

# WELCOME ABOARD



UNITED STATES SHIP TUNNY SSN 682

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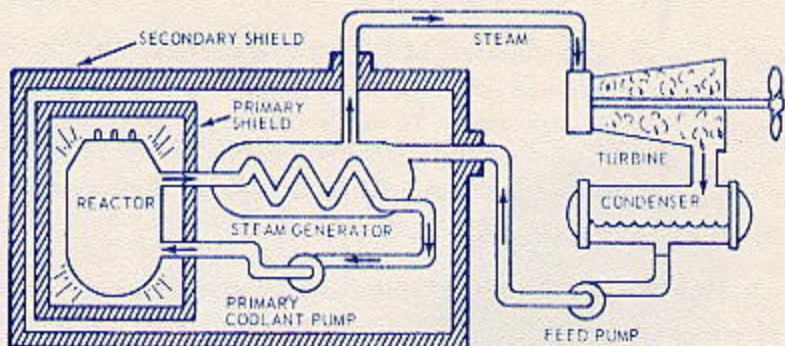
## USS TUNNY (SSN 682)

It is our pleasure to extend our hospitality to you during your stay onboard TUNNY. All members of the ship's crew will gladly assist you in any way possible. Please feel free to ask questions or request assistance.

Please understand that the crew has been highly trained to ensure TUNNY's safe operation. For this reason, do not attempt to operate equipment, knobs, valves or switches without the assistance of a crew member.

We hope that you will enjoy your visit to TUNNY and better understand the operation of a nuclear-powered attack submarine and the life of the personnel aboard.

# 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.

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 with 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 or 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.

# USS TUNNY (682)

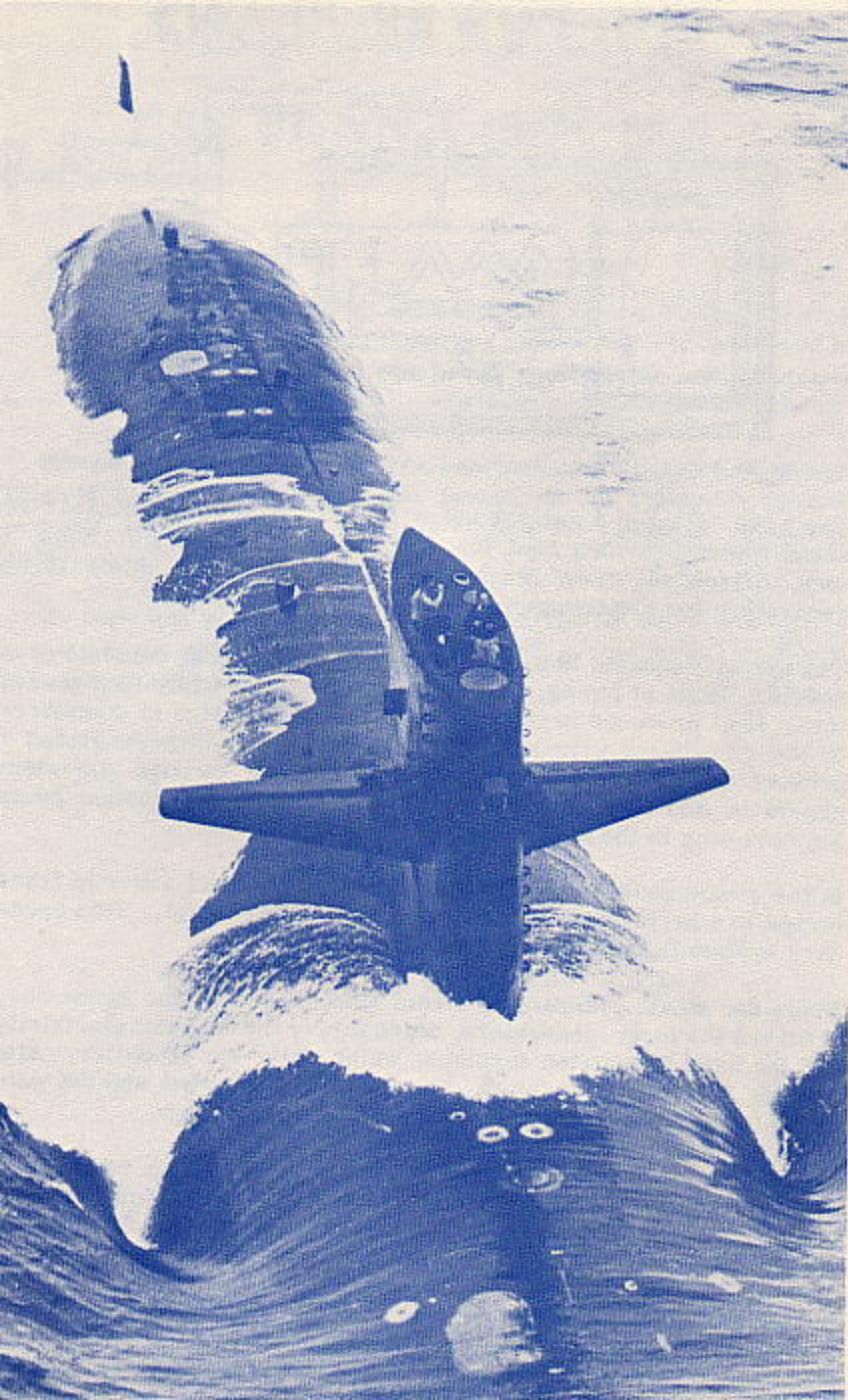
USS TUNNY (682) is a STURGEON-Class submarine designed for a length overall of 300 feet; extreme beam of 31 feet; a surfaced displacement of 4,630 tons; and accommodations for 12 officers and 110 men. A deep-diving submarine of vast range, she is adept in offensive operations against hostile submersibles. She is particularly suited as a "killer submarine" for joint operations with units of the antisubmarine warfare forces. The submarine also has the capabilities as a minelayer, supporter of underwater demolition team operations, and as a weather reference station. She may perform many types of reconnaissance and intercept missions; land and recover raiding parties; or provide lifeguard services. Vast range and great striking power are the hallmark of the nuclear-powered attack submarines.

TUNNY has completed several significant deployments since commissioning. She has made two deployments with the Mediterranean-based United States Sixth Fleet; spring and summer 1975, for which she was awarded the Meritorious Unit Commendation; and fall and winter 1976, capturing the Sixth Fleet's "Hook 'Em" award for outstanding Anti-Submarine Warfare (ASW) performance. In the spring of 1977, TUNNY deployed in support of Atlantic Fleet operations in the North Atlantic.

July of 1978 saw TUNNY commence a transit to Pacific waters, as her homeport was changed from Charleston, South Carolina, to Pearl Harbor, Hawaii. TUNNY arrived in Pearl Harbor August 1978.

In February 1979, TUNNY commenced a four month Western Pacific Deployment. From August 1979 to December 1980, TUNNY underwent a regular overhaul in Pearl Harbor Naval Shipyard during which the Navy's most advanced sonar, ESM, and fire control systems were installed.

After conducting an Eastern Pacific Deployment and standard post-overhaul tests and inspections, TUNNY departed on her second Western Pacific Deployment in December 1981. Returning in June 1982, she has since participated in a number of Third Fleet Operations.



**Commander George R. Fister**  
**United States Navy**



Commander George Rodwell Fister was born in Ogden, Utah, son of Frank and Avon Fister. He grew up in Tulsa, Oklahoma. After attending the University of Tulsa for a year, he attended the U.S. Naval Academy, graduating in June 1963.

Following commissioning, he served on USS CUTLASS (SS478) prior to attending Nuclear Power Training. Subsequently, he reported to USS ROBERT E. LEE (SSBN601) as a member of the overhauling crew. Following shakedown and DASO, he made three Polaris Patrols. He then reported to USS SEAHORSE (SSN669) in new construction. In 1969 he reported as Engineer Officer, USS SCULPIN (SSN 590). Commander Fister served as Assistant to the Type Commander Representative at Puget Sound Naval Shipyards, Bremerton, Washington for COMSUBPAC, COMNAVAIRPAC and COMSURFPAC from December 1972 to March 1976. He then served as Executive Officer on USS ASPRO (SSN 648). Commander Fister was in command of USS SKATE (SSN 578) from November 1979 until May 1982. He reported to USS TUNNY (SSN 682) in June 1982 for duty as Commanding Officer.

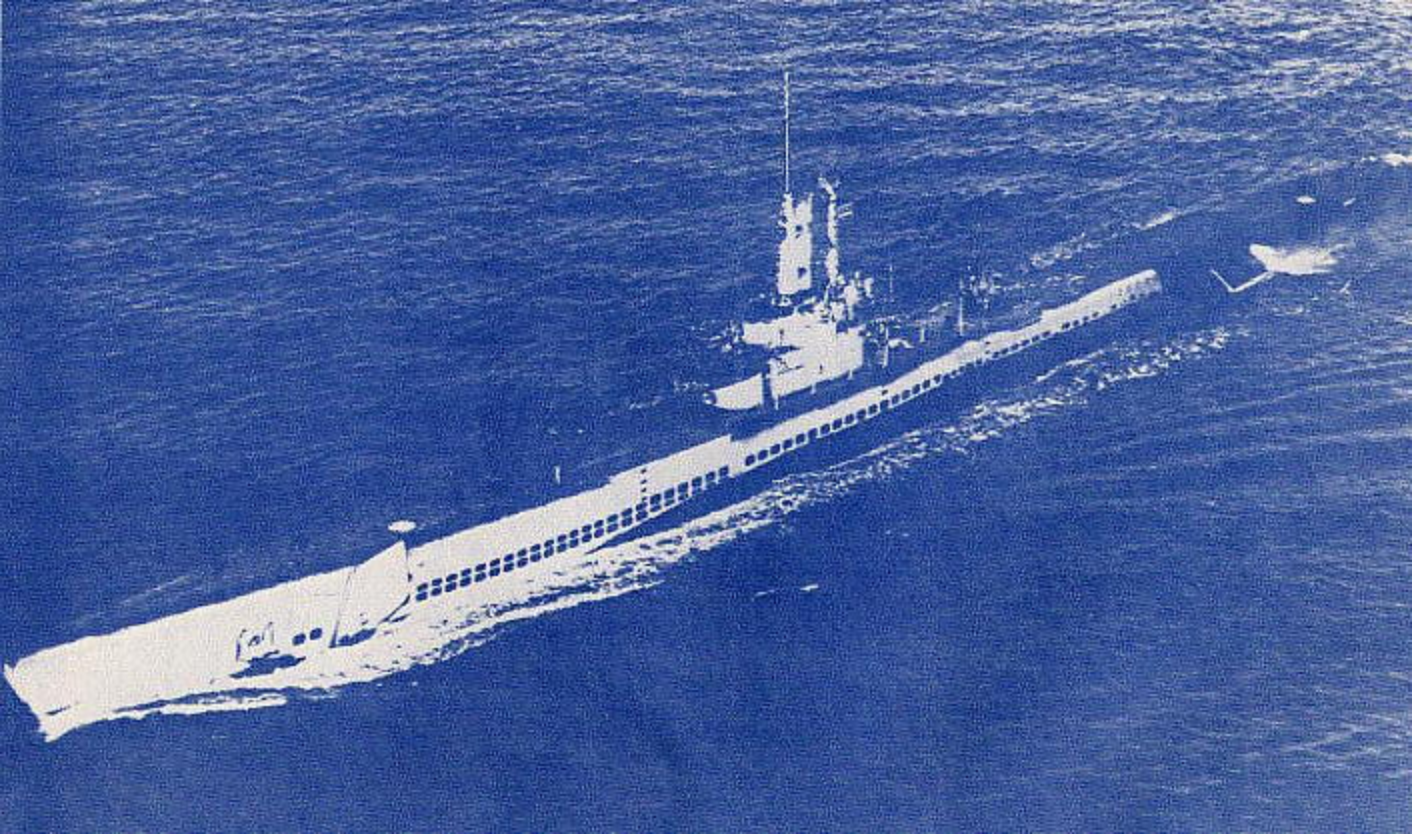
Commander Fister is authorized to wear the Legion of Merit, the Navy Commendation Medal with two gold stars in lieu of third award, the Navy Unit Commendation, Vietnam Gallantry Cross with Palm, Vietnam Service Medal and Navy Expeditionary Medal.

Commander Fister is married to the former Judith Anne Callahan of Baltimore, Maryland. They reside with three children, George Jr., Joel, and Ashley in Honolulu, Hawaii.

# USS TUNNY (SSN 682)

## COMMANDING OFFICERS

CDR Dennis Y. Sloan .....	Jan. 26 1974—Feb. 26, 1976
CDR Peter W. Thomas .....	Feb 26, 1976—Oct. 26, 1978
CDR Karl L. Kaup .....	Oct. 26, 1978—Aug. 2, 1982
CDR George R. Fister .....	Aug. 2, 1982—Present





# HERITAGE

The new TUNNY (SSN 682) is named to commemorate the fighting tradition of the former fleet submarine TUNNY (SS 282) which received the Presidential Unit Citation and six battle stars for combat operations in World War II before serving as the first Regulus Missile firing submarine (SSG 282), followed by service as a transport submarine (LPSS 282) during the Vietnam Conflict.

The first TUNNY (SS 282) was built by the Mare Island Navy Yard, Vallejo, California. Her keel was laid 10 November 1941. She launched 30 June 1942, under the sponsorship of Mrs. Frederick G. Crisp, wife of Captain Crisp, U. S. Navy. The fleet submarine commissioned at the Mare Island Navy Yard on 1 September 1942, Commander Elton W. Grenfell, U. S. Navy, commanding.

TUNNY (SS 282) was designed for a length overall of 311 feet; extreme beam of 27 feet; standard displacement of 1,526 tons; submerged displacement of 2,410 tons; mean draft of 15 feet; a surface speed of 20.25 knots; submerged speed of 8.75 knots; and a complement of 6 officers and 54 men. She was initially armed with ten 21-inch torpedo tubes; one 3-inch 50 caliber gun; two .50 caliber and two .30 caliber machine guns. Her designed depth was 300 feet.

# USS TUNNY (SSN 682)



**BUILT BY:**

**INGALLS SHIPBUILDING DIVISION**

**LITTON INDUSTRIES**

**Keel Laid:** May 22, 1970

**Launched:** June 10, 1972

**Commissioned:** January 26, 1974

**SPONSORED BY**

**MRS. LOLA AIKEN**



