter and has improved capabilities against very low-altitude and high-altitude targets in an electronic countermeasure environment. Its active radar, in conjunction with an inertial reference unit and microcomputer system, makes the missile less dependent on the aircraft fire control system enabling the pilot to aim and fire several missiles at multiple targets.

The AMRAAM is a result of a joint U.S. Navy and U.S. Air Force development effort and is in service with numerous NATO and Allied countries. The AMRAAM was deployed in September 1991 and is carried on the F/A-18 *Hornet*.

#### AIM-54 *Phoenix* Missile

The *Phoenix* missile is the Navy’s only long-range, air-to-air missile. The missile is designed for use in all-weather and heavy jamming environments. The improved *Phoenix*, the AIM-54C, can better counter projected threats from tactical aircraft and cruise missiles.

#### *Sparrow/Sea Sparrow*

A highly maneuverable, all-weather, beyond-visual-range, semi-active radar homing air-to-air missile used by the United States, NATO and other allied forces. Current air-to-air versions are carried on the F/A-18 aircraft.

In a shipboard version, the *Sea Sparrow*, provides U.S. Navy and NATO ships with an effective, anti-air weapon. First deployed in 1958, numerous models and upgrades have occurred to the *Sparrow* missile family.

## **Evolved Sea Sparrow Missiles (ESSM)**

The first ESSM was delivered to the fleet primary air defense for capital ships of 10 nations participating in the program.

### **Sidewinder**

The *Sidewinder* is a short-range, infrared, visual range air-to-air missile used by the United States, NATO and other allied nations. The missile has been through a number of modernizations and the current fleet weapon is the AIM-9M. The missile is an all-aspect, heat-seeking missile with improved capabilities against countermeasures.

A major modification to the AIM-9M *Sidewinder* is the AIM-9X. The AIM-9X is a joint U.S. Navy and U.S. Air Force program that upgrades the missile with a staring focal plan array in the seeker, and extremely agile airframe and state-of-the-art signal processors resulting in enhanced target acquisition, missile kinematics and improved infrared counter-countermeasure capabilities.

The missile's high, off-bore sight capability can be coupled to a helmet-mounted cueing system that will revolutionize the way that air-to-air missiles are employed. The *Sidewinder* is currently deployed on the F/A-18, AV-8 and AH-1 aircraft.

## **Shipboard Guns**

### **MK 45 – 5-inch 54/62 caliber gun**

This fully automatic naval gun provides surface combatants accurate naval gunfire against fast, highly maneuverable, surface targets, air threats and shore batteries during amphibious operations.

### **MK 38 – 25 mm machine gun system**

This single-barrel, air-cooled, heavy machine gun is effective up to 2,000 yards (Mod 2). The stabilized Mod 2 was developed in 2003 to improve ship self-defense and meet the needs of ships throughout the fleet, especially those operating in the Arabian Gulf.

### **MK 75 – 76mm/62 caliber, 3-inch gun**

Best suited for use aboard smaller combat vessels, the MK 75 features rapid fire capability with low manning requirements. The

gun was approved for fleet use in 1975 and was first deployed aboard *USS Oliver Hazard Perry* (FFG 7) in 1978.

### **Phalanx Close-In Weapons System (CIWS)**

The *Phalanx* CIWS combines a 20mm Gatling gun with search and tracking radar to provide surface ships with terminal defense against anti-ship missiles. The system underwent operational tests and evaluation aboard *USS Bigelow* (DD 942) in 1977 and went into production in 1978 with the first systems installed aboard *USS Coral Sea* (CV 43) in 1980.

*Phalanx* automatically detects, tracks, and engages air warfare threats while the Block 1B's man-in-the-loop system counters emerging littoral warfare threats.

## **Anti-Submarine Warfare (ASW) Torpedoes**

### **MK 46**

The MK 46 Mod 5A(S) torpedo achieved its initial operational capability and was introduced into the fleet in 1979. It can be launched from fixed and rotary wing aircraft and surface combatants VLA and torpedo tubes. Full-up MK 46 torpedoes are no longer being produced. In 1987, a major upgrade program enhanced the performance of the MK 46 Mod 5A(S) in shallow water.

A service life extension program was initiated in 1992 to extend the life of the MK 46 Mod 5A(S), convert it to the MK 46 Mod 5A(SW), and to provide additional shallow water and bottom avoidance modes. The MK 46 Mod 5A(SW) was introduced to the fleet in 1996.

### **MK 48**

The MK 48 heavyweight torpedo is used solely by submarines and is employed as the primary ASW and anti-surface ship weapon aboard attack, ballistic missile and guided missile submarines. Developed by the Applied Research Laboratory, Pennsylvania State University and Westinghouse Electric Corporation, Baltimore, the MK 48 and its subsequent variants have been in service with the Navy since 1972.

Its latest version, MK 48 Mod 7 Common Broad Advanced Sonar System torpedo is

optimized for both deep and littoral waters and has advanced counter-countermeasure capabilities.

### **MK 50**

The MK 50 is a highly capable undersea weapon for U.S. Navy aircraft and surface ships. It is an advanced lightweight digital torpedo designed for use against faster, deeper-diving and more sophisticated submarines.

The stored chemical energy propulsion system develops full power at all depths and is capable of multi-speed operations required by the tactical situation. Although full-up torpedoes have not been produced since 1993, the Block I software upgrade program has enhanced the MK 50's shallow water and countermeasure capability.

### **MK 54**

The MK 54 *MAKO* lightweight torpedo integrates existing torpedo hardware and software from the MK 46, MK 50 and MK 48 with state-of-the-art commercial-off-the-shelf digital signal processing technology. It incorporates an advanced guidance and control section and tactical software improvements to significantly increase shallow water counter-countermeasure capability at reduced lifecycle costs.

## **Mines**

### **MK 67 Submarine Launched Mobile Mine (SLMM)**

Based on the MK 37 torpedo, the SLMM is a submarine-deployed mine used for clandestine mining in hostile environments. The SLMM is a shallow water mine consisting basically of a modified MK 37 torpedo.

### **Quickstrike**

The *Quickstrike* is a family of shallow water, aircraft-laid mines. The MK 65 mine is a 2,000 pound mine with a specially designed thin-walled casing. Other *Quickstrike* versions (MK 62, MK 63) are converted general purpose bombs of the 500-pound and 1,000-pound sizes.

(Sources: Naval Sea Systems Command and Naval Air Systems Command)





# THE WORLD LEADER IN MAKING THE WORLD A BETTER PLACE.

Photo by Staff Sgt. Courtney Richardson



**PORT-AU-PRINCE, Haiti** A Haitian orthopedic surgeon observes a surgery aboard the Military Sealift Command hospital ship USNS *Comfort* (T-AH 20) during *Continuing Promise* 2011. *Continuing Promise* is a five-month humanitarian assistance mission to the Caribbean, Central and South America.



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