

Welcome Aboard



HISTORY OF USS TREPANG

USS TREPANG (SSN-674) is the second United States Naval ship to bear that name. The first TREPANG was a fleet type submarine built by Mare Island Shipyard, launched 23 March 1944 and commissioned 22 May-1944. TREPANG was decommissioned on 27 June 1946 after several successful war patrols and remained inactive until her name was stricken from the Navy list on 30 June 1967.

The present TREPANG is a nuclear powered attack submarine of the Sturgeon class built by Electric Boat Division of the General Dynamics Corporation. She is 292 feet long with a beam 32 feet and a surface displacement of 4250 tons. Her keel was laid on 28 October 1967, launched on 27 September 1969 and placed in commission on 14 August 1970. TREPANG employs the latest advances in submarine technology in all areas including sonar, weapons, and propulsion. She is capable of speeds in excess of 20 knots and depths in excess of 400 feet. TREPANG has a complement of 12 officers and 107 men. Three characteristics make TREPANG one of the Navy's most effective Anti-Submarine Warfare Weapons in existence today.

TREPANG was attached to Submarine Development Group Two, New London, Connecticut from her commissioning until March 1975. During this time she was involved in many highly valuable research and development projects. TREPANG is currently attached to Submarine Squadron TEN and is homeported in New London, Connecticut.

TREPANG completed a regular one-year overhaul at Portsmouth Naval Shipyard, Kittery, Maine in October 1975.

TREPANG has completed two Mediterranean deployments and has also completed five extensive deployments to the North Atlantic. TREPANG has received two Meritorious Unit Commendations a Navy Unit Commendation the Commander U.S. Sixth Fleet Anti-Submarine Warfare excellence award.



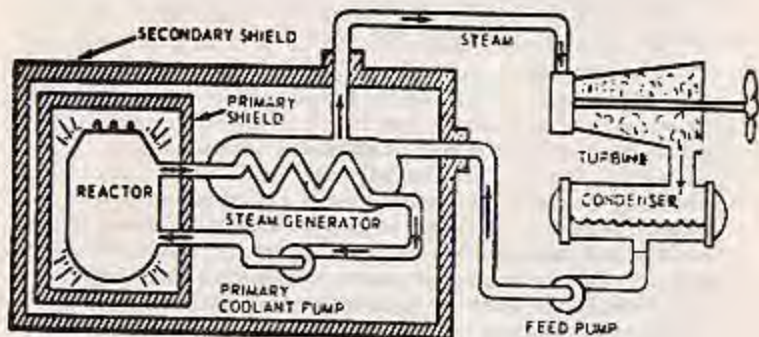
COMPARTMENTATION

ENGINEERING- These spaces provide room for the turbines which produce electrical power and the propulsion turbines which drive the ship. The propulsion turbines are accompanied by reduction gears which transmit the power to the shaft, ultimately turning the screw to give motion to the ship. The entire Engineering Department is permeated with steam and various fluid systems to supply the main and auxiliary components of the engineering system.

OPERATIONS- This area, between the bow compartment and engineering spaces, provides space for navigational equipments, ship control, and various habitability areas. The radio room, sonar room, officers staterooms, wardroom, and ship's offices are also contained herein. The lower level of the operations-compartment is primarily occupied by the torpedo room.

BOW COMPARTMENT- This portion of the boat is primarily a habitability space sleeping 67 men. Quarters for the chief petty officers are found here as are the diesel generator and the forward escape trunk.

THE POWER PLANT



The power plant of a nuclear submarine is based upon a nuclear reactor which provides heat for the generation of steam. This, in turn, drives the main propulsion turbines and the ship's turbo-generators for electric power.

Heat produced in the reactor by nuclear fission is transferred to the circulating primary coolant water which is pressurized to prevent boiling. This water is then pumped through the steam generator and back into the reactor by the primary coolant pumps for reheating in the next cycle.

In the steam generator, the heat of the pressurized water is transferred to a secondary system to boil water into steam. This secondary system is isolated from the primary system.

After passing through the turbines, which drive the propeller, the steam is condensed and the water is fed back into the steam generators by the feed pumps.

During the operation of the nuclear power plant, high levels of radiation exist around the reactor and personnel are not permitted to enter the reactor compartment. Heavy shielding protects the crew so that the crew member receives less radiation on submerged patrol than he would receive from natural sources ashore.

AUXILIARIES

The nuclear power plant gives the TREPANG the ability to remain deployed and submerged for extended periods of time. To take advantage of this, the ship is outfitted with extensive auxiliary equipment to provide for the needs of the crew.

The TREPANG'S atmosphere control equipment consists of oxygen tanks, which make up for that used by the crew, and scrubbers and burners which remove carbon dioxide and other atmosphere contaminants. The ship's air is continuously monitored when submerged by an installed atmosphere analyzer, and by various portable analysis equipment maintained by the Medical Department. It is also monitored for airborne and gaseous radiation, to ensure that exposure from these sources is kept below that allowed for the general public.

The ship is equipped with two distilling plants, which convert salt water to fresh water for drinking, washing, and supplying water to the propulsion plant. TREPANG also has its own laundry, and even its own ice cream machine.

COMMUNICATIONS

TREPANG is completely outfitted with the wide variety of antennas, transmitters, and receivers necessary for this task. Interior communications is possible on a wide range of circuits, including announcing circuits and sound powered phones which do not require electrical power and are reliable in a battle situation. Various alarm and indicating circuits give the Officer of the Deck and the Engineering Officer of the Watch a complete picture of what is going on throughout the ship.

NAVIGATION

Keeping track of the ship's position while submerged is difficult and important, and requires a complex navigational system. TREPANG has the capabilities of using electronic celestial or visual navigation. The highly accurate electronic navigation systems consists of LORAN and satellite navigation equipment.

WEAPONS

True submarines like TREPANG are fitted with modern antisubmarine fire control and sonar equipment, and are effective single weapon system available to combat other submarines. The torpedo tubes along with her fire control and SONAR system enable TREPANG to meet the challenge provided by any target.

SUPPLY

None of the complex equipment and machinery of the ship could function without the support of the supply department. The repair parts carried on board number in the hundreds of thousands, yet any one can be provided in a manner of minutes. The supply department also carries enough food to feed a crew of over one hundred for as long as 90 days, in the quality for which the Submarine Force is famous.

EMERGENCIES

In the event of an emergency, stand fast but clear of all passageways and watertight doors so that ship's force personnel may be free to proceed to the scene. The crewman in charge of the compartment will direct your movements and keep you informed as soon as he is able. If you are requested to clear an area, do so expeditiously and quietly. If you are requested to put on Emergency Air Breathing Masks, they will be given to you, you will be shown where to plug them in and assisted in donning them. The EAB manifolds throughout the ship are painted red. Put the mask on, secure it snugly around your head with all six straps, and breath normally.

Should you see water leaking or smell smoke, or have any question concerning the safety of the ship, please call it to the attention of one of the crewmen who will take proper action.

PERSONNEL RADIATION MONITORING

The ships corpsman will contact you shortly after coming on board (if for other than a brief visit) and to determine the need for you to wear a thermoluminescent device (TLD) and to assist you in completing the necessary documentation. TLD's shall be worn on the front portion of the body at waist level exterior to all clothing. Loss of TLD shall be reported to the ships corpsman. TLD's issued by the ship shall be turned in to the ship's Corpsman prior to debarkation.

CAUTION

Do not attempt to operate any equipment, twist knobs, flip switches, or turn any valves.

Please observe all warning signs.

MEDICAL FACILITIES

The ship has a Hospital Corpsman available at all times and he should be consulted for any illness or injury that may occur during the cruise. It is recommended that persons susceptible to motion sickness obtain medication prior to getting underway. He may be contacted through the Chief of the Watch in Control by dialing 0 on any Dial X phone.

SECURITY

Most features of the ship are of a classified nature. In addition, Sonar, Radio, ECM Room, Sonar Equipment Space, Nucleonics Laboratory and all spaces aft of the Operations Compartment are security areas and only authorized personnel are permitted. Information concerning speed, depth, weapons, fire control, sonar, ECM and the propulsion plant are classified.

ORDERS

If you are under military orders, please turn your orders in to the Leading Yeoman in the Ship's Office directly aft of the Operations Compartment access ladder. Your orders will be endorsed and ready for you to pick up at the end of your visit.

LIVING ACCOMODATIONS

Berthing is assigned visitors embarking upon their arrival. Please use only the berth assigned you so that you can be located if necessary.

Heads and washrooms are located in the Operations Compartment Middle Level. Before using a head for the first time, please consult a member of the crew for flushing procedures. Do not discard any solid object no matter how small, into the water closet as it may foul the seat of the overboard discharge valve.

Showers may be taken anytime, but because the number of shower facilities are very limited, showers should be taken as expeditiously as possible. There is no restriction on water. However, the ship's water making capacity, however large, precludes the "wasting" of water.

Messing arrangements have been made for you and you have been assigned a specific area and time to eat. All meals must be served in shifts so you are requested to be punctual in your arrival for meals and not to linger over coffee after finishing. Meals will not be announced but will be served on time. Please see the attached card giving your berthing place and the number and location of your mess seating. Smoking is normally permitted throughout the ship except in bunks, bilge areas, or in the vicinity of pyrotechnics or oxygen stations, however the smoking lamp may be put out for certain evolutions.

ACCESS AND CONGESTION

Visitors are always welcome in authorized spaces when the operations of the ship permit. However, at most operating and control stations space is very limited. As a result, it is necessary for persons not actually working in those spaces to obtain authorization prior to entering. If allowed in an area so controlled, you will be requested to leave when necessary. Out of necessity, guests cannot be accommodated on the bridge. Summarized below are areas designated as access controlled areas and the person authorized to all visitors:

Control Room	Officer of the Deck BCP Operator (on the surface)
Sonar Control	Sonar Supervisor (Restricted Area)
Maneuvering Room	Engineering Officer of the Watch
Radio Room	Radioman of the Watch (Restricted Area)
ECM Room	ECM Watchstander (Restricted Area)

CALLS

For embarked visitors, calls are made by the Chief of the Watch (in the control room). He will ensure that a visitor is called anytime the visitor designates.