

*Welcome Aboard*



*Arsenal of the Nation*

**USS CONNECTICUT**  
**SSN 22**



## *USS CONNECTICUT (SSN 22) SEAL SYMBOLOGY*

The navy blue and gold of the border are traditional U.S. Navy colors and symbolize both the sea and excellence. The white denotes integrity. The gold stars on the border represent the four previous ships named USS CONNECTICUT.

The focus of the seal is the rococo shield adapted from the armorial bearings of the State of Connecticut; its white color highlights the "Great White Fleet" of which the fourth USS Connecticut (BB-18) was the flagship. The tomahawks represent the native American heritage of the state and also the present day technology of cruise missiles carried onboard. The dark blue silhouette of the first working submarine, the Turtle, which was designed and built in Connecticut and broke the British siege of New York Harbor in 1776, recalls the heritage of the present day CONNECTICUT. The star and anchor are adapted from the "Command at Sea" emblem and recall the USS CONNECTICUT's role in preserving the United States command of the seas.

The trident is a traditional symbol of sea power; its bottom spike points to the ocean depths, the area of operation of the present "USS CONNECTICUT." The oak leaves, representing the Charter Oak of 1687, reflect the deep-rooted historic traditions of Connecticut and mark the refusal of their early leaders to give up their love of freedom. The dolphins, animals of speed and intelligence, are symbolic of the heritage of the submarine service.

The ship's motto "Arsenal of the Nation" originates from Connecticut Governor Baldwin who stated "It has been said that America is the Arsenal of Democracy and it has also been said that Connecticut is the Arsenal of the Nation." This motto represents Connecticut's long standing tradition of arms production - from the Colt Arms Co. of the early 1800's to the many defense industries in the state today, highlighted by the world's premier submarine construction yard.





On behalf of the officers and crew of USS CONNECTICUT (SSN 22), I wish to extend a warm welcome to our guests aboard America's most complex and heavily armed attack submarine. We are indeed proud of our ship and hope your time with us will be enjoyable.

I invite you to ask questions! You'll find that the entire crew is ready, willing and able to explain the details of their operational responsibilities and the routine of submarine life. You will find these men are highly trained and capable of fielding a wide variety of questions. They routinely match their collective skills against the power of the sea and I believe you will be as impressed by them as you will be by the CONNECTICUT herself.

We hope during your stay aboard USS CONNECTICUT you'll get a thorough introduction to our nation's "Silent Service."

F. J. Roegge  
Commanding Officer  
USS CONNECTICUT (SSN 22)



**USS CONNECTICUT (SSN 22)**



***COMMANDER FREDERICK J. ROEGGE  
UNITED STATES NAVY***



Commander Roegge is a native of Minneapolis, Minnesota. He graduated with honors from the University of Minnesota with a Bachelor of Science degree in Mechanical Engineering and received his commission through the NROTC program in December 1980.

Commander Roegge's first sea tour was aboard USS WHALE (SSN 638) where he served as a division officer and as Weapons Officer. During his tour, WHALE earned a Battle Efficiency "E" award and completed two North Atlantic deployments, a Mediterranean deployment, an under-ice exercise, and an interfleet transfer from Groton, Connecticut to Bremerton, Washington. In December 1985 he was selected as Flag Lieutenant to the Commander Submarine Force, U.S. Pacific Fleet in Pearl Harbor, Hawaii.

After winning the L. Y. Spear award as class honorman at the Submarine Officer Advanced Course, Commander Roegge reported to USS FLORIDA (SSBN 728) (BLUE) in Bangor, Washington. He completed five strategic deterrent patrols as Engineer Officer from November 1988 to August 1991. During this period FLORIDA earned two Battle Efficiency "E" awards, one Engineering "E", and the Marjorie Sterret Battleship Fund Award as the top combatant in the Pacific Fleet.

Commander Roegge then completed two years as a technical assistant to the Director, Naval Nuclear Propulsion (Naval Reactors). In January 1994, he became Executive Officer of USS KEY WEST (SSN 722) in Norfolk, Virginia, serving until October 1995. During this period, KEY WEST completed a deployment to the Arabian Gulf and the Mediterranean Sea and earned a Navy Unit Commendation as part of the THEODORE ROOSEVELT Battle Group.

After five months as a Program Analyst for the Director, Assessments Division (N81) on the Navy staff, Commander Roegge was selected in March 1996 to be Deputy Director of the Liaison Office to the U.S. House of Representatives for the Navy Office of Legislative Affairs. During this tour he earned a Master of Science degree in Engineering Management at the Catholic University of America and completed initial Joint Professional Military Education through the Air Command and Staff College. After completing Prospective Commanding Officer Training, Commander Roegge took command of USS CONNECTICUT (SSN 22) in January 1999.

Commander Roegge has earned the Meritorious Service Medal, the Navy Commendation Medal (four awards), and the Navy Achievement Medal (three awards).

Commander Roegge is married to the former Julie LaBeau of Petoskey, Michigan. They reside in Gales Ferry, Connecticut with their sons Alex and Will.

## ***HOW A SUBMARINE IS ORGANIZED***

Few modern institutions can rival the nuclear submarine for complexity and absolute self-sufficiency. The often inhospitable environment of the vast sea only intensifies the need for coordination of each crewman's activities. The keystone of the submarine organization is the Commanding Officer, the Captain of the ship. The responsibility for each operation of the submarine, in fact, the responsibility of each individual aboard, converge at the command level and create the Commanding Officer's ultimate charge: to successfully carry out the missions assigned. Whatever measures are required, in his judgement, to accomplish this task, the Commanding Officer is empowered to employ. It is this necessary conferral of discretion in an isolated circumstance that lends to the submarine command a sense of creativity and individuality.

Second in command is the Executive Officer, always next senior in rank to the Captain and not far from attaining his own command. The Exec, or XO, as he is informally called, offers his wide ranging experience to the submarine organization through direct coordination of the administrative and training activities of the ship. His knowledge and position extend his responsibilities and interests to every aspect of submarining.

The remainder of the ship's force is composed of five departments: Executive, Navigation, Weapons, Engineering, and Supply. The more junior officers are assigned within these departments to act as division officers. Divisions are the smallest organizational units aboard, and consist of groups of enlisted specialists organized according to skills.

Every piece of material on the ship from the propeller to the paint job is assigned to a division and finally to an individual technician for its care. Each of these men soon becomes an expert not only in the technical functions to which their special training has been directed, but also in the demands of administration, leadership and instruction of their shipmates.



There is a second organization aboard the ship: the watch organization. Whereas the first organization is designed to maintain equipment, train and administer to various groups of men, the watch organization is designed to conduct and coordinate the actual operations of the ship around the clock. This organization is ordinarily divided into three similar groups called "sections." At any given time on the submarine one of these sections "has the watch." Each watch section is headed by the Officer of the Deck who carries out the Commanding Officer's orders during the hours of his watch. It is the Officer of the Deck who orders the ship's course, speed and depth, and conducts all combined shipboard evolutions. He is assisted by a second officer, the Engineering Officer of the Watch, who controls the reactor plant and all engineering evolutions in the propulsion plant.

Each watch section consists, for example, of helmsmen, who steer the ship; throttlemen, to control the steam turbine engines; sonar operators, who listen for surface ships, submarines, and other contacts; auxiliarmen and electronic technicians who operate and maintain the ship's atmosphere control and auxiliary systems; machinists who maintain the propulsion systems; reactor operators, who control the ship's remarkable energy source; torpedomen and fire control technicians to service and launch weapons; radio operators, who maintain an invisible link with command centers ashore; and electricians, who supply power from the reactor for virtually every service on the ship. These watchstanders, among others, stand alertly by their equipment and stations throughout the duration of each watch.

The tempo of the watch is the heartbeat of the ship and, since one third of a submariner's time is spent standing watch, it is also the principle determinant of his day-to-day routine.



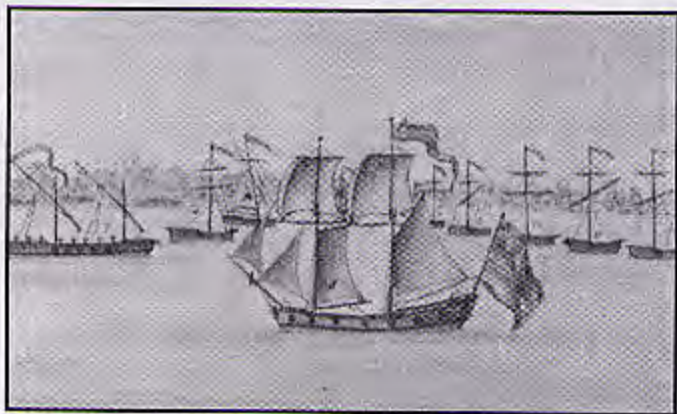






## *HISTORY OF SHIPS NAMED CONNECTICUT*

The first **CONNECTICUT**, a gondola, had a complement of 45 and carried an armament of one 12-pounder and two 9-pounder cannons. She was built at Skenesborough, N.Y., in 1776 for service with the Continental Army on Lake Champlain. Commanded by Army Captain Grant, she joined General Benedict Arnold's fleet by 20 August 1776 and took part in the Battle of Valcour Island on 11, 12, and 13 October 1776. This fleet action on Lake Champlain effectively delayed the British advance from Canada, and gained for the United States valuable time to strengthen their forces which made possible the decisive American victory at Saratoga on 17 October 1777. Threatened with capture at Split Rock on the last day of battle, **CONNECTICUT** was burned on Arnold's orders to prevent her capture by the enemy.



The second **CONNECTICUT** displaced 492 tons and had a complement of 180 and carried an armament of twenty-six 12-pounders. She was built by Seth Overton at Chatham, Connecticut and launched 6 June 1799 at Middletown, Connecticut. She sailed 15 October 1799 under the command of Captain M. Tryon for the Guadaloupe Station, and cruised in the West Indies for a year during the Quasi-War with France, protecting American commerce from French privateers. **CONNECTICUT**'s successful career was highlighted by the capture of four privateers and the recapture of seven American merchantmen before arriving at New London, Connecticut on 18 October 1800. **CONNECTICUT** was sold at New York in 1801.



The third CONNECTICUT, a side wheel steamer with a displacement of 1,725 tons, had a length of 251' 6", a beam of 38' 2" and depth (in hold) of 22' 8". She had a speed of 10 knots, a complement of 166 and an armament of four 32-pounders and one 12-pounder. She was built in 1861 by William Webb, N.Y.; purchased by the Navy 18 July 1861; and commissioned 23 August 1861, Commander M. Woodhull in command.



CONNECTICUT sailed on her first voyage 25 August 1861, delivered men and supplies to ships on the blockade along the Atlantic and Gulf coasts as far as Galveston, Texas, and returned to New York 29 September. Following two patrols, from 16 to 24 October and from 10 November to 17 December, in search of Confederate State cruiser Nashville, CONNECTICUT returned to cargo duty, making five voyages similar to her first between 7 January and 15 November 1862. She also captured four schooners with valuable cargo during this period.

Out of commission for repairs at New York from 24 November to 15 December 1862, CONNECTICUT left in tow of Montauk 24 December for duty as convoy and tow ship off Aspinwall, Panama, until returning to New York 6 June 1863.

During CONNECTICUT's next cruise, from 10 August 1863 to 25 July 1864, she operated most successfully with the North Atlantic Blockading Squadron off Virginia and North Carolina. She captured five vessels and drove a sixth ashore, abandoned and burned by its crew. Included were the English steamer Minnie, captured 9 May 1864 with a cargo of cotton, tobacco, turpentine, and gold, one of the most valuable prizes taken during the war; and the British steamer Greyhound, taken on 10 May, which carried in addition to her cargo of cotton, tobacco, and turpentine, the famous Confederate spy Belle Boyd.

Following another cruise carrying men to the fleet between 30 July and 5 October 1864, CONNECTICUT was placed out of commission at Boston from 7 October 1864 to 17 February 1865. Her last cruise from 21 February to 3 August 1865 was in the West Indies and on the east coast, searching for Confederate privateers and towing monitors from Port Royal to Philadelphia. CONNECTICUT was decommissioned 11 August 1865 at Philadelphia Navy Yard and sold 21 September 1865.

The fourth CONNECTICUT (BB-18) displaced 16,000 tons and had a length of 456' 4", a beam of 76' 10", a draft of 24' 6" and a speed of 18 knots. She had a complement of 827 and had an armament of four 12" guns, eight 8" guns and twelve 7" guns. She was launched 29 September 1904 by New York Navy Yard; sponsored by Miss A. Welles, granddaughter of Gideon Welles, Secretary of the Navy during the Civil War; and commissioned 29 September 1906, Captain W. Swift in command.





Joining the Atlantic Fleet, CONNECTICUT became flagship 16 April 1907, and later that month joined in the Presidential Fleet Review and other ceremonies opening the Jamestown Exposition. On 16 December 1907, still flagship, she sailed from Hampton Roads on the cruise round the world of the Great White Fleet. On 8 May 1908, the Atlantic Fleet joined the Pacific Fleet in San Francisco Bay for a review by the Secretary of the Navy, and the combined fleets continued their cruise, with CONNECTICUT as flagship, showing the flag and bringing a show of American strength to many parts of the world. The fleet returned to Hampton Roads 22 February 1909.

Continuing to serve as flagship for the Atlantic Fleet until 1912, CONNECTICUT cruised the east coast and the Caribbean from her base at Norfolk, conducting training and joining in ceremonial observances. Between 2 November 1910 and 17 March 1911, she made an extended cruise in European waters on a scouting problem. Between 1913 and 1915, CONNECTICUT served with the Fourth Division, Atlantic Fleet, usually as flagship. Aside from a brief cruise to the Mediterranean in October and November 1913, she served in the Caribbean, protecting American citizens and interests during disturbances in Mexico and Haiti.

After repairs and temporary service as receiving ship at Philadelphia Navy Yard in 1916, CONNECTICUT returned to full commission 3 October 1916 as flagship of the Fifth Division, Battleship Force, Atlantic Fleet. She operated along the east coast and in the Caribbean until the United States entered World War I. Based in the York River, Virginia, during the war, she exercised in Chesapeake Bay, and trained both midshipmen and gun crews for merchant ships. At the close of the war, she was fitted out for transport duty, and between 6 January and 22 June 1919 made four voyages to return troops from France. On 23 June 1919, she was reassigned, becoming flagship of Battleship Squadron 2, Atlantic Fleet.

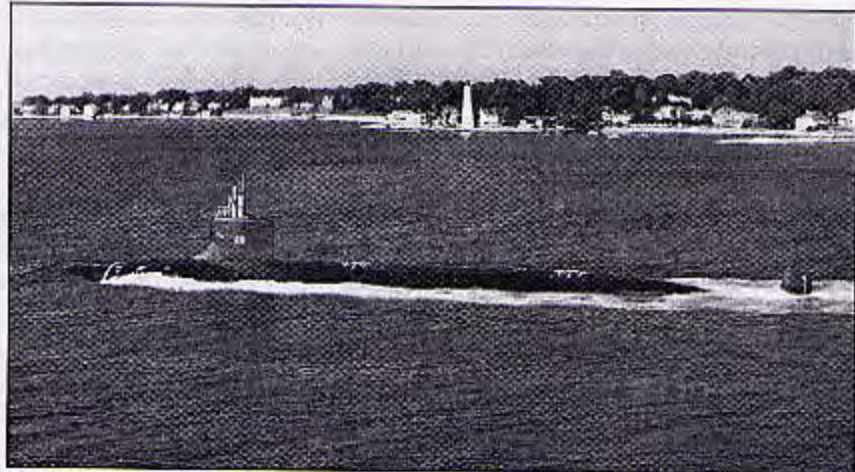


In the summer of 1920, CONNECTICUT sailed to the Caribbean and the west coast on a midshipman-Naval Reserve training cruise. The next summer found her in European ports on similar duty, and upon her return to Philadelphia 21 August 1921, was reassigned as flagship Train, Pacific Fleet. She arrived at San Pedro, California, 28 October, and during the following year cruised along the west coast, taking part in exercises and commemorations. Entering Puget Sound Navy Yard 16 December 1922, CONNECTICUT was decommissioned there 1 March 1923, and sold for scrapping 1 November 1923, in accordance with the Washington Treaty for the limitation of naval armaments.

USS CONNECTICUT (SSN 22), the Navy's newest and most advanced attack submarine is the fifth ship to bear the name of the fifth state admitted into the union. CONNECTICUT is manned with the most talented, hand picked officers and enlisted men the submarine force has to offer.

The SEAWOLF-class submarine provides the Navy with advanced weapons and tactical capabilities. CONNECTICUT, the second of three SEAWOLF-class submarines to be built, is designed to be the world's quietest submarine, designed to be less detectable at high speed than a LOS ANGELES-class submarine is while sitting at the pier. Compared to previous SSNs, it has an increased weapons load of torpedoes and cruise missiles. CONNECTICUT provides the Navy with the fastest, quietest, and most heavily-armed attack submarine in the world today. Its robust design supports missions including surveillance, intelligence collection, special warfare, covert cruise missile strike, mine warfare, anti-submarine and anti-ship warfare.

Over 300 suppliers in the state of Connecticut provided material and services to help build CONNECTICUT.



## *CONNECTICUT'S STATISTICS*

<b>LENGTH:</b>	353 feet
<b>BEAM:</b>	40 feet
<b>DISPLACEMENT:</b>	9150 tons submerged 8060 tons surfaced
<b>BUILDER:</b>	Electric Boat Corporation
<b>KEEL LAID:</b>	September 14, 1992
<b>SHIP SPONSOR:</b>	Patricia L. Rowland
<b>CHRISTENED:</b>	September 1, 1997
<b>COMMISSIONED:</b>	December 11, 1998
<b>COMPLEMENT:</b>	14 Officers 126 Enlisted
<b>ARMAMENT:</b>	ADCAP Torpedoes; Tomahawk Cruise Missiles
<b>WEAPON DELIVERY:</b>	8 Torpedo Tubes
<b>SPEED:</b>	Greater than 25 knots
<b>DEPTH:</b>	Greater than 800 feet



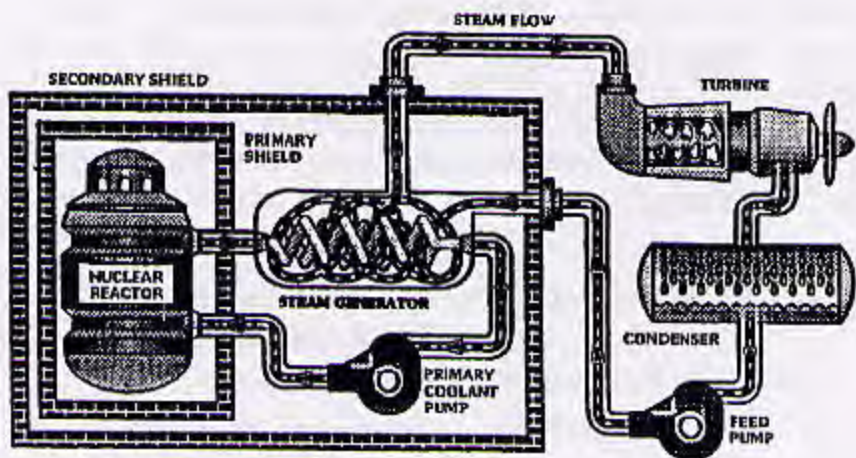
The propulsion plant of a nuclear powered ship is based upon use of a nuclear reactor to provide heat. The heat comes from the fissioning of nuclear fuel contained within the reactor. Since the fissioning process also produces radiation, shields are placed around the reactor so that the crew is protected.

The nuclear propulsion plant in the ship uses a pressurized water reactor design which has two basic systems: the primary system and the secondary system. The primary system circulates ordinary water and consists of the reactor, piping loops, pumps and steam generators. The heat produced in the reactor is transferred to the water under high pressure so it does not boil. The water is pumped through the steam generators and back to the reactor for reheating.

In the steam generators, the heat from the water in the primary system is transferred to the secondary system to create steam. The secondary system is isolated from the primary system so that the water in the two systems does not intermix.

In the secondary system, the steam flows from the steam generators to drive the turbine generators, which supply the ship with electricity, and to the main propulsion turbines, which drive the propeller. After passing through the turbines, the steam is condensed into water which is fed back to the steam generators by the feed pumps. Thus, both the primary and secondary systems are closed systems where water is recirculated and reused.

There is no step in the generation of this power which requires the presence of oxygen. This allows the ship to operate completely independent from the earth's atmosphere for extended periods of time. The fuel in the reactor's core will last approximately thirty years, the life of the ship.



**NUCLEAR REACTOR POWER PLANT DIAGRAM**



## EMERGENCY AIR BREATHING MASK INSTRUCTIONS



70024 48

**Tighten side straps first, then tighten the top strap. Completely loosen all straps upon removal.**

Emergency Air Breathing masks are used when the ship's atmosphere is hazardous to breathe. They are located in identified lockers throughout the ship. The manifolds are red in color, and red non-skid strips below each manifold identify their location.



## *The Submariner*

Only a submariner realizes to what great extent an entire ship depends on him as an individual. To a landsman this is not understandable, and sometimes it is even difficult for us to comprehend, but it is so!

A submarine at sea is a different world in herself, and in consideration of the protracted and distant operations of submarines, the Navy must place responsibility and trust in the hands of those who take such ships to sea.

In each submarine there are men who, in the hour of emergency or peril at sea, can turn to each other. These men are ultimately responsible to themselves and each to the other for all aspects of operation of their submarine. They are the crew. They are the ship.

This is perhaps the most difficult and demanding assignment in the Navy. There is not an instant during his tour as a submariner that he can escape the grasp of responsibility. His privileges in view of his obligations are almost ludicrously small, nevertheless, it is the spur which has given the Navy its greatest mariners — The men of the Submarine Service.

It is a duty which most richly deserves the proud and time-honored title of — Submariner.





# USS CONNECTICUT

**Nuclear Powered Attack Submarine**

**Named In Honor Of The State Of**

# CONNECTICUT

*Built By*

**GENERAL DYNAMICS**

Electric Boat Division  
Groton, Connecticut

KEEL LAID . . . . . September 14, 1992  
LAUNCHED . . . . . September 1, 1997  
COMMISSIONED . . . . . December 11, 1998

CHRISTENED September 1, 1997  
By Patricia L. Rowland



**USS CONNECTICUT (SSN 22)**

