USS CONSTELLATION (CV 64)



"America's Flagship"



For more information, visit our website at: www.navy.mil/homepages/cv64

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Public Affairs Officer
USS Constellation (CV 64)
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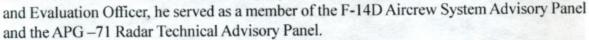
Captain John W. Miller Commanding Officer USS CONSTELLATION (CV 64)



Captain John W. Miller, a native of Los Angeles, California, received his commission upon graduation from the United States Naval Academy in 1979. He was designated a Naval Flight Officer in June 1980 and received orders to VF–101 for replacement training in the F-14A Tomcat.

In June 1981, Captain Miller reported to the "Tomcatters" of VF-31. He deployed to the Indian Ocean in January 1982 and the Mediterranean Sea in September 1983 aboard USS JOHN F. KENNEDY (CV 67).

Captain Miller returned to VF-101 as a staff instructor in July 1984. Assigned to COMFITWINGONE as the Tactical Development





In December 1986, Captain Miller reported to VF-84 where served as the Maintenance Officer. During this tour he completed two tours to the Mediterranean Sea, first aboard USS NIMITZ (CVN 68) in 1986-87, and then aboard USS THEODORE ROOSEVELT (CVN 71) in 1988-89.

Captain Miller reported to the Naval Academy in August 1989 where he served a one-year tour as the Leadership Section Head. In 1990, he was selected as a White House Fellow and served as a Special Assistant to the Administrator of the National Aeronautics and Space Administration.

Captain Miller reported to VF-101 in September 1991 as the Executive Officer. He reported to VF-142 as Executive Officer in July 1992 and became the last "Ghost Rider" Commanding Officer in October 1993. During this tour he deployed to the Mediterranean Sea aboard USS GEORGE WASHINGTON (CVN 73). He assumed command of VF-101 in September 1995.

In January 1997 he reported to the Bureau of Naval Personnel where he served as the Aviation Commander Assignment Officer until August 1998. He assumed command of USS DUBUQUE (LPD 8) in March 1999 and USS JUNEAU (LPD 10) in July 1999.

During his career he has logged more than 3,500 flight hours and 1,000 arrested landings in the Tomcat. His awards include the Legion of Merit, Meritorious Service Medal (two awards), Air Medal (two strike flight awards), Navy Commendation Medal (four awards), Navy Achievement Medal and numerous campaign and unit awards.

USS CONSTELLATION: A "Stellar" History

The name Constellation is one of the most famous in U.S. naval history. The first ship to be commissioned in the United States Navy; the first to put to sea; and the first to engage, defeat, and capture an enemy vessel was the three-masted, square-rigged U.S. Frigate Constellation.

It all started on March 27, 1794, when a special act of Congress provided for building the U.S. Navy its first new ships. The six frigates were given symbolic names which the new country could rally around — names such as Constitution, Congress, Chesapeake, United States, and President. But the first to be commissioned received the name held in highest esteem by the fledgling Congress — the name for that ring of stars, white in a blue field, on the new American flag: Constellation.

The U.S. Frigate Constellation was built at Harris Creek Shipyard in Baltimore's Fells Point. She was designed with a main battery of 36 guns, had a crew compliment of 340 men, and displaced 1,265 tons with a beam of 41 feet and length of 164 feet.

On September 7, 1797, Constellation was launched just in time as the United States entered its first naval war. The "Quasi War" (1798-1801) with France was largely Constellation's war. On February 9, 1799, Constellation fought and captured the 40-gun frigate L'Insurgente, the fastest ship in the French Navy. Under the command of the legendary Captain Thomas Truxtun, it was the first battle by one of the original six frigates. This great achievement for a young United States Navy was the first major victory by an American designed and American-built warship.

There were many more victories to follow. Truxtun and Constellation fought a second single-ship action in February 1800: a night encounter with France's 54-gun frigate LA Vengeance. Constellation was again victorious, winning a bloody and violent 5-hour battle. French sailors, amazed at her expert sailing ability because she could attain the thrilling speed of 13 knots while sailing under nearly an acre of canvas sails, nicknamed her "Yankee Racehorse."

Both battles were cause for rejoicing throughout the new republic. Constellation had aggressively defended America's right of safe passage on the seas for its merchant ships. These first naval victories served notice to the world that the United States would defend her honor and freedom at all costs.

While these victories were important to the nation, Truxtun and Constellation made an even greater contribution to the infant United States Navy — this was the system of conduct, discipline, gunnery signals and naval operations put into effect by Truxtun while in command. His system set a pattern of success and efficiency that is the basis of U.S. Naval procedure to this day.

Constellation would continue to serve with distinction in the Barbary Wars against Tripoli and the War of 1812 against Great Britain. In 1840, Constellation completed a historic voyage around the world, which included being the first U.S. warship to enter the inland waters of China.

After more than 50 years of extraordinary service, the U.S. Frigate Constellation was thoroughly worn out. In 1853 she was broken up at the Gosport Navy Yard in Norfolk, Va.

But the name of Constellation would live on. In 1854, the U.S. Sloop of War Constellation was launched from Gosport. With similar dimensions to her famous predecessor, she carried 22 guns, had a crew compliment of 240 men, and displaced 1,400 tons with a beam of 42 feet and length of 176 feet.

The new ship's first assignment was interdicting the slave trade off the coast of Africa. She captured two slavers and released the imprisoned slaves. At the outbreak of the Civil War, Constellation made the first Union Navy capture, overpowering the slaver brig Triton in coastal waters off Africa.

After the war, Constellation saw various duties such as carrying famine relief stores to Ireland and carrying precious American works of art to the Paris Exposition of 1895.

In 1894, Constellation became a training ship for the Naval Training Center in Newport, R.I. In addition to being used extensively as a training ship for Naval Academy midshipmen, she also helped train more than 60,000 recruits during World War I.

Decommissioned in 1933, Constellation was recommissioned as a national symbol on August 24, 1940 by President Franklin Roosevelt. Shortly after the country's entry into World War II, she became the flagship for Admiral Ernest J. King and Admiral Royal Ingersoll.

The treasured warship was decommissioned in February 1955 and was taken "home" to her permanent berth in Baltimore Harbor. Now a National Historic Landmark, she is the last existing Civil War era naval vessel and the last sail-powered warship built by the U.S. Navy. Ironically, just as the aircraft carrier USS Constellation (CV 64) was beginning her 19th overseas deployment, the U.S. Sloop of War Constellation completed a \$9-million restoration project in July 1999. The restoration will allow a new generation of Americans to learn about the important role Constellation had in our nation's history.

AMERICA'S FLAGSHIP: The Tradition Continues

Like her famous namesakes, USS CONSTELLATION (CV 64) has a proud and distinguished record. Connie, as her crew affectionately calls her, has almost 38 years of service, which has seen her sail into harm's way from Yankee Station off the coast of Vietnam to the turbulent waters of the Arabian Gulf.

Built at the New York Naval Shipyard as the second ship in the Kitty Hawk class of aircraft carriers, Connie was commissioned on October 27, 1961, under the motto "Spirit of the Old, Pride of the New." She has been homeported at Naval Air Station North Island in San Diego since July 1962.

Just like the original CONSTELLATION, America's newest and best Navy ship was immediately put to the test. In response to North Vietnamese attacks on U.S. destroyers in the Gulf of Tonkin in August 1964, CONSTELLATION departed from a scheduled port visit to Hong Kong and was the first U.S. warship to launch strikes against North Vietnamese vessels and bases.

Over the next eight years, CONSTELLATION would return to the South China Sea for a total of seven combat cruises, conducting air strikes against heavily fortified North Vietnamese positions, engaging naval targets and shooting down enemy aircraft.

In 1968 President Lyndon Johnson made a surprise visit prior to Connie's fourth deployment to the Western Pacific (WestPac). In November, Connie pilots flew the last strike missions into North Vietnam prior to a bombing halt declaration.

In May 1972, Lt. Randy Cunningham and Ltj.g. Willie Driscoll of Fighter Attack Squadron 96 became America's first fighter aces of the Vietnam War by downing three MiGs during vicious dog fighting over North Vietnam. The extraordinary effort brought their total to five enemy aircraft in four months.

For her actions in Southeast Asia, CONSTELLATION was awarded the Presidential Unit Citation by President Richard Nixon.

In 1975 Connie was re-designated "CV" from "CVA" following a complex overhaul to the flight deck, enabling her to deploy with the S-3A Viking (anti-submarine) and F-14 Tomcat (fighter) aircraft.

A newly refurbished Connie began her 10th deployment in April 1977, which included the first port call by a U.S. carrier to Pattaya, Thailand. In September 1978, Connie sailed west once again on her 11th overseas deployment. The ship was extended on station in the Arabian Gulf because of the Iranian hostage crisis. Her service earned her the Navy and Marine Corps Expeditionary Medal. While on her 12th deployment to the Western Pacific and Indian Oceans, CONSTELLATION set a new endurance record for that time by remaining on station for 110 consecutive days.

In the summer of 1981, Connie hosted President Ronald Reagan. It turned out to be a watershed moment in the carrier's illustrious history. Reagan presented a Presidential Flag to the ship and proclaimed CONSTELLATION as "America's Flagship" – a new ship's motto which is used to this day.

In 1982, Constellation returned to the yards, this time in Bremerton, Wash. Naval aviation had undergone vast changes since 1961, and when Connie came out of the yards in 1984 two weeks early and under budget, it was completely modernized. One facet of the ship's upgrade was the ability to carry the Navy's newest strike fighter, the F/A-18 Hornet. She was also fitted with the new PHALANX radar-guided gattling gun, two new flush deck catapults and the NATO Sea Sparrow Missile System.

During WestPac 1987, Constellation once again found itself in the spotlight; this time providing vital air cover for the escort of U.S. flagged oil tankers through the Arabian Gulf.

In February 1990, Constellation left San Diego, returning to the East Coast for a three-year overhaul. The \$800-million Service Life Extension Program (SLEP), completed in Philadelphia Naval Shipyard in March 1993, added an estimated 15 years to the carrier's operational life. The overhaul saw upgrades to virtually every system on the ship.

After completing one of the most successful work-up schedules in Navy history, CONSTELLATION departed San Diego on June 18, 1999, beginning her 19th overseas deployment. Connie immediately put her war fighting skills to the test by conducting a Joint Task Force Exercise (JTFEX). This marked the first time ever that a carrier has conducted JTFEX at the beginning of a deployment. With increased tensions between North and South Korea, Connie then headed for the Korean theatre to closely monitor the situation and provide a calming influence. After port calls in Pusan, ROK; Yokosuka, Japan; Singapore; and Kuala Lumpur, Malaysia, Connie entered the Arabian Gulf on August 28 where she will spend the next 10 weeks flying combat air patrols over the Iraqi no-fly zones in support of Operation Southern Watch.

On September 16, 1999, Captain Jamie Kelly relieved Captain Don Bullard as Commanding Officer of America's Flagship. Just as Captain Thomas Truxtun left an indelible imprint on our nation's naval heritage as CONSTELLATION's first Commanding Officer in 1797, so too has Captain Bullard continued that heritage by guiding the Navy's finest crew on the nation's best carrier. As Connie's 29th Commanding Officer, Captain Kelly will continue this legacy and add to the illustrious history of America's Flagship.

For almost 200 years, CONSTELLATION has traveled the worlds oceans representing America's interests. Whether it was from the cannons of the "Yankee Racehorse" or from the aircraft of "America's Flagship," CONSTELLATION has always been first to answer our nation's call. And just as thousands of Sailors have done before, today's Sailors will continue to protect freedom around the globe and add to CONSTELLATION's "stellar" history.

The Ship's Departments

An aircraft carrier is really a floating city. To run CONSTELLATION efficiently, the ship requires an infrastructure similar to that of a city. The duties of the Commanding Officer (CO) are similar to those of a mayor. He is ultimately responsible for the welfare of the ship and its crew, and establishes guidelines under which the ship operates. Next comes the Executive Officer (XO), who is similar in many respects to a city manager. The XO ensures the CO's guidelines are implemented and the daily functions on board the ship run smoothly. The ship is further divided into 17 departments, each with a specific area of responsibility and expertise. Working together, these departments provide the range of services required to support CONSTELLATION's ship and air wing crew of more than 5,000.

AIMD

The aircraft intermediate maintenance department, or AIMD, provides intermediate level maintenance support for embarked aircraft. This includes maintenance beyond the normal level of routine maintenance performed by the squadrons themselves and can include almost any type of repair. AIMD has a jet engine shop, electronics repair facilities, and the ability to repair and fabricate airframe and structural components.

AIR

Air department is perhaps the most visible department. It includes all the Sailors who work on the flight deck and associated equipment. This includes the catapults, arresting gear, crash and salvage team, optical landing system, aircraft refueling crews, primary flight control (the tower), and aircraft handlers on the flight deck and in hangar bays.

CHAPLAIN

Attending to the spiritual needs of the crew and air wing is the job of the Chaplains' department. Three chaplains perform religious services, and religious programs specialists assist all faiths in coordinating worship services and other activities. The department also runs one of the largest libraries afloat for the reading enjoyment of the crew.

COMBAT SYSTEMS

Expert operations and maintenance of the ship's Command, Control, Computers, Communication and Intelligence (C4I) suites are the mainstay of the Combat Systems department. In addition to maintaining e-mail access for the entire crew, they are responsible for more than 5,000 pieces of radar, satellite communications and computer equipment.

DECK

Deck department is the home of "traditional" seamanship skills. Boatswain Mates operate the ship's small craft, mooring lines, anchors and the refueling and underway replenishment rigs for taking on supplies at sea. They also "drive the ship," standing watch as helmsmen on the bridge.

DENTAL

Five dentists including an oral surgeon and prosthodontist, and a staff of dental technicians care for the crew's dental health needs.

ENGINEERING

Engineering department operates all machinery that provide for the ship's propulsion, which includes eight boilers that generate steam for the four main engines and aircraft catapults. It also provides for all the ship's services, including electricity, steam, fresh water, telephones, fire-fighting water, and sewage. The engineers provide valuable machine shop services, from sheet metal fabrication, casting foundry, fine mill, and machine work, and coordinate the ship's "fire department," or damage control organization.

EXECUTIVE

Coordinating the ship's personnel and administration are the functions of Executive department. The ship's Personnel Office coordinates the placement of more than 2,800 personnel and the administration of all enlisted service records. In addition to maintaining officer records, the Captain's Office coordinates and implements Navy and ship policies. The Public Affairs Office maintains the ship's television system/studio, provides a daily newspaper at sea and conducts media liaison work.

Executive also oversees a full-service print shop, career management programs, and special programs including equal opportunity, substance abuse prevention, and other counseling and assistance.

LEGAL

Two legal officers and a staff of legal assistants provide legal support to the ship, air wing, command staffs, and ships in company. Legal also oversees the ship's security division which performs physical security missions, ceremonial duties, and support for a variety of special missions. These include search and seizure of vessels, recovery of aircraft and crew, and noncombatant evacuation.

MAINTENANCE

Maintenance department coordinates all shipboard preventive maintenance, periodic maintenance and major repairs, in port and underway. It ensures the ship maintains its peak material condition to ensure it's combat ready at all times.

MEDICAL

Providing medical services to more than 5,000 Sailors and Marines, Medical department consists of a fully-staffed medical facility with most of the services found in hospitals. The ward can accommodate 52 patients, and the ship's doctors, corpsmen and nurses provide routine and emergency medical support both on the ship and throughout the battle group (via helicopter).

NAVIGATION

Tracking the ship's position is critical for the safety of the ship and for the air wing -- naval aircraft generally rely on the ship to provide reference information for tactical strikes. The navigator and ship's quartermasters use visual, celestial, inertial, electronic, and satellite navigation systems to know precisely where the ship is at all times, in all weather conditions.

OPERATIONS

Often referred to as the "nerve center" of the ship, Combat Direction Center (CDC) controls the employment of all the ship's weapons systems, in addition to those highly visible parts of the Operations department, air operations, carrier air traffic control center (CATCC), strike operations, meteorology and oceanography, and the carrier intelligence center (CVIC), all provide critical planning, control, analysis and coordination functions to ensure mission success.

SAFETY

One of the smallest but most vital departments on the ship, Safety provides information, training and procedures to ensure the safe operation of the ship. The safety officer, the industrial hygienist, and a troop of trained senior petty officers coordinate safety training via a network of safety petty officers from each division.

SUPPLY

Ensures sustained carrier operations through a responsive logistic support system for both the ship and air wing. Supply prepares and serves 18,000 meals per day, does the crew's laundry, operates the hazardous material safety program, three ship's stores, the post office, the ship's payroll, and the morale, welfare, and recreation program.

TRAINING

Training is a top priority because of the vast amount of hi-tech equipment and complex systems on board. Training ensures the crew is well trained by coordinating the indoctrination program for all new personnel, scheduling required schools, tracking all training exercises, and coordinating professional and personal education and advancement for the crew.

WEAPONS

Provides the ship and air wing with all training and operational munitions. Weapons department requisitions, receives, stows, inventories, assembles, and transports all ammunition, bombs, mines, cartridges, bullets, missiles, grenades, and demolition charges. Departmental personnel also man the small arms mounts.

Carrier Air Wing Two (CVW-2)

The air wing is the ship's primary offensive and defensive weapon of an aircraft carrier, allowing it to dominate the air space surrounding the ship and to project its awesome power ashore.

Embarked on USS Constellation is Carrier Air Wing Two (CVW-2). The air wing brings together nearly 2,600 officers and enlisted men and women, maintaining and flying the

the airwing: three strike/fighter F/

14 squadron; one multi-mission sea

borne electronic warfare EA-6 squad-

control E-2 squadron; one helicopter

most technologically advanced aircraft in the world.

Seventy-two aircraft make up A-18 squadrons; one fighter Fcontrol S-3 squadron; one airron; one airborne early warning and HSL-47 detachment; and one logis-

tics support C-2 COD detachment. The air wing is aboard during all major overseas deployments and for operational training conducted in waters near the U.S. When not embarked on Constellation, the squadrons are stationed at their various home air stations throughout the U.S. West Coast.

Constellation and Air Wing Two are a mighty team, able to respond quickly, and with tremendous firepower, to any crisis, anywhere in the world on short notice.

CONNIE/CVW-2 TEAM: Breaking Barriers



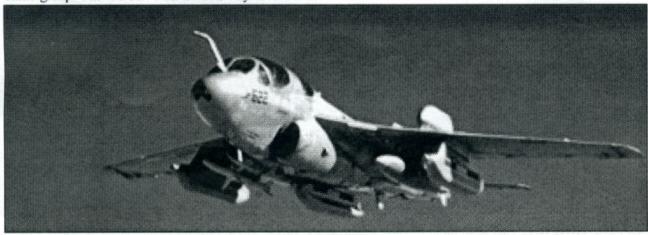
F/A-18C HORNET: This agile multi-mission fighter/attack aircraft is the centerpiece of CVW-2's potent striking power. Flying the single-seat Hornet, the VFA-137 "Kestrels," VFA-151 "Vigilantes" and VMFA-323 (USMC) "Death Rattlers" offer the premier power projection arm to the battle group commander. Capable of delivering precision weapons day or night, the F/A-18C has the state-of-the-art air-to-air/air-to-ground weapons suite.



F-14D SUPER TOMCAT: A two-seat, long-range, supersonic interceptor with attack capability. Outfitted with new engines, the F-14D enjoys increased fuel efficiency and unrestricted throttle handling throughout its flight envelope, including catapult launches without the use of afterburners. Improved radar and enhanced missile capability give the star of "TOP GUN" a decisive edge in the air-to-air combat arena. The VF-2 "Bounty Hunters" are the sole F-14 Tomcat squadron in CVW-2.



S-3B VIKING: A four-seat extended-range force multiplier, this aircraft is the "long pole in the tent" for CVW-2. While incorporating an improved antisubmarine weapons system, this upgraded Viking has evolved into a platform relied upon to perform multiple missions. Equipped with an imaging radar, improved avionics, the Harpoon missile, and an in-flight refueling system, the S-3B provides unique offensive punch and support to the battle group. The VS-38 "Red Griffins" fly in CVW-2.



EA-6B PROWLER: A four-seat electronic countermeasures aircraft, the VAQ-131 "Lancers" fly the ICAP-2 version of the Prowler. An improved jamming capacity, expanded communications system, enhanced signal processing and the HARM missile make the EA-6B the platform of choice for suppression of enemy air defense systems and protection of CVW-2 strike aircraft as they put ordnance on target and egress safely.



C-2A GREYHOUND: The C-2A Greyhound, also known as the "Carrier On board Delivery" (COD) aircraft, provides critical logistics support. With a payload of up to 10,000 pounds, the C-2A provides a means to transport spare parts, mail and people to and from the ship. A two-plane detachment from the VRC-30 "Providers" flies in CVW-2.



E-2C+ HAWKEYE: The "eyes" of CVW-2, this airborne early warning command and control aircraft keeps the big picture for the battle group. The VAW-116 "Sun Kings" fly the updated version of the Hawkeye. This E-2C+, with a crew of five, operates at longer ranges, can track more than 2,000 targets, has improved jamming resistance and fully-automated/optimized overland detection. State-of-the-art avionics and upgraded engines make this "mini-AWACS" an indispensable command and control platform.



SH-60F / HH-60H SEAHAWK: Incorporating an integrated antisubmarine mission avionics system with a dipping sonar, a crew of four provides inner-zone protection for the carrier as well as primary Sea Air Rescue (SAR) responsibility. Other primary mission areas include strike rescue and special warfare support. The HS-2 "World Famous Golden Falcons" complete the total combat package for the air wing.

Aircraft Launch and Recovery

CATAPULTS

CONSTELLATION is equipped with four steam catapults which are capable of propelling the heaviest carrier aircraft from the flight deck at speeds in excess of 170 m.p.h.. These speeds are reached from a standing start in less than two seconds during the 250-foot catapult launch stroke. An equivalent land-based takeoff would require nearly 6,000 feet of runway.

It is possible, using four catapults, to launch aircraft at the rate of one every 30-45 seconds. CONSTELLATION has successfully launched more than 360,000 aircraft since commissioning.



THE LAUNCH, OR "CAT SHOT"

Two of CONSTELLATION's four steam catapults are located in the bow, and the remaining two are located in the center of the ship on the port side, called the waist.

The catapults consist of large pistons underneath the deck. Above the deck, only a small device engages the aircraft nose gear.

When the planes are ready for takeoff, the aircraft handlers on the flight deck guide the planes onto the catapults and hook the catapults onto the planes' nose gear. After a final check, the pilots are admitted to the catapults, which accelerate the planes from 0 to 150 m.p.h. in under two seconds. The pistons are stopped at the end of the catapults by water brakes and then return to their original positions to launch other planes.

ARRESTING GEAR

Five arresting gear engines are used to "trap" returning aircraft. Four of these engines are normally on line with the fifth engine held in reserve for emergency barricade landings. The aircraft's tailhook engages a cross-deck pendant, which is attached to a cable woven around the arresting gear engine. Aircraft landing at speeds up to 160 m.p.h. are brought to a halt within about 300 feet after grabbing or "trapping" the wire.



THE ARRESTED RECOVERY, OR "TRAP"

Aircraft are recovered on board in a process known as an arrested landing. The design of naval aircraft starts with the airframe and landing gear, as they must withstand a tremendous shock each time the aircraft launches or lands.

The goal of a landing is for the pilot to have the aircraft's tailhook grab one of four arresting wires stretched across the deck. These wires are about 40 feet apart, two inches off the deck, and are connected to the arresting engines (large hydraulic-mechanical devices which spool out tensioned wire and absorb the momentum of the aircraft).

To land, the pilot uses the carrier's optical landing system, called the Fresnel lens, also known as "the ball." This system emits a beam of light, which tells the pilot if the aircraft's approach is high or low. By following the glide slope established by "the ball," the pilot can place the tailhook of the aircraft so it catches the desired wire (usually the third wire, counted from the stern).

While approaching, the speed of the aircraft is kept slightly above stall speed. When the aircraft hits the deck, the pilot immediately applies full power, in case the plane "bolters," or fails to catch a wire. This way, the aircraft has enough power to get airborne safely for another attempt.

Aircraft Carriers

ENDURING ASSETS FOR A MARITIME NATION

USS CONSTELLATION is an impressive sight. Nearly 1,100 feet long and displacing 88,000 tons, the sheer size of this "floating city" is staggering. But the real marvel of an aircraft carrier is the enormous amount of activity concentrated in such a relatively small area. On the flight deck and in the hangar bays, the air wing operates more than 70 aircraft. Below in the engineering spaces, eight boilers provide steam for propulsion and electricity. The size and complexity of an aircraft carrier only hints at the importance of these ships as part of America's Navy. No other country has ever deployed as formidable a ship as the CONSTELLATION and other U.S. aircraft carriers.

OPERATING "FORWARD ... FROM THE SEA"

To understand the role of the carrier today, one must recognize the sweeping changes that have taken place in the world in the past few years. The end of the Cold War marked the end of a relatively static threat. While large and technically advanced, our adversary was a known and predictable quantity. Now, regional hostilities potentially

threaten our national security interests around the world.

The Navy's current vision is captured in the concept "Forward ... From the Sea." This document outlines the Navy's fundamental shift from preparing for an open-ocean war at sea with the Soviet Navy to focusing on regional threats to U.S. national interest. "Forward...From the Sea" recognizes the ability of the U.S. Navy to control the sea lanes as well as controlling the "littoral zone," the areas from off the coast to as far inland as necessary to establish a safe zone for entry of additional U.S. forces. In this way, the Navy-Marine Corps team are an "enabling" force, establishing safe beachheads, ports and airfields, and paving the way for follow-on action by Army, Air Force, and allied forces.

When crises erupt overseas, U.S. leaders want to know where the nearest carrier battle group is located. The Navy-Marine Corps team is the pivot-point of our nation's "911 emergency" response force ... ready to answer the call -- any time, anywhere.



FORWARD DEPLOYED, READY ON ARRIVAL

Aircraft carriers are routinely forward deployed around the world, engaging in joint (U.S. Navy, Marines, Army, and Air Force) and combined (with other allied nations) exercises. These exercises hone our own combat skills, as well as providing valuable experience in operating with other forces.

While deployed, aircraft carriers operate in international waters providing an reassuring presence to our allies and a warning to our potential enemies. This presence can be quickly increased or withdrawn as the situation dictates. Should the situation require it, the aircraft carrier and air wing team are ready on arrival to accomplish whatever mission is given, from unobtrusive surveillance to devastating strikes -- and anything in between.

Although aircraft carriers are routinely deployed near traditional areas of potential conflict, the aircraft carrier can move quickly to another area of the world should a crisis erupt, and be ready to operate immediately.

POWERFUL, FLEXIBLE FORCES

Aircraft carriers are the single most flexible force in the U.S. arsenal. The traditional carrier air wing, consisting of a mixture of aircraft types, is able to meet virtually any emergent security need. When deployed, the carrier can be counted on to quickly

respond to nearly any tasking with its own assets.

The air wing is also an extremely flexible force structure. If the situation requires it, the air wing can be quickly tailored to suit the mission by changing the aircraft mix. This could be as small a change as removing Navy patrol aircraft and adding Navy fighters, or as radical as removing much of the air wing in favor of Marine Corps and Army helicopters. This kind of "adaptive joint-force packaging" has been clearly demonstrated in recent military action.

ENDURANCE

An aircraft carrier has the ability to remain on station in international waters for an indefinite time, unmatched by any other military asset. The reduction of overseas presence by the Army and Air Force places an even greater premium on the Navy's "floating airfields." Large troop movements or long-range aircraft patrols from the U.S. can be both expensive and an unnecessary escalation of conflict.

Endurance is a function of the Navy's logistic support forces. Although the ship carries great quantities of fuel, food and spare parts for sustained, unsupported opera-

tions, it must still be replenished on a regular basis.

To resupply, Navy oilers and combat support ships bring boiler and aviation fuel, fresh food and weapons. Critical parts and mail are brought by C-2 cargo planes. In essence, the CONSTELLATION can continue operations almost indefinitely, if necessary, without entering port.

READY TODAY AND TOMORROW

The modern aircraft carrier is a marvel of complexity. However, the single goal of combat readiness is the heart of its mission. Optimized during an evolutionary process, CONSTELLATION is the product of not only skilled shipbuilders, but of great ships and Sailors, who sailed before. The lessons learned in millions of miles of steaming, countless aircraft launches and recoveries and a myriad of missions in both peace and war have made today's U.S. Navy aircraft carriers the most powerful warships ever built ... and ready to take on the challenges of tomorrow.

Points of Interest

HANGAR BAY

The hangar bay's primary function is to store, and serve as a repair area for, the ship's aircraft. Nearly half of the 71 aircraft on board can be kept in the hangar bay, with the remainder staged on the flight deck.

COMBAT DIRECTION CENTER

The Combat Direction Center (CDC) is the ship's eyes and ears. CONSTELLATION'S CDC is one of the most modern in the fleet, with computer-enhanced air detection systems. Four warfare modules in CDC compile specific data and relay it to the Tactical Action Officer (TAO), and display it in real time on large computer screens. The TAO uses this information to assist the captain in defending the ship against attack, and to employ the air wing on offensive missions.

FORECASTLE

Both of CONSTELLATION's 30-ton anchors are raised or lowered from the forecastle (pronounced folk-sull). Each anchor is supported by more than 1,000 feet of anchor chain. Each anchor chain link weighs 360 pounds. In port, 14 six-inch diameter Kevlar ropes are used to tie CONSTELLATION to the pier.

FLIGHT DECK

The flight deck is often described as one of the most dangerous places in the world because of the numerous high-performance aircraft launching and landing in a relatively small, confined area. CONSTELLATION uses its four steam-powered catapults to launch an aircraft at a rate of once every 30-45 seconds. The catapult, in conjunction with the plane's engines, accelerates the aircraft from 0 to 150 m.p.h. in less than two seconds. One of four one-and-a-half-inch diameter arresting cables are used to "trap" an incoming aircraft. These wires are about two inches above the deck and when caught in the plane's tailhook, bring the plane to a stop in less than 300 feet.

NAVIGATION BRIDGE

The navigation bridge is where the ship's maneuvering commands are issued. At sea, the captain remains on the bridge whenever the ship is conducting flight operations or other special evolutions. Assisting the captain is the Officer of the Deck (OOD), who ensures the safe navigation and operation of the ship. The conning officer, or Junior Officer of the Deck (JOOD), works for the OOD. It is his responsibility to maneuver the ship by providing orders to the helmsman, who steers the ship, and to the lee helmsman, who communicates speed changes to the engineers via the engine order telegraph. The navigator and his assistants, quartermasters, use several types of navigational aids, including satellites and the stars, to provide course recommendations to the OOD.

USS CONSTELLATION (CV 64) Facts & Figures

Keel laidSeptember 14, 1957
LaunchedOctober 8, 1960
CommissionedOctober 27, 1961
Total cost\$400 milion (1961) dollars
"Combat" displacement weight88,000 tons
Overall length at flight deck1,047 feet
Width of flight deck266 feet
Height keel to mast17 stories
Flight deck area4.5 acres
Maximum speed30+ knots
Propulsion system8 steam boilers
Main engines4 steam turbine engines
Shaft horsepower280,000
Propellers4, 21'-diameter, 22 tons each
Freshwater distilling400,000 gallons/day
Size of air wing71 tactical aircraft
Aircraft elevators4
Catapults4, steam-driven
Arresting gear cables4 steel cables
Anchors2 (30 tons each)
Compartments and spaces3,000+
Accommodations5,500+ people
Telephones1,400+
Meals served each day (at sea)18,000+

Constellation History Highlights

September 7, 1779 The 38-gun U.S Frigate Constellation is launched, starting a historic career that included battle engagements in the Quasi War, the Barbary Wars and the War of 1812. Decommissioned in 1853.

July 28, 1855 U.S. Sloop of War Constellation is commissioned at Gosport (Norfolk), Va. The last U.S. sail-powered warship built, she served with distinction until her decommissioning in 1955. Completely refurbished in 1999, she is permanently docked in Baltimore harbor in Maryland.

October 27, 1961 The third American ship to bear the name, the aircraft carrier USS Constellation (CVA 64) is commissioned at New York Naval Shipyard.

August 4, 1964 In response to attacks against American destroyers, launches the first American air strikes against North Vietnam.

Vietnam War Makes seven combat cruises. On the 6th, Lt. Randy "Duke" Cunningham and Ltjg Willie Driscoll become the first U.S. aces of the Vietnam War, shooting down five enemy aircraft.

July 1, 1975 Redesignated "CV" from "CVA" following modifications to the flight deck and equipment to support the S-3A Viking and F-14 Tomcat.

August 1987 Provides air cover for U.S.-flagged tankers in the Arabian Gulf.

February 13, 1990 Departs for Philadelphia and the Service Life Extension Program, an overhaul designed to add 15 years to the carrier's life. Returns to San Diego three years later after completing the \$800-million overhaul.

December 17, 1999 Returned from 19th overseas deployment. During the 6-month cruise, spent 10 weeks in the Arabian Gulf in support of Operation Southern Watch and engaged in nine combat missions against Iraq.

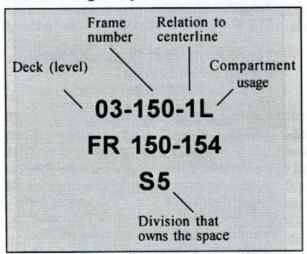
Shipboard Safety

- Stay with your escort at all times and follow his/her instructions. In the event of an emergency, your escort will take you to a safe area. If you get separated from your escort, please stop someone and ask for assistance. CONSTELLATION Sailors are always willing to help.
- Be careful. Stairs are very steep, so always use handrails or chains. Watch for ankle-twisters, "knee-knockers," and other trip hazards. The overhead clearances in some areas are not very high, so watch your head. Be prepared to duck. If you wear a cap, be careful that the brim does not mask your vision from protruding objects.
- Do not smoke or eat on board, except in designated areas. Your escort can tell you where designated smoking areas and dining facilities are located.
- Do not sit or lean on lines, rails, or chains. Some may not be able to support your weight, or the ship's movement could cause you to fall overboard.
- Do not run. Only two groups of people are allowed to run: the Fire Party (the ship's fire fighters) and Security Force. If you hear someone yell loudly behind you, please move aside and get out of the way quickly.
- Supervise your children at all times. This is a must for their protection.
- Medical emergencies. In the event that you need medical attention, ask your escort or the nearest Sailor for help. Medical's phone extension is 7911 or 7032.
- Off limits. All sponsons, catwalks, the fantail, and all areas marked "restricted" are off limits for your safety. If you don't know what something is, don't touch it. If you are unsure, please ask-again, our Sailors are always willing to help.

Where are you?

To determine your location inside the ship, the wall of the compartment you're in.

on. The hangar bay is the 1st or main deck.



Decks below the hangar bay are numbered find the yellow square or "bull's eye" on consecutively: 2nd deck, 3rd deck, etc. Decks above the hangar bay are identified as: 01 The first number identifies the deck you're level, 02 level, etc. The flight deck is the 04

> The second number is the frame number and tells you where you are along the ship's length, running fore to aft from frame 1 to frame 242.

> The third number indicates which side of the ship you are on. Odd numbered spaces are starboard (right) of the centerline. Even spaces are port (left) of the centerline.

The last letter indicates space usage.

In our example, this space is one level below the flight deck (03 level), near the middle of the ship (frame 150), and is a living compartment on the starboard side of centerline (1L).