

# USS LOUISIANA



Welcome Aboard



**Welcome Aboard!**

**On behalf of the officers and crew of USS LOUISIANA (SSBN 743), I wish to extend a warm welcome to our guests aboard one of America's largest and most sophisticated submarines. We are proud of our ship and want your time with us to be enjoyable.**

**We invite you to ask questions! You will find the entire crew is ready, willing, and able to explain the details of their operational responsibilities and the routine of submarine life. 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 LOUISIANA herself.**

**We hope your stay aboard LOUISIANA will be a thorough introduction to the best of our nation's "Silent Service".**

**David G. Ruff  
Commander, USN**

## CHARACTERISTICS



LENGTH:	560 FEET
HULL DIAMETER:	42 FEET
DRAFT:	36 FEET
DISPLACEMENT (SUBMERGED):	18,750 TONS
SPEED:	> 25 KNOTS
DEPTH:	> 800 FEET
MISSILE TUBES:	24
TORPEDO TUBES:	4
COMPLEMENT:	
OFFICERS:	15
ENLISTED:	150
TOTAL:	165

★ USS LOUISIANA is the last Trident submarine built with the Trident II D-5 missile. She is home ported at Kings Bay, GA. With her long-range missiles, advanced sonar, and fire control systems, LOUISIANA is the most modern and survivable strategic deterrent in the entire world.

★ LOUISIANA is a highly survivable and capable sea-based deterrent system designed for operations through the next century.

★ LOUISIANA incorporates new and quieter machinery that cannot be installed in other fleet ballistic missile submarines because of space and weight constraints.

★ She has an advanced sonar system comparable to that developed for the United States Navy's newest attack submarines, capable of providing long-range detection and more effective tracking of potential threats.

★ She can defend herself with the latest MK48 ADCAP torpedoes.

★ Through the use of modular replacements for major equipment, improved design and integrated logistic support, maintenance is simplified and reliability is enhanced.

★ LOUISIANA has additional growth potential to accommodate future technology as it becomes available, both in ship systems and in larger missiles.

## **CDR David G. Ruff**



Commander David G. Ruff is a native of Hopkinsville, Kentucky. He attended the United States Naval Academy, graduating with distinction in 1982 while earning a Bachelor of Science degree in Chemistry.

Following Nuclear Propulsion Training, Commander Ruff reported aboard USS PORTSMOUTH (SSN 707), serving as Sonar Officer, Damage Control Assistant, and Main Propulsion Assistant. While onboard, PORTSMOUTH completed new construction, changed home port to San Diego, California, and deployed to the Western Pacific and Indian Oceans. Commander Ruff then reported to the Naval Postgraduate School, graduating with distinction in 1988, while earning dual Master of Science degrees in System Technology (Antisubmarine Warfare) and in Engineering Acoustics.

After Submarine Officer Advanced Training, Commander Ruff relieved as Engineer Officer of USS KAMEHAMEHA (SSBN 642) (BLUE), completing the last eight months of a refueling overhaul. He remained onboard KAMEHAMEHA for two patrols from Holy Loch, Scotland, and then relieved as Material Officer of Submarine Development Squadron 12 in New London, Connecticut. He next attended the Air Command and Staff College in Montgomery, Alabama, graduating with honors in 1994.

Commander Ruff then relieved as Executive Officer of USS ARCHERFISH (SSN 678), a SEAL delivery/dry deck shelter submarine, and completed a Special Forces deployment to the Mediterranean. During his tour, ARCHERFISH earned a Battle Efficiency "E" and two Silver Anchor awards. Commander Ruff next reported to the Navy Staff, completing assignments in the Assessment Division (N81) and as the Deputy Executive Assistant to the Deputy Chief of Naval Operations (Resources, Warfare Requirements, and Assessments (N8)). He relieved as Commanding Officer of USS LOUISIANA (SSBN 743) (GOLD) in August 1999.

Among his awards, Commander Ruff is entitled to wear Gold Submarine Dolphins, the Ballistic Missile Patrol Pin with four stars, the Meritorious Service Medal (two awards), the Navy Commendation Medal (two awards), the Navy Achievement Medal (two awards), and numerous unit awards.

Commander Ruff is married to the former Marla Carli of Sanford, Florida. They have two children, Greg and Katie.

## LCDR ROBERT I. DOUGLASS



Lieutenant Commander Douglass was born in Groton, Connecticut. He was appointed to the United States Naval Academy from Ohio and graduated with distinction in 1987 with a Bachelor of Science degree in Marine Engineering.

While at the Naval Academy, he was selected for a post-graduate scholarship to the University of Michigan and earned a Master of Science degree in Nuclear Engineering at Ann Arbor prior to commencing the naval nuclear power pipeline in February 1989.

Upon completion of training at Nuclear Power School in Orlando, Florida., Nuclear Power Training Unit in Windsor Locks, Connecticut, and the Submarine Officer Basic Course, he reported to USS JAMES K. POLK (SSBN-645) (BLUE) in Charleston, South Carolina. While on board POLK, he completed two strategic deterrent patrols from Holy Loch, Scotland, strategic offload, Special Forces operations and shipyard conversion of POLK to a SEAL Delivery platform.

In 1993, Lieutenant Commander Douglass reported to Submarine School, where he served as a Cruise Missile instructor in the Officer Training Department and then Submarine Officer Advanced Course (SOAC) Training Program Manager. While temporarily assigned to Commander, Cruiser Destroyer Group Twelve, he served as Submarine Liaison Officer to the embarked Joint Task Force Commander executing "Operation Support Democracy" during the Cuban/Haitian exodus and crisis in the summer of 1994.

Lieutenant Commander Douglass then relieved as Navigator/operations Officer onboard USS PITTSBURGH (SSN-720) from 1995-1998. He completed several missions of vital interest to the United States in the Eastern Pacific, Mediterranean Sea and Arabian Gulf areas. During this time, PITTSBURGH won the Green "C" for communications excellence in 1996 and a Silver Anchor in 1997.

In 1998, Lieutenant Commander Douglass reported to the Director, Submarine Warfare Division (N87), and served as a requirements officer in the Submarine Modernization Branch (N872) for Periscope, Navigation, Radar and ESM issues. In October 2000, he reported to USS LOUISIANA (SSBN-743) (GOLD) as Executive Officer.

Lieutenant Commander Douglass is entitled to wear Gold Submarine Dolphins, the Ballistic Missile Patrol Pin with one star, the Meritorious Service Medal, the Navy Commendation Medal (four awards), the Navy Achievement Medal (four awards) and various unit awards.

Lieutenant Commander Douglass and his wife Karen are renovating an 1860 home in the historic district of Saint Marys, Georgia with their sons John and James.



## **SKCM (SS/AW) Kenneth A. Biller**

Originally from Milwaukee, Wisconsin, Master Chief Biller enlisted in the Navy in September 1980. He completed OSVET Training in Great Lakes, IL.

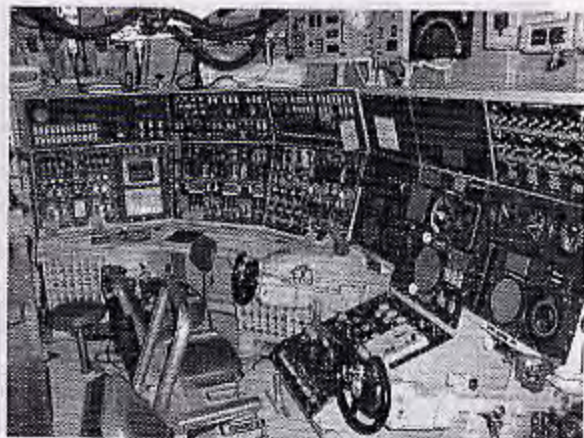
He reported to the USS JUNEAU (LPD 10) in November 1980, where he served as a member of the Aviation Deck Division. In May 1982 he reported to Aviation Administration (AZ) "A" school in Meridian, MS. He transferred to Patrol Squadron Seventeen (VP-17) in Barbers Point, HI, in June 1982 where he served in the Maintenance Control Branch. He was advanced to AZ3 in June 1992. He transferred to Patrol Squadron Six (VP-6) in October 1984, where he served in Maintenance Control Division. While attached to VP-6, he was advanced to AZ2 in January 1985, and received his designation as Enlisted Aviation Warfare Specialist. He reported to Storekeeper (SK) "A" school in Meridian, MS, in December 1987, where he was advanced to AZ1 and achieved his lateral conversion from AZ1 to SK1. In February 1988 he reported to Basic Submarine School in New London, CT.

Master Chief Biller was transferred to the USS WILL ROGERS (SSBN 659) (BLUE) in April 1988, where he served as the Leading Petty Officer for the Supply Department. He became qualified in submarines in August 1988 and transferred to Trident Training Facility (TTF), Kings Bay, GA, in June 1990, where he was designated as Master Training Specialist. In September 1990, he was advanced to Chief Petty Officer.

Master Chief Biller transferred to the USS MARYLAND (SSBN 738) (BLUE) in June 1993, where he served as Supply Department Leading Chief. While serving on board "Fighting Mary", he was advanced to Senior Chief in April 1996. He transferred to Commander Submarine Squadron Twenty in June 1996, where he served as the Assistant Supply Officer. While at COMSUBRON 20 he was selected to attend the Senior Enlisted Academy from August 1997 - October 1997. In March 1999 he was advanced to Master Chief. He reported to USS LOUISIANA (SSBN 743) (GOLD) in September 1999 as the Chief of the Boat.

Master Chief Biller's personal and unit awards include the Navy and Marine Corps Commendation Medal (three awards), Navy and Marine Corps Achievement Medal (three awards), Battle Efficiency Ribbon, Coast Guard Unit Commendation, Good Conduct Medal (four awards), National Defense Medal, Humanitarian Service Medal, Sea Service Deployment Ribbon (six awards), M-16 Marksman Ribbon, and Qualified 1st Class Hand Grenade.

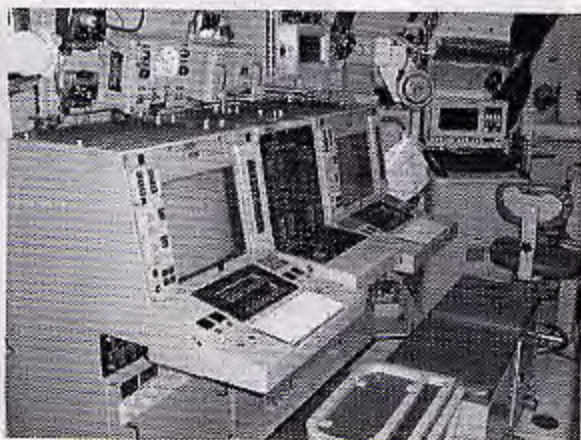
Master Chief Biller is married to the former Linda Arnette of Atlanta, Georgia. They have a daughter, Suzzi.



## **BALLAST CONTROL PANEL SHIPS CONTROL PANEL**

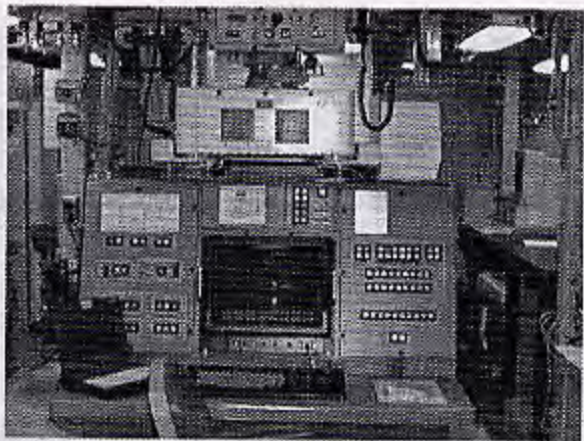
Ballasting, diving and surfacing evolutions are controlled from the Ship's Control Panel (SCP) and the Ballast Control Panel (BCP). These panels are located in the forward port corner of the Command and Control Center. Steering commands are issued and controlled from the SCP, commonly referred to as the "helm". Evolutions that affect the ship's trim, ventilation line-up, surfacing, and diving are coordinated at the BCP.

## **DEFENSIVE WEAPONS SYSTEM**

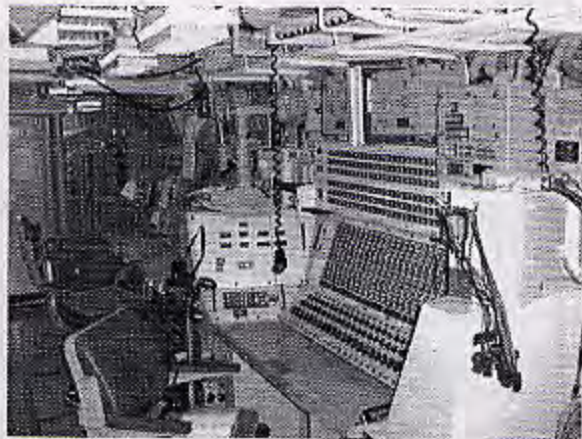


The Defensive Weapons System (DWS) is used to track contacts, shoot torpedoes, and launch torpedo countermeasures. The consoles are located in the forward starboard corner of the Command and Control Center. The Fire Control Technician of the Watch constantly updates the solution of all contacts held by sonar, radar, and periscope systems so that the ship has an accurate picture of the surrounding water space.

## NAVIGATION CENTER



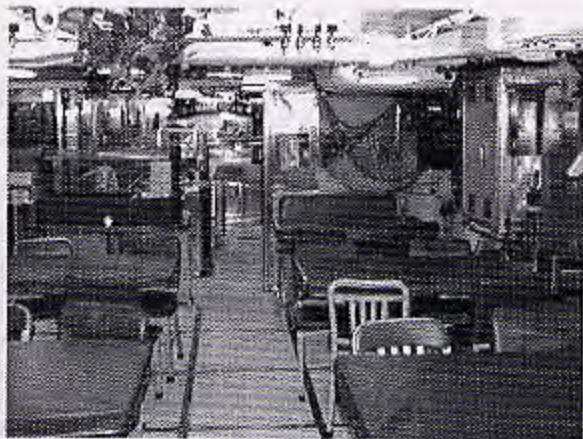
The navigation subsystem provides a highly accurate geographic position of the ship. This data is used by the missile fire control subsystem to compute missile launch data. In addition, the ability to maintain an accurate position for a long period of time allows the ship to remain submerged and undetected for extended periods without the need to fix its position.



## MISSILE CONTROL CENTER

Strategic missile testing, maintenance, and launch evolutions are controlled from the Missile Control Center (MCC). The Fire Control Console is the controlling station for the computer systems. The Launch Control Console monitors and controls the missile tubes and their environment before, during, and after launch. There are two watchstanders on duty in MCC around the clock. The Weapons Officer has the firing key locked in his safe and can only remove it after the Commanding Officer has authorized launch.



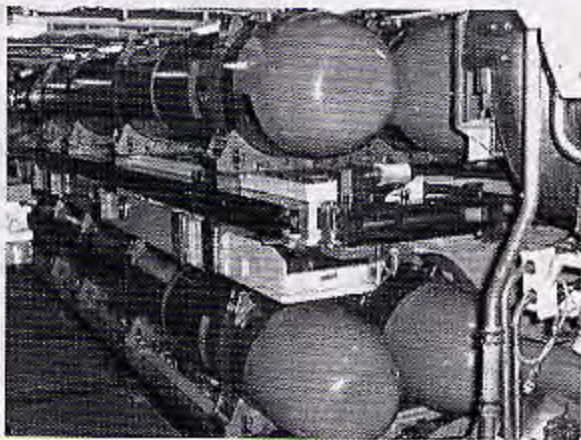


## DINING FACILITIES

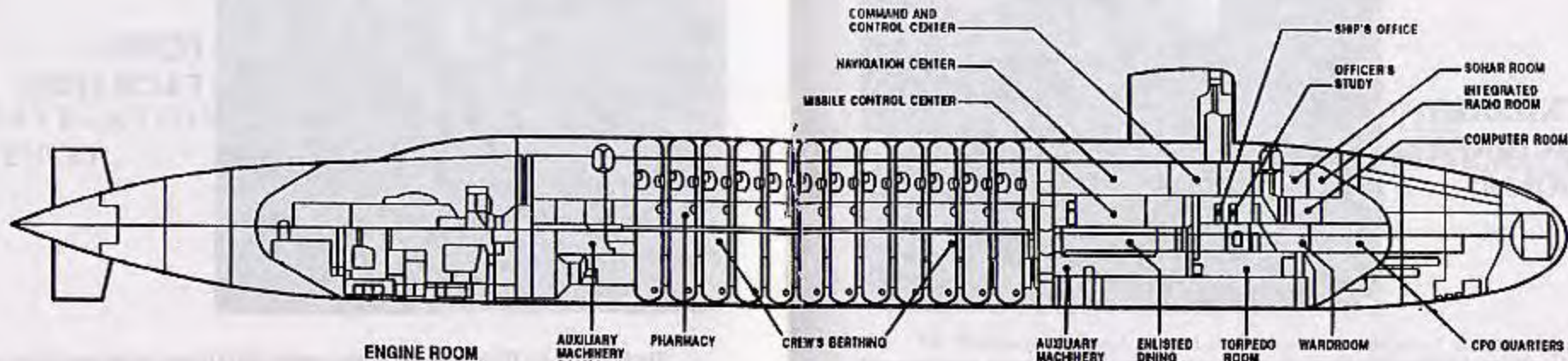
The Food Service Division serves approximately 50,000 meals in the crew's mess during a normal patrol. Meals are served four times a day - breakfast, lunch, dinner, and midrats (midnight rations). As there is only one galley onboard, the officers and crew eat the same food.

The mess decks can accommodate 40 enlisted personnel at a time. Meals are served continuously for a one hour period, which allows all personnel to eat. A five week cycle menu is used, ensuring variety throughout the patrol cycle. The bill of fare consists of various items such as grilled steaks, chicken, pizza, lasagna, and salads.

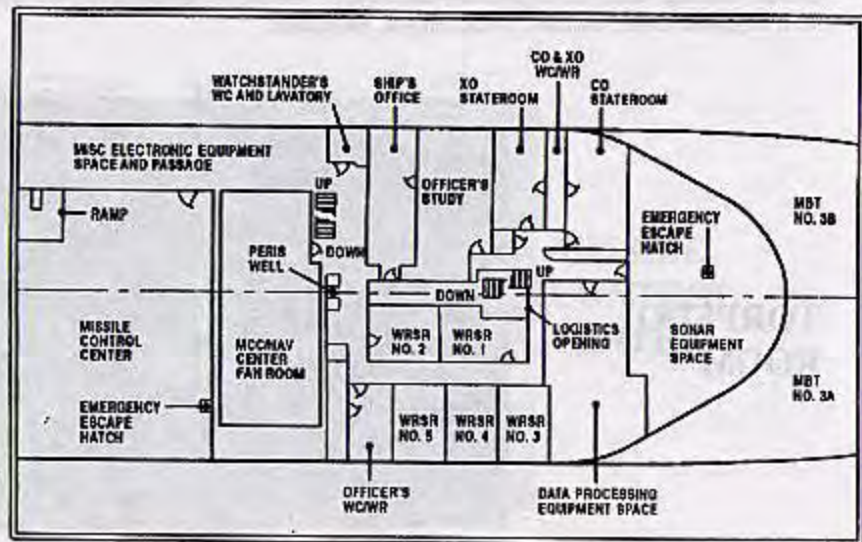
## TORPEDO ROOM



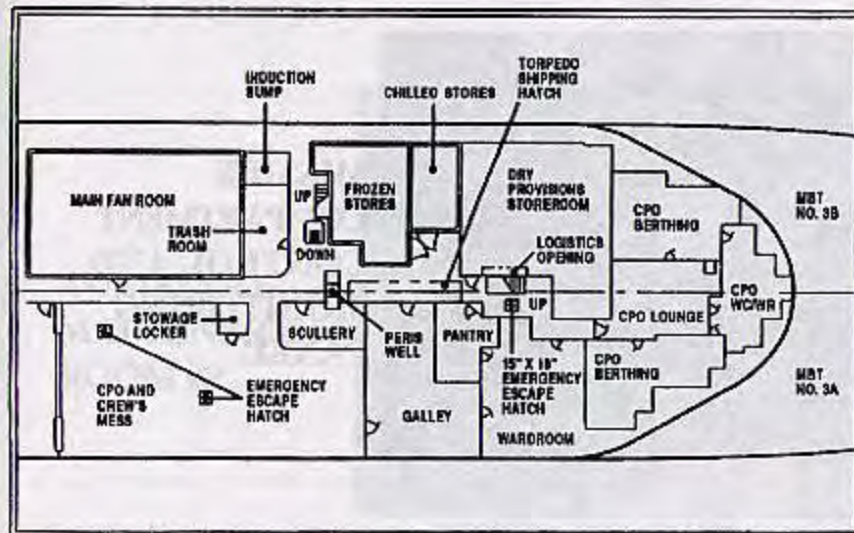
The Torpedo Room contains four torpedo tubes, two on each side in an over and under configuration. The controls for the operation of the torpedo tubes are located on the Defensive Weapons Console in the forward center of the Torpedo Room. LOUISIANA is capable of shooting the MK 48 and ADCAP torpedoes.



**Missile Compartment**



**Second Platform**

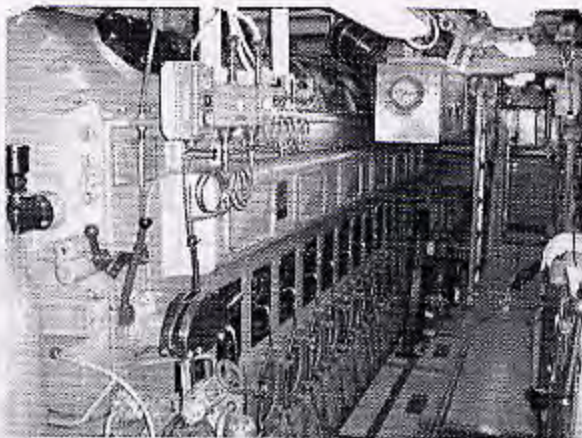


**Third Platform**

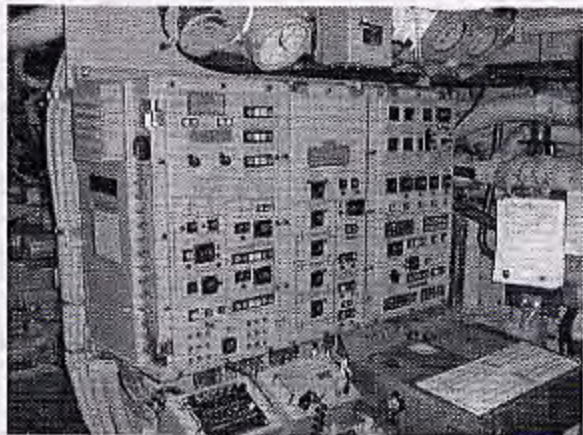
**Forward Compartment**

**USS LOUISIANA (SSBN 743)**

## **AUXILIARY MACHINERY ROOM #1**

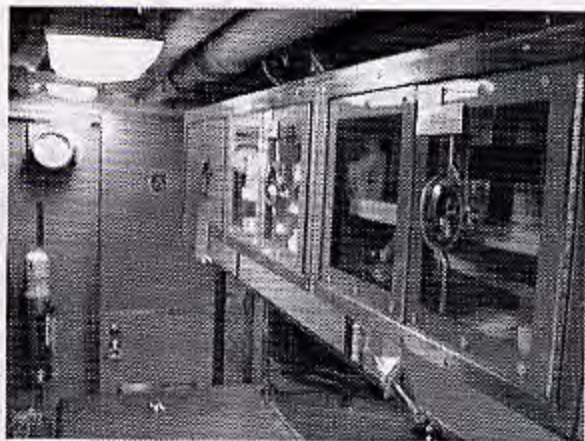


Located in Auxiliary Machinery Room #1 are various electrical motor generators and the ship's diesel engine. The diesel engine with its attached generator is an emergency source of electrical power. In addition, it can be used to ventilate the ship.



## **MISSILE COMPARTMENT CONTROL AND MONITORING PANEL**

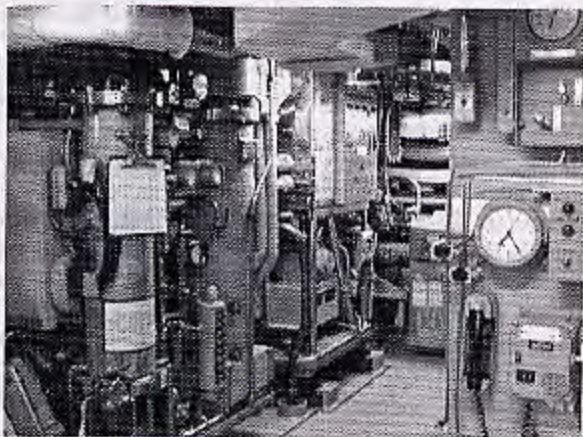
The Control and Monitoring Panel (CAMP) is located on the starboard side of missile compartment second level. CAMP provides the capability of monitoring and controlling temperatures and humidity in all 24 missile tubes. This watch station is manned around the clock.



## **THE PHARMACY**

The Pharmacy (Sickbay), located on the starboard side aft of missile compartment second level, is the working space for the hospital corpsman. The Independent Duty Corpsman is specially trained to provide medical and dental treatment to the crew. Services such as minor surgery and suturing, dispensing of drugs, and even emergency dental treatment are performed by "Doc" whenever the ship is at sea. Laboratory studies, drinking water bacteriological studies, counseling, and health record maintenance are all performed in the pharmacy.

## **AUXILIARY MACHINERY ROOM #2**



Located in Auxiliary Machinery Room #2 (AMR2) is the atmosphere control equipment required to filter and revitalize the air while the ship is submerged. Oxygen is generated from sea water. CO<sub>2</sub> and CO are extracted from the atmosphere and discharged overboard allowing the ship to remain submerged for extended periods of time.

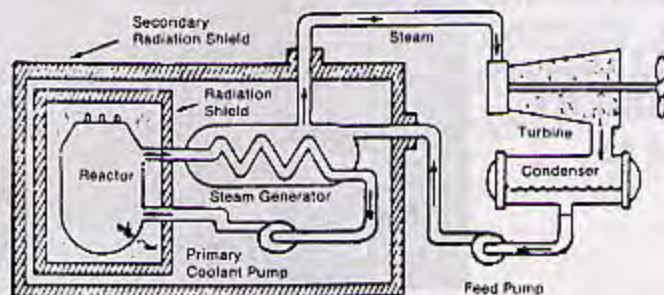
## THE NUCLEAR REACTOR PLANT

The propulsion plant of a nuclear powered ship is based upon the 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 this 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. This water is pumped 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 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.

## HOW A SUBMARINE IS ORGANIZED

Few modern institutions 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: Navigation/Operations, Weapons, Engineering, Supply, and Medical. The first four are ordinarily led by the more senior officers of the ship who rank just below the Executive Officer. 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 his special training has been directed, but also in the demands of administration, leadership, and instruction of his 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 the 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; throttle men, to control the steam turbine engines; sonar operators, who listen for surface ships, submarines, and other contacts; machinist mates and electronic technicians, who operate and maintain the ship's atmosphere control and auxiliary systems; reactor operators, who control the ship's nuclear reactor; torpedo men, missile technicians, and fire control technicians, to control and launch weapons; radio operators, who continually 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 Submariner*

*Only a Submariner realizes to what 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 the 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 other for all aspects of operation.*

*This is perhaps the most difficult and demanding assignment in the Navy. There is not an instant during his tour as Submariner that he can escape the grasp of responsibility. His privileges, in view of his obligations, are most 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.*

## HISTORY OF SHIPS NAMED LOUISIANA

The submarine USS LOUISIANA (SSBN 743) is the fourth United States naval vessel to be named in honor of the eighteenth state admitted into the union and the eighteenth and last Trident Submarine to be commissioned.

The first LOUISIANA, a sloop built in New Orleans in 1812, played a vital role in the defense of New Orleans during the war of 1812. From December 23, 1814, to January 8, 1815, the sloop LOUISIANA pounded advancing British troops, providing naval gunfire support for General Jackson's troops. When British troops advanced upriver beyond the range of the deadly cannon fire of the sloop LOUISIANA, the crew did not let the absence of wind deter their support. Crew members waded ashore with mooring lines and towed their sloop upriver against the currents of the mighty Mississippi to re-engage. LOUISIANA was credited with playing a key role in the defeat of the British and keeping the valuable port of New Orleans in American hands.

The second LOUISIANA, a side wheel steamer, was commissioned in August 1861. Originally assigned to the Union's North Atlantic Blockading Squadron, LOUISIANA operated along the Virginia Coast against confederate blockade runners. LOUISIANA was involved in the defense of Washington, D.C., in December of 1862, where Maj. Gen. John J. Foster reported that LOUISIANA "had rendered most efficient aid, throwing their shells with great precision, and clearing the streets, through which her guns had range." She later was involved in numerous engagements off the coast of North Carolina. The second LOUISIANA was sacrificed on Christmas Eve, 1864, when she was towed, stripped and laden with explosives, to the base of Ft. Fisher in Wilmington, NC, and detonated in an attempt to destroy the fort with minimum loss of life. The explosion had little effect, and it took Union forces several more weeks to capture this important Confederate stronghold.

The battleship LOUISIANA (BB 19) was the third ship to bear the name. Commissioned on June 2, 1906, LOUISIANA was soon called on to provide her services, and was sent to Havana with a Peace Commission at the request of the Cuban president for help in suppressing an insurrection. In November of 1906, LOUISIANA embarked President Theodore Roosevelt for a cruise to inspect construction progress of the Panama Canal. On December 16, 1907, LOUISIANA departed Hampton Roads as one of the 16 Battleships of the "Great White Fleet" sent on an around the world cruise by President Roosevelt as a means of deterring hostile action toward the United States and displaying America's position as a global naval power to the world. This cruise took a little over a year, returning to Hampton Roads on February 22, 1909. LOUISIANA later saw duty in World War I as a training ship and convoy escort. The silver service from the Battleship LOUISIANA is proudly displayed on board.



# TRIDENT MISSION

Deterrence of war has been the sole mission and fundamental reason for the existence of the fleet ballistic missile submarine since its inception in 1960. These ships are among the Navy's highest priority programs and, as the survivable and dependable leg of the deterrent Triad, they are the cornerstone of national security policy.

With almost unlimited cruising range and endurance limited only by the crew, the Fleet Ballistic Missile submarine is capable of extended submerged operations in the international waters of the world, which comprise 70 percent of the earth's surface. Because the submarine is nuclear-powered, it is free of the need to surface or extend a snorkel above the surface for continuous operation. Fleet Ballistic Missile submarines remain hidden by the ocean, their locations unknown to any potential enemy. The Trident II D-5 missile, powered by solid propellant, is ready to launch within minutes of receiving the command from the President of the United States. The Fleet Ballistic Missile system provides the United States with a powerful deterrent to those who might start a global war.



## OHIO CLASS SUBMARINES

OHIO class (TRIDENT) submarines are the largest and most powerful submarines ever built by the free world. At 560 feet in length and displacing 18,750 tons, they are the nation's first line of strategic defense. Well-equipped to accomplish this task, TRIDENTs serve as undersea intercontinental ballistic missile launching platforms that are virtually undetectable. Their improved mobility, quietness, and speed make them the most survivable of our nation's strategic systems.

Faster than their predecessors and equipped with highly accurate sensors, weapons control systems, and central computer complexes, TRIDENT submarines are armed with sophisticated MK48 anti-submarine torpedoes and TRIDENT I or TRIDENT II missiles, enabling them to operate in 10 times more open ocean area than vessels equipped with shorter range Polaris/Poseidon missiles. Each vessel has two separate crews (BLUE/GOLD) of 165 officers and enlisted men - all specialists in their respective fields. The NAVY now has the following OHIO class submarines:

- USS OHIO (SSBN 726)
- USS MICHIGAN (SSBN 727)
- USS FLORIDA (SSBN 728)
- USS GEORGIA (SSBN 729)
- USS HENRY M. JACKSON (SSBN 730)
- USS ALABAMA (SSBN 731)
- USS ALASKA (SSBN 732)
- USS NEVADA (SSBN 733)
- USS TENNESSEE (SSBN 734)
- USS PENNSYLVANIA (SSBN 735)
- USS WEST VIRGINIA (SSBN 736)
- USS KENTUCKY (SSBN 737)
- USS MARYLAND (SSBN 738)
- USS NEBRASKA (SSBN 739)
- USS RHODE ISLAND (SSBN 740)
- USS MAINE (SSBN 741)
- USS WYOMING (SSBN 742)
- USS LOUISIANA (SSBN 743)

# The Crest of the USS LOUISIANA (SSBN 743)

Military Units have historically employed emblems as a means of organizational identification. Designed during the new construction period, the chosen insignia becomes an integral part of the ship's ongoing history. Closely associated with the crew and its reputation, the emblem is proudly displayed on a wide variety of official documents and memorabilia.

**The Ship's Crest . . .** The crest of the USS LOUISIANA recalls the proud traditions of the people of the State of Louisiana and the three previous ships to bear her name. In understanding the symbolism of this crest, the crew is reminded of their special bond to the people and history of Louisiana, and the heroic tradition of the naval veterans who have gone before them. To others, the crest will serve as a proud statement that the crew carries forward those traditions in faithful and excellent service.

**The Circle of Gold Braid . . .** The gold braid encircling the seal represents eternal commitment of the crew to the values of pride, patriotism, honor, and tradition.

**The Eighteen Stars . . .** The eighteen stars surrounding the crest identify Louisiana as the eighteenth state of the Union and the LOUISIANA as the eighteenth Trident Submarine.

**The Pelican . . .** The Pelican is shown protecting her young with outstretched wings. The state bird, as legend has it, is the only bird known to give its own flesh to feed its young when it is unable to find food.

**Red, White, Blue, and Gold . . .** The USS LOUISIANA is sworn to defend the red, white, and blue of our proud nation and carries the gold, white, and blue of the State of Louisiana to recall her origins. Additionally, the dark blue and gold traditionally associated with the United States Navy represents excellence and the sea, and distinguish the two crews of the Louisiana.

**The Submarine Silhouette . . .** Striking in its appearance, the bow-on perspective of the modern Trident submarine is unmistakable. Bold and steadfast, it serves as a warning of the ship's resolute commitment to defending freedom.

**The Four Stars, Laurel, and Crossed Tridents . . .** The four stars represent that this is the fourth ship to bear the name. The laurel is symbolic of each crew member's commitment to service with honor to his country and ship. The Tridents symbolize naval weaponry, both past and present, and sea prowess. Their bottom spikes pierce the state motto, anchoring it, and point toward the ocean depth where the ship patrols.

**The Fleur-de-lis . . .** An iris with three petals was once the armorial emblem of French sovereigns and is often used as a symbol of the state of Louisiana. Here it represents the French influence on the state of Louisiana.

**The Banner . . .** The banner with the inscription "Union, Justice, and Confidence" proclaims the state motto. Wrapping the banner around the ship symbolizes the crew's strong esprit de corps with the people of the state of Louisiana.

**The Crawfish . . .** The crawfish is symbolic of the rich and unique cultural heritage of the proud people of the state of Louisiana.