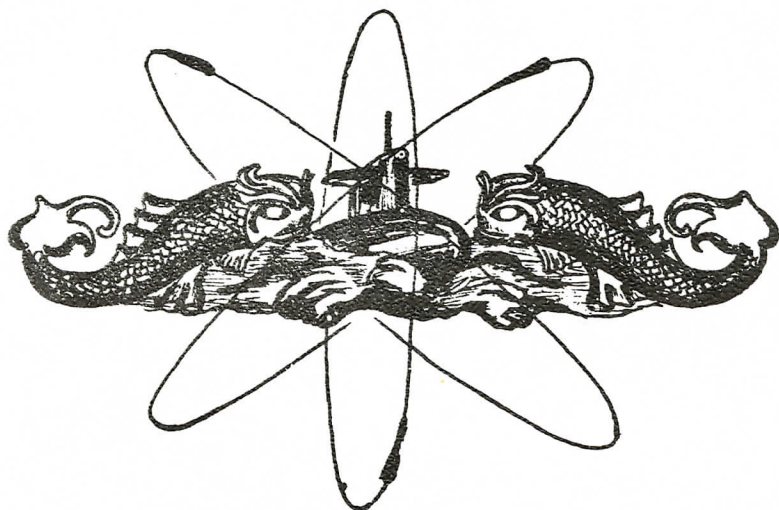


*The*

*U.S.S. FLASHER*

*SSN-613*

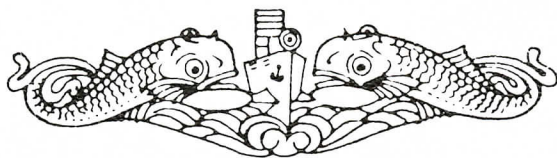


*WELCOMES  
YOU  
ABOARD*

# WELCOME ABOARD

Among the proudest and most enjoyable moments in a submariner's professional life are those spent exhibiting his ship to visitors. The relationship between the submariner and his ship is intimate to the point that he tends to radiate a personal pride in his submarine. His link with the heroism of past submarine achievements is strong and close. Most important, the submarine sincerely welcomes the visitor because it is to you that we devote our efforts and accomplishments, our sacrifices and exultations. We are most anxious for you to understand and perhaps even share in these feelings.

**FLASHERS** is a nuclear powered attack submarine of the **PERMIT (SSN-594)** class. Her principal mission as an attack submarine is to operate against submarine or surface ship targets. Surpassing the underwater capabilities of any class of ship before her, **FLASHER** carries detection, communications, navigation, propulsion and computerized weapons systems of the most advanced design. For months, she can cruise quietly submerged with a maximum of comfort for her crew, and with an ever ready potential for delivery of any submarine tactical weapon the Navy possesses--against submerged or surface vessels. This versatile warship, in addition to her primary capability of firing **SUBROC** missiles and conventional and nuclear torpedoes, can lay mines, perform reconnaissance, support frogman operations, transport troops and equipment, coordinate with surface ships and aircraft in conducting anti-submarine operations, and carry out rescue at sea missions: all without exposing herself to hostile forces or detection.



# FLASHER'S HERITAGE

Built by the Electric Boat Company, Groton, Connecticut, the **USS FLASHER (SSN-249)** was launched on 20 June 1943. The **FLASHER** is named after the Flasher or the Tripletail, a fish common to nearly all the world's seas.

**FLASHER** was commissioned on 25 September 1943 at the U.S. Naval Submarine Base, New London, Connecticut. Lieutenant Commander **Reuben T. WHITAKER** served as her first Commanding Officer.

**FLASHER** commenced her first war patrol four months later and returned to Freemantle, Australia after 54 days, having sunk 10,528 tons of enemy shipping. Her second, third and fourth patrols were eminently successful bringing her score up another 46,985 tons.

Lieutenant Commander **George W. GRIDER** relieved Lieutenant Commander **WHITAKER** as Commanding Officer for the fifth war patrol. During this patrol **FLASHER** sank an estimated 45,322 tons, 28,600 of it a day. After the fifth patrol, **FLASHER** was overhauled in San Francisco just seventeen months after leaving New London. During this brief period she had sunk or damaged an estimated 152,000 tons of enemy shipping. By directive dated January 1947, **FLASHER** was placed out of commission in reserve, attached to the U.S. Atlantic Reserve Fleet.

**FLASHER** earned six Battle Stars on the Asiatic-Pacific Area Service Ribbon for the war patrols she conducted during the period 6 January 1944 to 13 March 1945. She was awarded the Presidential Unit Citation in recognition of heroism during the third, fourth and fifth patrols. She was officially credited with sinking more tonnage of Japanese shipping than any other submarine during World War II (100,230 tons, 24 vessels) and was the only submarine officially credited with exceeding the 100,000 tons mark.

The conning tower of the original **FLASHER** now stands at the entrance to Nautilus park at New London, Connecticut as a memorial to the submariners who lost their lives in World War II.



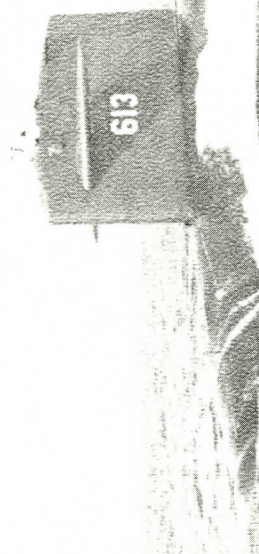
# SHIP'S HISTORY

The keel for **USS FLASHER (SSN-613)** was laid on 14 April 1961 at the Electric Boat Division of the General Dynamics Corporation in Groton, Connecticut. In the Nation's only simultaneous twin launching, **FLASHER** and **USS TECUMSEH (SSBN-628)** slid down the ways on 22 June 1963. Originally laid down as the tenth submarine in the **PERMIT** class building program, **FLASHER** was extensively modified during construction. These modifications consisted of lengthening the hull, lengthening the sail and upgrading the integrity of seawater systems. **FLASHER** was commissioned on 22 July 1966 at the U.S. Naval Submarine Base, Groton, Connecticut. **FLASHER** entered continuous service as a part of the Submarine Force, U.S. Pacific Fleet in September 1966, homeported in Pearl Harbor, Hawaii until February 1975.

**FLASHER** is the second ship in the United States Navy to bear the name. Her predecessor, SS-249, was one of the most famous units in the Pacific Theater of World War II and the only U.S. submarine officially credited with sinking over 100,000 tons of enemy shipping. The conning tower of the original **FLASHER** now stands at the entrance to Nautilus Park at New London as a memorial to the submariners who lost their lives in World War II. In that same proud tradition **FLASHER** has carried on the distinction associated with the name. Serving as a part of the nation's first line of defense, **FLASHER** has made twelve deployments to the Western Pacific as a member of the powerful U.S. Seventh Fleet. The success of her operations have resulted in the award of the Presidential Unit Commendation, Navy Unit Commendation and three Meritorious Unit Commendations. **FLASHER** has been the recipient of the Battle Efficiency "E" on five occasions.

**FLASHER** has undergone two major overhauls, each improving her material readiness and combat capability. The first was conducted in 1970-71 at Pearl Harbor Naval Shipyard and the second was conducted at Mare Island Naval Shipyard. On completion of overhaul in December 1976, the ship was assigned to Submarine Squadron **THREE** and shifted homeport to San Diego, California. Since that time, **FLASHER** has operated extensively in the Eastern Pacific and completed **SEVEN** successful deployments to the Western Pacific. CDR **R.R. MORRIS, USN** relieved as the eight Commanding Officer in November 1982. **FLASHER** has subsequently operated in the Southern California area and will undergo a third major overhaul beginning in May 1983.

*SKA@ HINSY from January - April 1961*  
*JS*







**Commander Ralph R. Morris, U.S. NAVY**

Commander **Ralph Richard MORRIS**, son of Mr. and Mrs. Ralph L. Morris, is a native of Forth Worth, Texas. After graduating from Arlington, Heights High School, he received an appointment to the United States Naval Academy, graduated in June 1966. He completed Nuclear Power and basic submarine training before reporting to **USS ULYSSES S. GRANT (SSBN-631)** in April 1968 to begin his submarine career.

Commander **MORRIS** served for three and half years as Engineer Officer in **USS JAMES MONROE (SSBN-622)** followed by a two year tour as Operations Officer in **USS TAUOG (SSN-639)**. After completing a two year tour on the staff for Commander Submarine Force, Pacific in January 1979, he reported for a three year tour as Executive Officer in **USS QUEENFISH (SSN-651)**. He assumed command of **USS FLASHER (SSN-613)** on 27 November 1982.

Commander **MORRIS** is authorized to wear the Navy Commendation Medal with gold star in lieu of a second award, the Navy Expeditionary Medal and the National Defense Service Medal.

Commander **MORRIS** is married to former Chris Ann Hunt of Kingsport, Tennessee.

# HOW NUCLEAR POWER OPERATES A SUBMARINE

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.

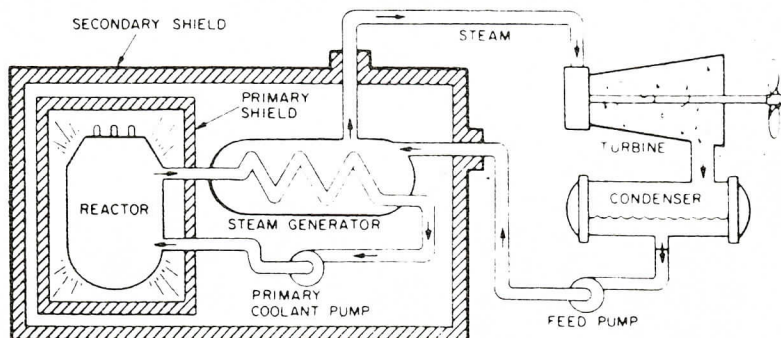
The primary system is a circulating water cycle and consists of the reactor, loops of piping, primary coolant pumps and steam generators. Heat produced in the reactor by nuclear fission is transferred to the circulating primary coolant water which is pressurized to prevent boiling. This water is then 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.

From the steam generators, steam flows to the engine room where it drives the turbo-generators, which supply the ship 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 oxygen. This fact alone allows the ship to operate completely independent 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 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.





## SHIP'S CHARACTERISTICS

Length .....	292 ft. 8 inches
Beam (Extreme) .....	32 ft.
Displacement	
Surfaced .....	4103 tons
Submerged .....	4634 tons
Propulsion .....	Nuclear Reactor
Speed .....	Over 20 Knots
Submergence Depth .....	Greater than 400 ft.
Armament .....	Torpedoes and SUBROC missiles
Complement .....	12 Officers
.....	94 Enlisted
Keel Laid .....	April 14, 1961
Launched .....	June 22, 1963
Commissioned .....	July 22, 1966
Builder .....	General Dynamics Corporation
.....	Electric Boat Division
Commanding Officer .....	Ralph R. Morris