

Welcome

Aboard!



HENRY CLAY (1777-1852)

Henry Clay was born in Hanover County, Virginia on April 12, 1777, the seventh of nine children. His father, John Clay, was a former Baptist minister turned farmer.

He studied law and was admitted to the bar in 1797. In 1798, Clay moved to Lexington, Kentucky, where he established a flourishing law practice and married Lucretia Hart. In 1799, as a member of the state constitutional convention, he first took a definite stand in opposing the perpetuation of slavery. In 1803, he was elected to the Kentucky legislature. In 1806, he was appointed to fill an unexpired term in the United States Senate. In 1808, he was reelected to state legislature becoming Speaker of the House. He took the lead among those who favored a war with Great Britain and became known as a "war hawk". In 1809, he again was appointed to fill a vacancy in the U.S. Senate where he championed the Protective Tariff. In 1811, he was elected to the U.S. House of Representatives. His subsequent terms in the house were from 1811 to 1814, from 1815 to 1821, and from 1823 to 1825. He served as Speaker of the House during this entire period except for 1821. His bold and vigorous course did much to precipitate the War of 1812. In 1814, he was one of the commissioners sent to negotiate a treaty of peace with Great Britain.

In 1821, he effected an agreement by which Missouri might be admitted as a slave state with understanding that citizens of other states should be permitted to settle there. These arrangements gave Clay the popular nickname "The Great Compromiser". In 1824, he ran unsuccessfully for President and was appointed as Secretary of State. He resigned from the Senate in 1842 and was an unsuccessful Whig presidential candidate in 1844 against James K. Polk. Reelected to the Senate in 1848, he did all he could to ease increasing friction between the North and South. His series of resolutions known as the Compromise of 1850, or, Compromise Measures of 1850, delayed for a decade the outbreak of the American Civil War.

In the morning of June 29, 1852, Henry Clay, "The Great Compromiser", died of tuberculosis. His service to his country in foreign affairs and in effecting compromises at times of national crisis gives him high rank among America's greatest statesmen.



COMMANDER JAMES WILLIAM LATHAM, USN

Commander LATHAM is from Chatham, New Jersey. He graduated from the U.S. Naval Academy in 1969. Following graduation and a temporary assignment in USS BLACKFIN (SS 322), he completed initial training at Nuclear Power School, Mare Island, California; Nuclear Power Training Unit (S1W Prototype) Idaho Falls, Idaho; and Submarine School, Groton, Connecticut.

Commander LATHAM served in USS POLLACK (SSN 603) from January 1971 to June 1974. After attending the Submarine Officer Advanced Course (SOAC) at Submarine School, he was assigned as Engineer Officer in USS GEORGE BANCROFT (SSBN 643)(BLUE) from January 1975 to January 1978. Commander LATHAM was a member of the Strategic Submarine Staff, Office of the Chief of Naval Operations in Washington, D.C. from February 1978 to January 1980. He was then Executive Officer in USS JOHN C. CALHOUN (SSBN 630)(BLUE) from May 1980 to June 1983.

Commander LATHAM has earned the Navy Commendation Medal and the Navy Achievement Medal.

Commander LATHAM, his wife Tilda and their three children live in Mount Pleasant, South Carolina.



Keel laid 23 October 1961

Launched 30 November 1962

Commissioned 20 February 1964

THE FBM SUBMARINE

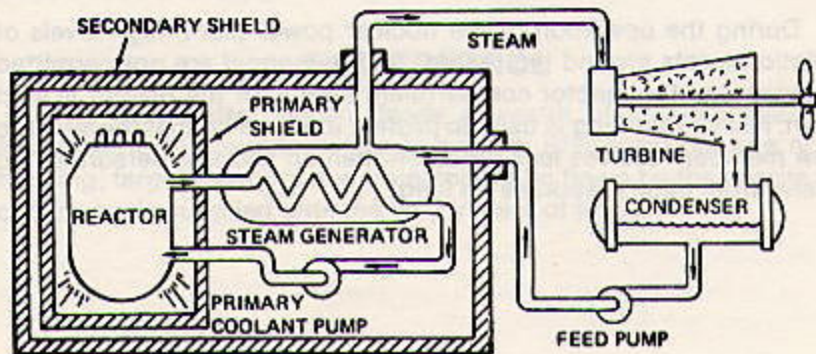
The most vital element of our National defense, and most stabilizing element for world peace is the United States nuclear strategic missile force. Today, FBM's constitute a dominant part of this deterrent. Invulnerable to detection these ships provide our Nation with a flexible and survivable retaliatory force, unequalled anywhere else in the world. It is our Nation's highest priority defense program. These ships and their crews have logged over two hundred years underway, submerged on patrol.

About twenty-five years ago, the submarine launched ballistic missile system was conceived as an additional option in the United States strategic deterrent forces. The first fleet ballistic missile submarine was the USS GEORGE WASHINGTON (SSBN598) which was commissioned in December, 1959. The second generation of FBM submarines began with the USS ETHAN ALLEN (SSBN608) and included many new designs and improvements over the 598 class. The third generation, commencing with the USS LAFAYETTE (SSBN616) incorporated further operational and habitability improvements. USS HENRY CLAY (SSBN625) is a 616 class of submarine and can carry sixteen Poseidon missiles.

THE PROPULSION PLANT

Nuclear reactor power provides the steam to propel the HENRY CLAY and to supply the ship's huge electrical load, permitting long periods of complete submergence.

The propulsion plant consists of a nuclear reactor with its associated circulating water and steam cycles and auxiliary machinery.



THE PROPULSION PLANT (Continued)

The primary system is a circulating water cycle and consists of the reactor, identical port and starboard loops of piping, primary coolant pumps and the tubes of the steam generators. Heat is produced in the reactor by nuclear fission and is transferred to the circulating primary coolant water which is pressurized to prevent boiling. This water is then pumped through the steam generator tubes where it causes secondary water surrounding the tubes to boil and form steam. It is then pumped back to the reactor by the primary coolant pumps where it is heated for the next cycle.

The steam produced is then used by the "secondary system" to provide electricity and turn the ship's propeller. This system is made up of the shell side of the steam generators, turbines, condensers, and steam generator feed pumps. It is completely isolated from the primary system since the primary water goes through the tubes of the steam generator while the water which is boiling to make steam is on the shell side of the steam generator. Steam rises from the steam generators and flows to the engine room where it drives the steam-driven turbo-generators which supply the ship with electricity, and the main propulsion turbines which drive the propeller. After passing through the turbines, the steam is condensed and the water is fed back to the steam generators by the feed pumps.

There is no step in the generation of this power which requires the presence of air or oxygen. This fact alone allows the ship to operate completely divorced from the earth's atmosphere for extended periods of time.

During the operation of the nuclear power plant, high levels of radiation exist around the reactor and personnel are not permitted entrance into the reactor compartment until after the reactor is shut down. Heavy shielding is used to protect the crew so that the average crew member receives less radiation than an average person would receive from natural sources on land.

THE POSEIDON WEAPONS SYSTEM

The weapons system consists of the missile itself, a fire control system for aiming the missile, a launching system to eject the missile, and a navigation system to precisely locate the ship's position. The crew of the HENRY CLAY is trained and continually tested on their ability to operate these systems in a precise and highly reliable manner giving the ship the capability to immediately launch a retaliatory strike in event of a nuclear attack on the United States.

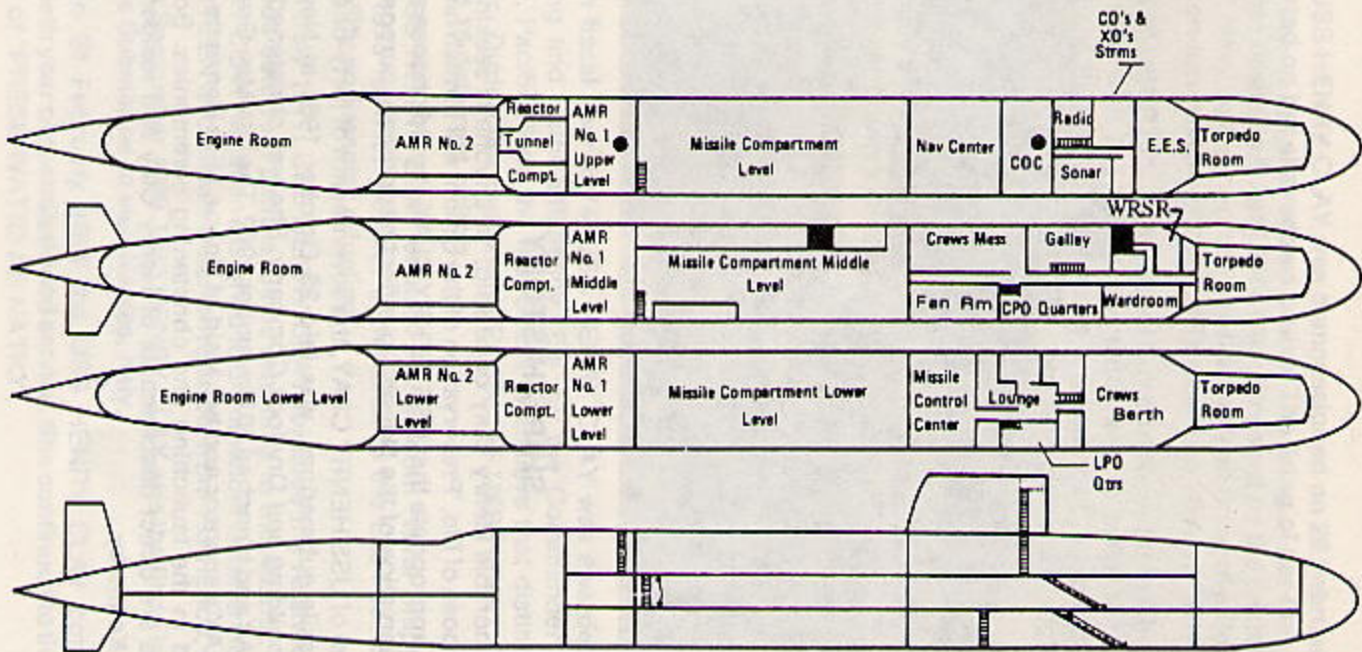
THE MISSILE AND MISSILE GUIDANCE

The Poseidon missile, named for the Greek God of the Sea, is a two-staged ballistic missile with multiple warhead capability, designed to be launched from either surface or submerged submarines. The missile is powered by solid fuel rocket motors and is guided by a self-contained inertial guidance system independent of external commands or control.

Within the submarine, personnel can prepare and check the missiles for firing while the ship is submerged. Ejected from its launching tube by gas, the missile is forcefully propelled above the surface of the water where the rocket motor fuel ignites. The missile guidance system puts the missile on the correct course at the time of the launch and automatically computes a new course should the missile deviate from its path. At the precise instant required, the guidance system shuts off the rocket motors and triggers separation of the reentry body from the missile. The reentry body with its nuclear warhead then follows a ballistic (free falling) trajectory to the target as far as 2500 miles away.

FIRE CONTROL

The fire control system feeds a wealth of a coordinated information to the missile guidance system. Ship location, true north heading, target location, and trajectory to be flown by the missile are continuously supplied until the very instant of firing.





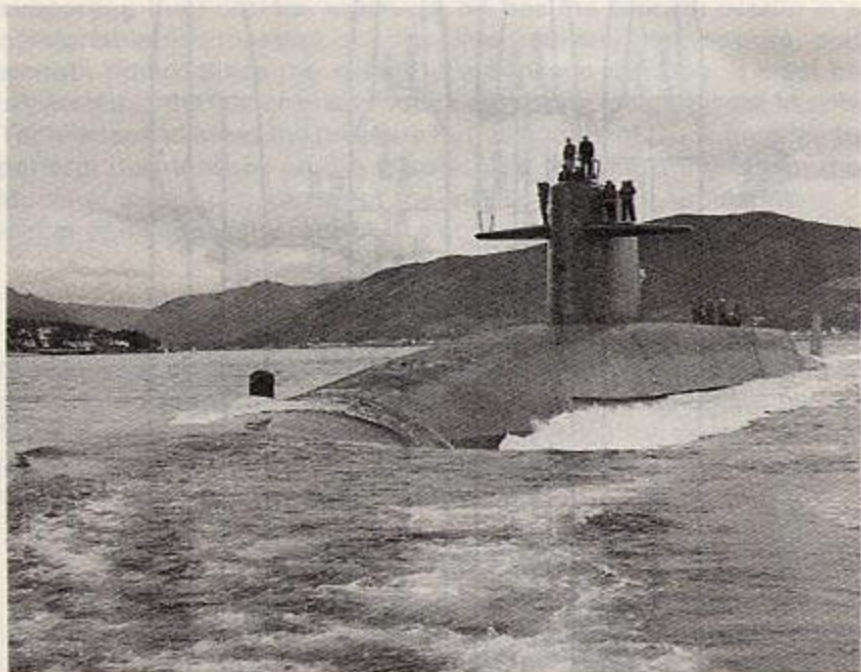
SUBMARINE DOLPHINS

Submarine Dolphins are proudly worn by individuals who have completed an arduous one to two year qualification period. Individuals qualified in submarines have a basic knowledge of all systems on board. Submarine Dolphins are a mark of distinction and have been worn by submarine sailors since 20 March 1924. The design is a bow view of a submarine, proceeding on the surface, with bow planes rigged for diving, flanked by dolphins in horizontal position with their heads resting on the upper edge of the bow planes.



DETERRENT PATROL PIN

An FBM submarine breastpin is awarded to personnel in the ship's companies of the silent service missile fleet. The device is known as the FBM Patrol Pin, although its official designation is SSBN Deterrent Patrol Insignia. Design of the SSBN pin shows a silver Lafayette class submarine with superimposed Polaris missile and electron rings which signify the armament and nuclear powered characteristics of the FBM Deterrent Force. A scroll beneath the submarine will hold stars, one bronze star for each "successful" patrol after the first or a silver star for five "successful" patrols.



SHIP'S HISTORY

The Honorable Henry Clay once said, "If anyone is seeking the primary purpose of life, 'Preservation of the Union' will furnish him the key." It was appropriate that USS HENRY CLAY should choose as her motto "Preservation of the Nation" to reflect her primary purpose.

The keel of USS HENRY CLAY, the seventeenth of forty-one fleet ballistic missile submarines, was laid 23 October 1961 at Newport News Shipbuilding and Drydock Company. She was christened USS HENRY CLAY and launched 30 November 1962. The late Mrs. Green B. Gibson, CLAY's sponsor and her Maid of Honor, Miss Henrietta Clay, participated in the launching and christening ceremonies. Both of these ladies are direct descendants of Henry Clay and residents of Lexington, Kentucky.

USS HENRY CLAY was commissioned on 20 February 1964 and departed on her shakedown cruise. The firing of her first submerged Polaris missile on 6 April 1964 was witnessed by the Secretaries of the Army, Navy, and Air Force. The first surface firing of a Polaris missile was conducted from USS HENRY CLAY on 20 April 1964.

USS HENRY CLAY departed Newport News for the final time on 11 July 1964 with the Blue Crew embarked to make her first Polaris Deterrent Patrol. She served as a member of Submarine Squadron FOURTEEN until October 1968 completing a total of eighteen deterrent patrols for the U.S. Atlantic Fleet.

USS HENRY CLAY entered Charleston Naval Shipyard 10 October 1968 where she was improved for her newer A-3 Polaris missile capability and furnished with more modern equipments to continue to support her primary mission.

Following missile test firings off the coast of Florida, USS HENRY CLAY transited the Panama Canal and reported to the U.S. Pacific Fleet as a member of Submarine Squadron FIFTEEN. USS HENRY CLAY resumed Polaris nuclear deterrent patrols in August 1970 and was awarded the Meritorious Unit Commendation for service as a member of Submarine Squadron FIFTEEN during the period 1 July 1968 to 1 October 1970.

In fiscal year 1974, USS HENRY CLAY was awarded the Engineering and Battle Efficiency "E's" by the Commander Submarine Force, Pacific Fleet, the first SSBN to achieve that distinction in the Pacific. During her tour in the Pacific the USS HENRY CLAY completed 18 deterrent patrols.

USS HENRY CLAY entered Portsmouth Naval Shipyard on 13 April 1975 for overhaul and conversion to the C-3 Poseidon missile capability and reactor refueling.

In July 1977, USS HENRY CLAY rejoined the Atlantic Fleet and resumed deterrent patrols. Since returning to the Atlantic Fleet, USS HENRY CLAY has been assigned to Commander Submarine Squadron FOURTEEN and makes deterrent patrols from Holy Loch, Scotland.

In September 1983, USS HENRY CLAY was the first Fleet Ballistic Missile Submarine to visit Naples, Italy.

On 20 February 1984 the USS HENRY CLAY completed its twentieth year of commissioned service. She continued to live up to her motto of "PRESERVATIO AB NATIO".

THE CREW

Each FBM submarine has two crews, called Blue and Gold, of about 150 officers and men each. While one crew mans the ship on patrol, the other crew is at its home port, undergoing refresher training, taking leave, breaking in new crew members, and in general getting ready to go to sea.

Each crew is made up of the highest caliber of men. Originally the main source for submarine personnel was from within the Navy. For the most part the training required was only that needed in the specialized weapons and nuclear fields. But with the steady demand for more and more men as the submarine fleet has grown, most now are new recruits and are the very best men our Nation can make available.

The officers that supervise the operation of the ship come from three sources: The United States Naval Academy in Annapolis, the Navy Reserve Officer Training Corps (NROTC) at civilian colleges and universities, and through direct recruitment on the college campus. Academic standards are extremely high for this program; however, the rewards of excellent promotion opportunity, special pay, and eventual command of a submarine are a very strong attraction for submarine service.

A special recruiting program for qualified high school graduates guarantees technical training and operational experience in the submarine field. Individuals who wish to enter the highly technical fields of nuclear plant operation, missile systems operation, or operation of the ship's advanced electronic equipment can in most cases expect about two years of intensive schooling.

To be able to maintain and operate the equipment, a man must be thoroughly familiar with the basic theory and fundamental physical principals involved. Much of this kind of training is available outside the Navy only at college level.

In addition to the technical ratings on board, there are many nontechnical areas where a new recruit can be assigned without intensive formal schooling. Often these serve as stepping stones to technical careers. Regardless of their duty, each man on a submarine is vital to ship's mission and each will have to earn his "dolphins"; and in the process earn the respect of his shipmates and the honor of being on a submarine.