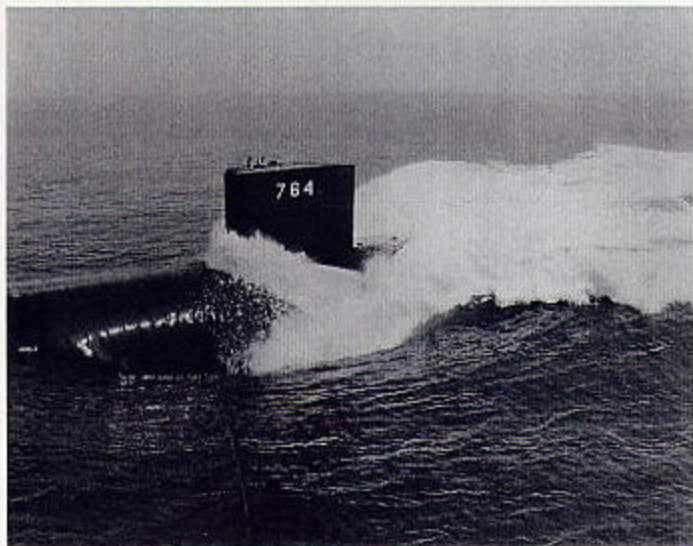


WELCOME ABOARD



USS BOISE
SSN 764

**NUCLEAR-POWERED
ATTACK SUBMARINE**



USS BOISE (SSN 764)

LENGTH: 360 FEET
DISPLACEMENT (SURFACED): 6,135 TONS
SUBMERGED: 6,902 TONS
HULL DIAMETER: 33 FEET
DRAFT: 32 FEET
COMPLEMENT: 14 OFFICERS
115 ENLISTED
129 TOTAL
KEEL LAID: 25 AUGUST 1988
CHRISTENED: 20 OCTOBER 1990
COMMISSIONED: 7 NOVEMBER 1992



USS BOISE (SSN 764)

WELCOME ABOARD!

On behalf of the officers and men of BOISE, I take pleasure in extending to you the hospitality of the Submarine Force of the United States Navy. It is our desire to make your stay with us as pleasant as possible. All members of the ship's crew are ready to assist you in any way possible - you have only to ask.

The men of BOISE typify the high level of professionalism, skill, and reliability traditionally found in the Submarine Force. They come to us from all walks of life and represent almost every state, but share a common goal - to operate the finest ship in the Navy at the forefront of our nation's defense.

The officers and crew will do their best to answer your questions about USS BOISE. We hope your time on board will be informative, interesting, and enjoyable.

**COMMANDING OFFICER
USS BOISE (SSN 764)**



**COMMANDER
DAVID L. LEACH
UNITED STATES NAVY**

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DAVID L. LEACH
UNITED STATES NAVY**

Commander David L. Leach, a native of Normal, Illinois, began his naval career in 1976 as an enlisted dental technician at the Naval Air station in Bermuda. After two years of service, he attended the University of Southern California earning a Bachelor of Science Degree in Mechanical Engineering in 1981.

Following nuclear power training, Commander Leach reported for duty on the USS HOUSTON (SSN 713) in 1983 where he served for three years in a variety of division officer billets. The ship completed post-shakedown availability, an interfleet transfer, six operational Tomahawk missile launches and a three month Western Pacific deployment during his tour.

After attending the Submarine Officer Advanced Course in 1986, he served as the Combat Systems Officer on USS HONOLULU (SSN 718). The ship completed an interfleet transfer to Hawaii and a Western Pacific Deployment. Commander Leach continued at sea as Engineering Officer on USS LOS ANGELES (SSN 688) where he was selected as the 1989 Junior Officer Shiphandler of the Year. He completed a Western Pacific Deployment and three Northern Pacific Deployments during his tour.

In 1991, Commander Leach reported to the staff of Commander, Submarine Force, U. S. Pacific Fleet where he served one year as Force Exercise Officer and one year as Current Operations Officer. He then served as Executive Officer of USS GEORGIA (SSBN 729)(BLUE), successfully completing three strategic deterrent patrols. During this tour, Commander Leach completed a Master of Science degree in Information Systems from Hawaii Pacific University. Commander Leach most recently served for two years as Deputy to the Special Assistant for Legislative Matters for the Chief of Naval Personnel in Washington, DC.

Commander Leach is authorized to wear the Meritorious Service Medal, the Navy and Marine Corps Commendation Medal with one silver star (six awards), and various unit awards including two Meritorious Unit Commendations and the Battle "E" ribbon.

Commander Leach is married to Laurie Ann Lubinski of Napa, California. They have one teenaged son, David.

THE CITY OF BOISE

"Les bois!" were the words cried by a French Canadian fur trapper upon sighting the unexpected Eden as he crossed the Northwest desert plains in 1811. The unknown trapper is lost to history; however, his amazed cry still echoes in the name of Boise, city of trees, and capital of Idaho.

Boise's history resounds with the clang of the miner's pick and the clatter of covered wagon wheels. In 1863, an army detachment established Fort Boise to protect prospectors and homesteaders traveling the Oregon Trail. A year later, Boise became territorial capital of Idaho and a settler planted 7,000 apple trees along the Boise River bank, establishing an orchard. Inspired teams of townsmen built dams along the river and carved irrigation ditches into the surrounding desert. Soon, sagebrush plains bloomed into rich farmland.

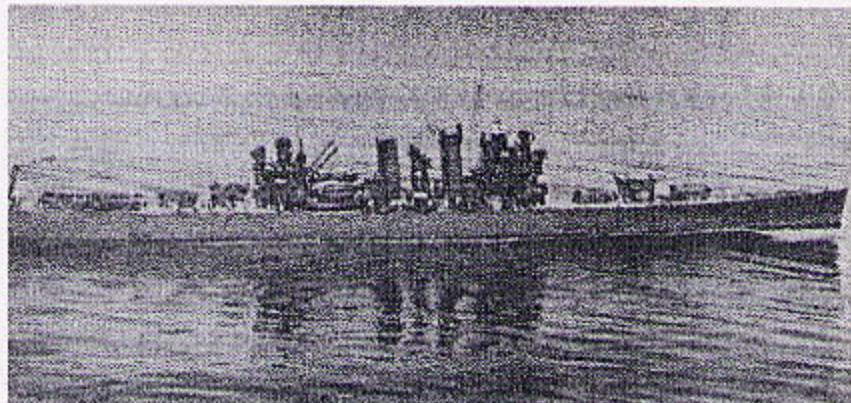
In 1890, Idaho attained statehood, Boise became its capital and the town's population nearly doubled in the next three months, from 2,500 to more than 4,000. By then Boise had electricity, telephone, telegraph and Union Pacific Railway services.

The peace and tranquility of the rustic Rocky Mountains drew Boise families for summer camping. Laughter and singing rang on the winter air as horses pulled sleighs along snowy woodland trails, and the word spread about the good life in Boise. In neighboring Utah, the Salt Lake City Tribune reported, "Clear-sighted American grit and enterprise have within 20 years built a town which is the pride of citizens and the admiration of strangers". The writer added wryly, "From a sanitary standpoint, the place is the admiration of everyone - except the doctors and undertakers."

Over a century later, the reporter's praise holds true. Boise is unquestionably a healthy place to live. According to American Hospital Statistics, Boise residents and fellow Idahoans are, on average, hospitalized less frequently than other U.S. citizens. Parenting magazine selected Boise as one of the top U.S. cities for raising children.

Boise also has more national and international corporate operations than any other city with a population under 1 million. It is world headquarters of Boise Cascade, Albertsons, Trus-Joist, Micron, J.R. Simplot Company and Morrison-Knudsen. Boise business advantages have drawn more than 1,500 new enterprises over the past several years, it is the city's reputation as a scenic wonderland and sporting paradise that attracts vacationers.

A small wonder, located in aptly named Treasure Valley, Boise unfolds in ribbons of scenic grandeur that strike today's visitor no less dramatically than the French Canadian trapper of 1811. At eye level, there's the blue sparkle of the Boise River. Just above it is a lush green band of woodlands that meanders right through the center of town. Over the treetops rise city spires and skyscrapers. And presiding over all are the indigo peaks of the Rocky Mountains, piercing a sapphire sky that seems to go on forever.



USS BOISE (CL-47)

Ships named USS BOISE

USS BOISE (CL-47), the only previous Navy ship named after Idaho's capital, was a light cruiser of the Brooklyn Class built by the Newport News Shipbuilding and Drydock Company. Commissioned on August 12, 1938, she soon established a record of accomplishments in World War II that was second to none. Cruisers being the lightweights of the Fleet, BOISE was big enough to pack a murderous wallop, yet fast enough to flash through and around the enemy.

During the 44 months that the United States was at war, BOISE served 35 months overseas. She operated in the Netherlands, East Indies, the Western Pacific, including Philippine waters, and the Mediterranean. She participated in two night surface attacks, and fourteen major invasions and shore bombardments, yet was damaged by enemy fire only once. Her crew earned the American Defense Service Medal with Fleet Clasp, the Asiatic Pacific Medal with nine bronze stars, the World War II Victory Medal and the Philippine Presidential Unit Citation.

In 1951 the Argentine Navy purchased the USS BOISE (CL-47) from the United States at a cost of approximately \$7,800,000. She officially transferred on April 12, 1951 and was commissioned at Philadelphia on March 11, 1952 as Nueve de Julio. The name refers to 9 July 1816, when Argentine provinces signed their Declaration of Independence.

In August 1981, this once proud ship of Cruisers Battle Force reentered U.S. waters at Brownsville (Texas) Ship Channel where she was cut up for scrap metal at Manchester Sling Inc.



BOISE
KSN 760

HISTORY OF USS BOISE (SSN 764)

DEPLOYMENTS

MEDITERRANEAN SEA/INDIAN OCEAN 1995

NORTH ATLANTIC OCEAN 1996

MEDITERRANEAN/NORTH ATLANTIC 1998

UNIT AWARDS

SILVER ANCHOR 1993

MERITORIOUS UNIT COMMENDATION 1995

SEA SERVICE RIBBON 1995

RED ENGINEERING "E" 1996

NAVY EXPEDITIONARY MEDAL 1996

ARCTIC SERVICE RIBBON 1996

SEA SERVICE RIBBON 1996

ARCTIC SERVICE RIBBON 1998

SEA SERVICE RIBBON 1998

VITAL STATISTICS

Keel Laid	August 25, 1988
Christened	October 20, 1990
Launched	March 23, 1991
Commissioned	November 7, 1992
Sponsor	Mrs. Louise M. McClure
Length	360 feet
Diameter	33 feet
Displacement(submerged)	6900 tons
Speed	Greater than 25 knots
Maximum diving depth	Greater than 800 feet
Endurance	Unlimited
Armament	12 Tomahawk missiles (vertical launch), 28 Mk 48 ADCAP torpedoes/ Tomahawk missiles (torpedo tube launched)
Complement (approx.)	14 Officers, 15 Chief Petty Officers, 100 E-6 and below (129 total)

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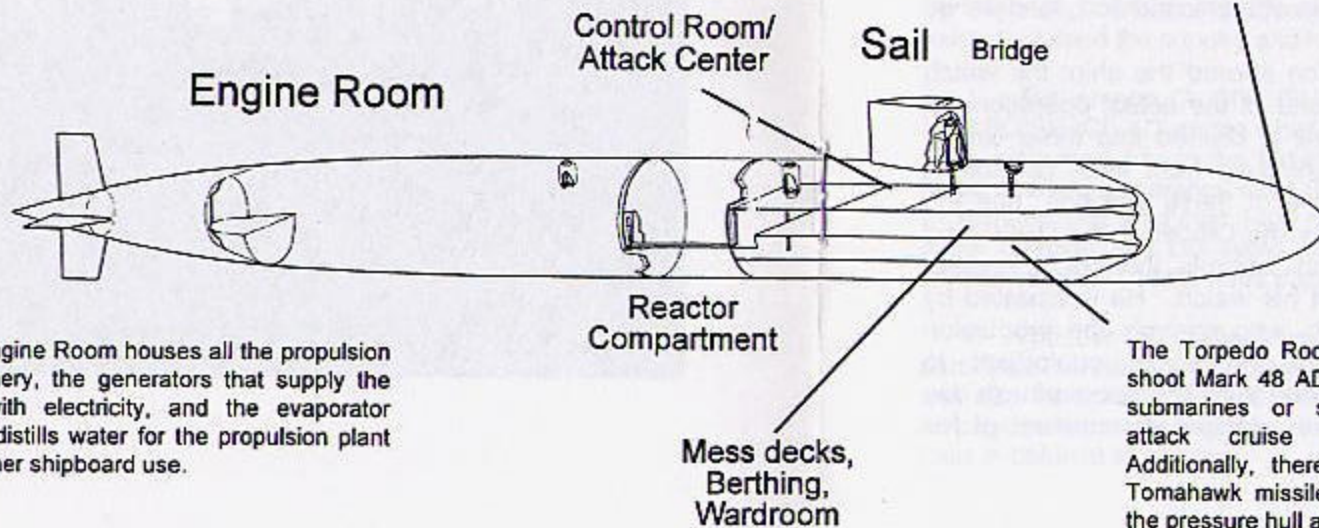
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The Los Angeles Class

Submarines of the Los Angeles class, the U.S. Navy's most prolific class of nuclear-powered attack submarines, are among the most advanced undersea vessels of their type in the world. Their mission: to hunt down and destroy enemy surface ships and submarines. With the advent of the Tomahawk cruise missile, they have the additional role of a tactical strike mission against land-based targets.

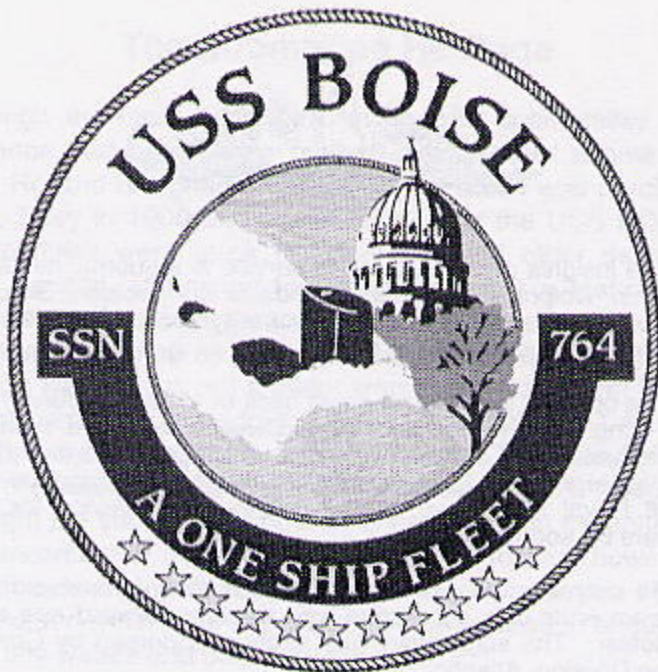
The 360 foot, 6900 ton ships are well equipped to accomplish these tasks. Faster than their predecessors and equipped with highly accurate sensors and weapon control systems, they are armed with sophisticated Mark 48 ADCAP (advanced capability) antisubmarine/anti-ship torpedoes and Tomahawk cruise missiles. The newest ships of the class, including BOISE, carry additional Tomahawk cruise missiles in vertical launch tubes in the bow. Each vessel carries a crew of about 129, 14 officers and 115 enlisted men, all specialists in their respective fields.

The Sonar Sphere, an array of over 1,000 hydrophones, is located in the bow. This is the best listening position on board since it is far removed from the propulsion machinery.



The Engine Room houses all the propulsion machinery, the generators that supply the ship with electricity, and the evaporator which distills water for the propulsion plant and other shipboard use.

The Torpedo Room has 4 tubes that can shoot Mark 48 ADCAP torpedoes at either submarines or ships, Tomahawk land-attack cruise missiles, or mines. Additionally, there are 12 vertical-launch Tomahawk missile tubes located between the pressure hull and the sonar sphere.



USS BOISE (SSN 764) SEAL

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The phrase "A ONE SHIP FLEET" was that used to describe USS BOISE (CL 47) as the Chief of Naval Operations, Admiral Ernest J. King, welcomed her to the United States for repairs following the epic battle at Cape Esperance near Guadalcanal where in the short span of 27 minutes, she fired over 1400 rounds sinking six ships while sustaining major damage and casualties of her own. BOISE's wartime exploits earned her the 11 battle stars displayed on the emblem.

With her impressive firepower, incredible endurance and ability to participate in nearly every facet of naval warfare, the submarine BOISE can also be termed "A ONE SHIP FLEET". She will proudly carry the heritage of her namesake city and naval predecessor as she roams the seas in defense of freedom.



The insignia of the submarine service is a submarine flanked by two dolphins. Dolphins, traditional attendants to Poseidon, Greek god of the sea and patron and deity of sailors, are symbolic of a calm sea and are sometimes called the sailors friend."

The origin of the insignia dates back to 1912. On June 13, CAPT Ernest J. King Commander Submarine Division 3, later a World War II fleet admiral and Chief of Naval Operations, suggested to then-Secretary of the Navy George von L. Meyer, via the Bureau of Navigation (now the Bureau of Naval Personnel), that a distinguishing device for qualified submariners be adopted.

He submitted his pen and ink sketch showing a shield mounted on the beam ends of a submarine with dolphins forward and aft of the conning tower. The suggestion was strongly endorsed by Commander Submarine Division, Atlantic.

A Philadelphia firm, previously contracted by the Navy, was also asked to design a suitable badge. The firm submitted two designs which were combined into the single design used today. It consisted of a bow view of a submarine cruising on the surface, with bow planes rigged for diving, flanked by dolphins in a horizontal position with their heads resting on the upper edges of the bow planes.

Originally, the insignia was to be worn at all times by officers and enlisted men qualified in submarine duty and attached to submarine units or organizations ashore or afloat, and not to be worn when not attached.

The officers' insignia was a bronze, gold-plated pin, worn centered above the left breast pocket and above ribbons or medals. Enlisted men wore the insignia embroidered on silk, in white on blue for blue clothing, and blue on white for white clothing. This was sewn on the outside of the right sleeve, midway between the wrist and the elbow. The device was 2.75 inches long.

In mid-1947, the embroidered device shifted from the sleeve of the enlisted men's jumper to above the left breast pocket. A change to uniform regulations dated September 21, 1950, authorized the embroidered insignia for officers and a bronze, silver-plated pin-on insignia for enlisted men.

In more recent times, insignias for specialist officers in the Submarine Force have been developed. These include the Engineering Duty dolphins, Medical Officer dolphins, and Supply Corps dolphins. Regardless of the pin or the insignia at the center, dolphins are worn with pride by members of the Submarine Force.

The Submarine Heritage

Although inventors had been toying with submersible craft for years, none had produced a really practical naval submarine until John P. Holland designed and built a boat which was purchased by the U.S. Navy in 1900 and commissioned as the USS HOLLAND. Other countries were quick to adopt this and other designs, and within a decade, submarine forces had become a feature of most major navies. However, almost all naval authorities of the period viewed the submarine as a coastal and harbor defense craft. The submarine was a boat, not a major warship, and the term "boat" has remained common usage to this day. The HOLLAND was initially looked upon as an experimental curiosity. The Navy violated a century of tradition by naming the little vessel after a living person, but thought the submarine would be a passing, non essential step in the advancement of naval warfare. John P. Holland, however, saw beyond the current limitations of his primitive prototype. His vision was that of a new class of warship, powerful enough to engage major fleets in any waters and dominate the seas.

Following the Japanese attack on Pearl Harbor on December 7, 1941, the Pacific Fleet was heavily damaged and unable to mount any kind of credible offensive action ... with the exception of the Submarine Force, which was initially discounted by the Japanese. USS TRITON attacked and damaged enemy warships on 10 December 1941. Asiatic Fleet submarines stationed in the Philippine Islands were already on patrol. Within three days of the devastation at Pearl Harbor, Pacific Fleet submarines GUDGEON, PLUNGER, POLLACK, POMPANO, TAUTOG, and DOLPHN commenced patrols deep into the heart of enemy waters.

Submarine attrition of Japanese shipping prevented consolidation of the empire and accounted for over 55% of all shipping losses, including 29% of Imperial warships. Although comprising only 2% of U.S. Navy personnel, submariners kept the country in the Pacific war while the fleet was rebuilding. As the war progressed, they starved the Japanese war machine of badly needed men, oil, machinery, tools, and supplies, which ended up on the ocean floor. The costs were high. Submarine casualty rates were 6 times higher than other naval forces. 52 submarines and 3,500 submariners were lost. It is the sacrifices made by these men, who remain on eternal patrol, that must be treasured, carried forward, and emulated today by the men who wear the gold and silver dolphins of the Submarine Force. This is our submarine heritage.

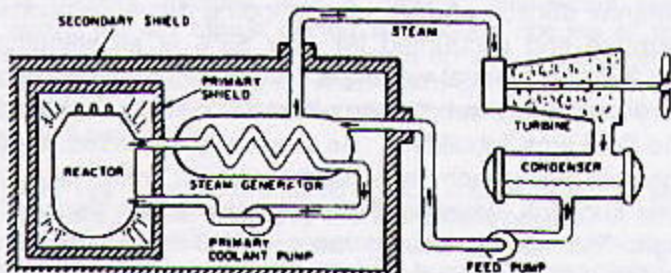
Description of a Submarine Nuclear Propulsion Plant

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 propulsion plant in this ship uses a pressurized water.

The nuclear propulsion plant is comprised of two basic systems. 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 which is under high pressure so it does not boil. This water passes through the steam generators and back into 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 the 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 air or oxygen. This allows the ship to operate completely independent from the earth's atmosphere for extended periods of time.

General Information

Please observe the following procedures while you are on board.

WARNING SIGNS: Please observe all warning signs. Consult a crewmember for assistance in any matter. Signs restrict access to some parts of the ship, such as the Engine Room and Radio Room; these signs are for your safety, as well as the security of the ship.

EMERGENCIES: Should any emergency situation arise, alarms will be sounded and the appropriate word passed. You are requested to **STAND STILL BUT REMAIN CLEAR** of all passageways and operating areas. Do not obstruct ladders, hatches, or the watertight door to the Engine Room. Allow ship's personnel to perform required actions without interference. The member of ship's company in charge at the scene will explain the situation as soon as he is able. Please follow his directions without hesitation.

OPERATION OF SHIP'S EQUIPMENT: Do not operate any equipment, switches, or valves without prior approval from ship's force. Observe posted precautions and procedures in all operations.

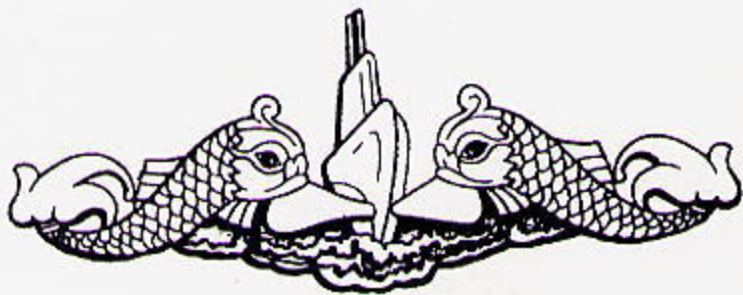
SECURITY: Certain aspects of the ship's operational characteristics and certain areas of the ship are classified. The Radio Room and Engine Room are always classified areas; underway, the Sonar Room becomes one. Please do not discuss ship's operations you may see or hear about once you leave the ship.

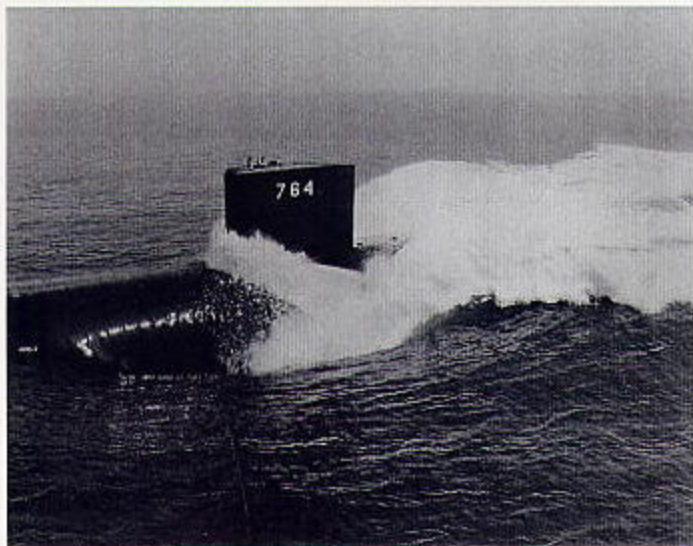
MEDICAL FACILITIES: The ship has a Hospital Corpsman available at all times; he should be consulted for any illness or injury that may occur underway. Passengers susceptible to motion sickness are advised to obtain medication prior to getting underway. The Corpsman can usually be found in the 3-inch launcher space or Crew's Mess, or may be contacted through the Chief of the Watch.

LAUNDRY: The ship's laundry is just forward of the Auxiliary Machinery Room in Forward Compartment Lower Level. The Chief of the Boat (COB) assigns laundry days, normally on a divisional basis.

HEADS: There are heads throughout the Forward Compartment. Only officers will use the Officer's Head, and Chief Petty Officers, the CPO Head. Avoid excessive use of potable water. When you shower, soap down with the water off, and then rinse; do not let the water run. There is a small push-button on the side of the shower head that acts as an on-off button without changing temperature. Ensure no articles such as pencils, rags, toothpicks, etc. fall into the commodes, as such articles can foul the pumps, valves, and piping associated with the sanitary system.





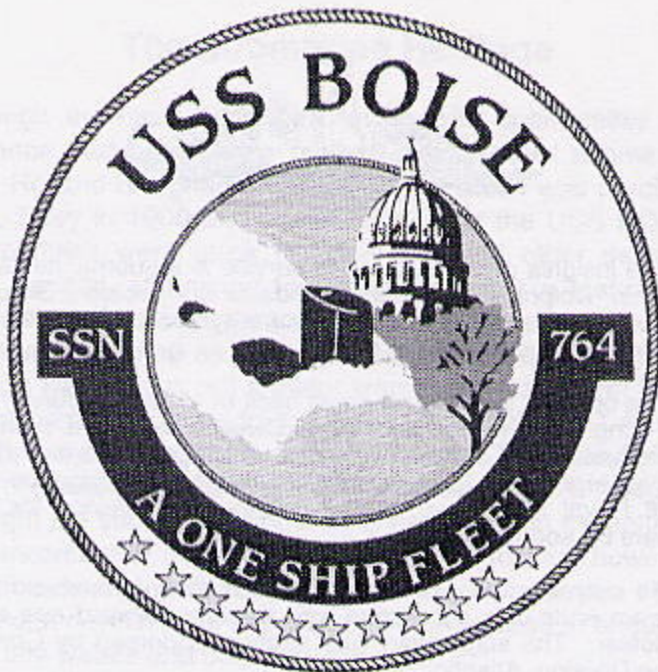


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