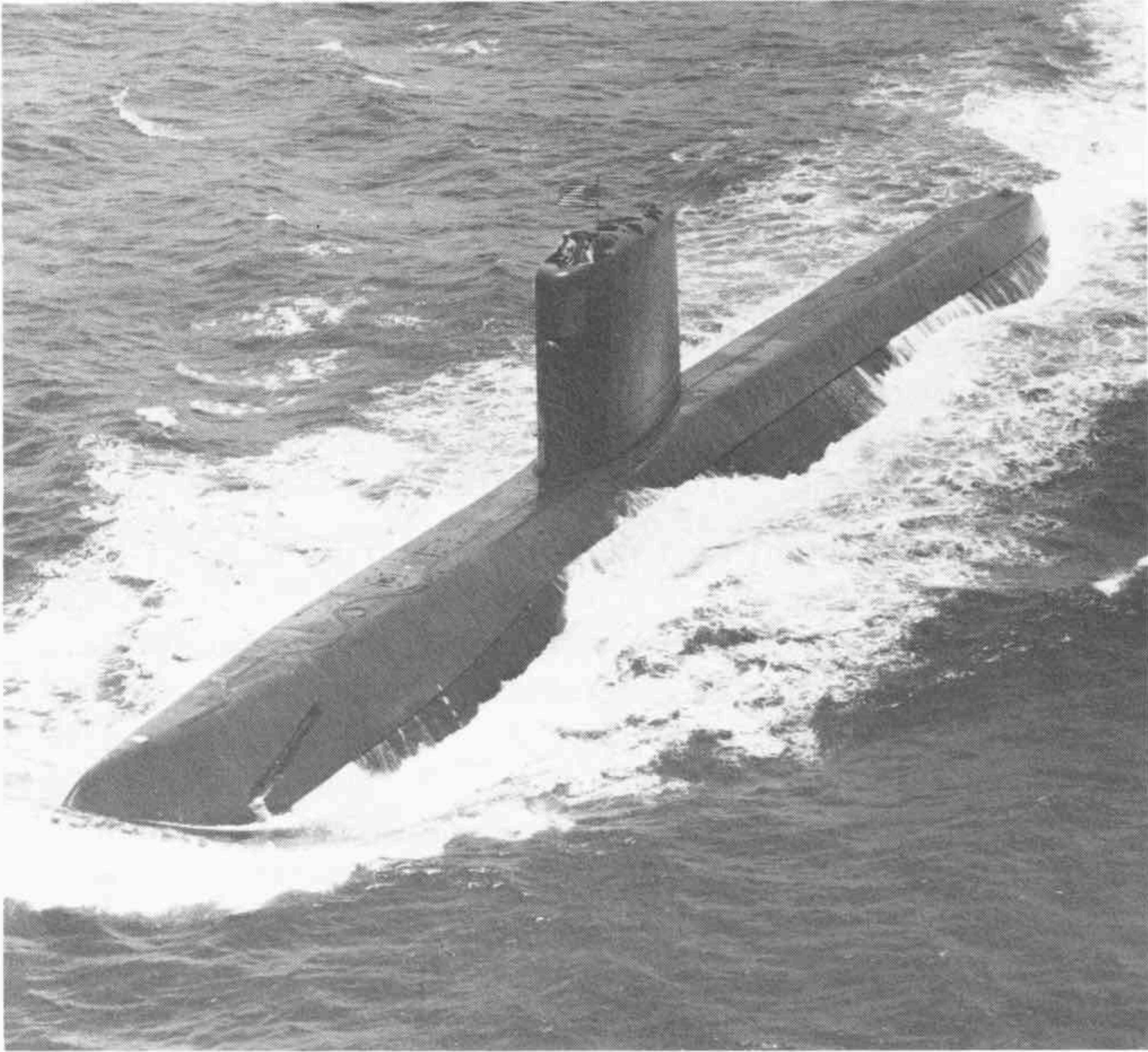


# Welcome Aboard



**SSN 583**

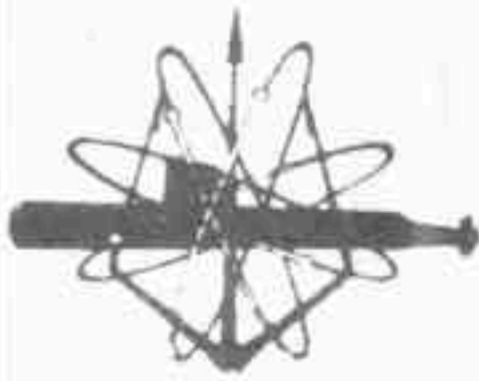
UNDERSEA  
PROGRESS  
WITH  
NUCLEAR POWER

MAR. 22 1979

**U**

**S**

**S**



**S**

**A**

**R**

**G**

**O**

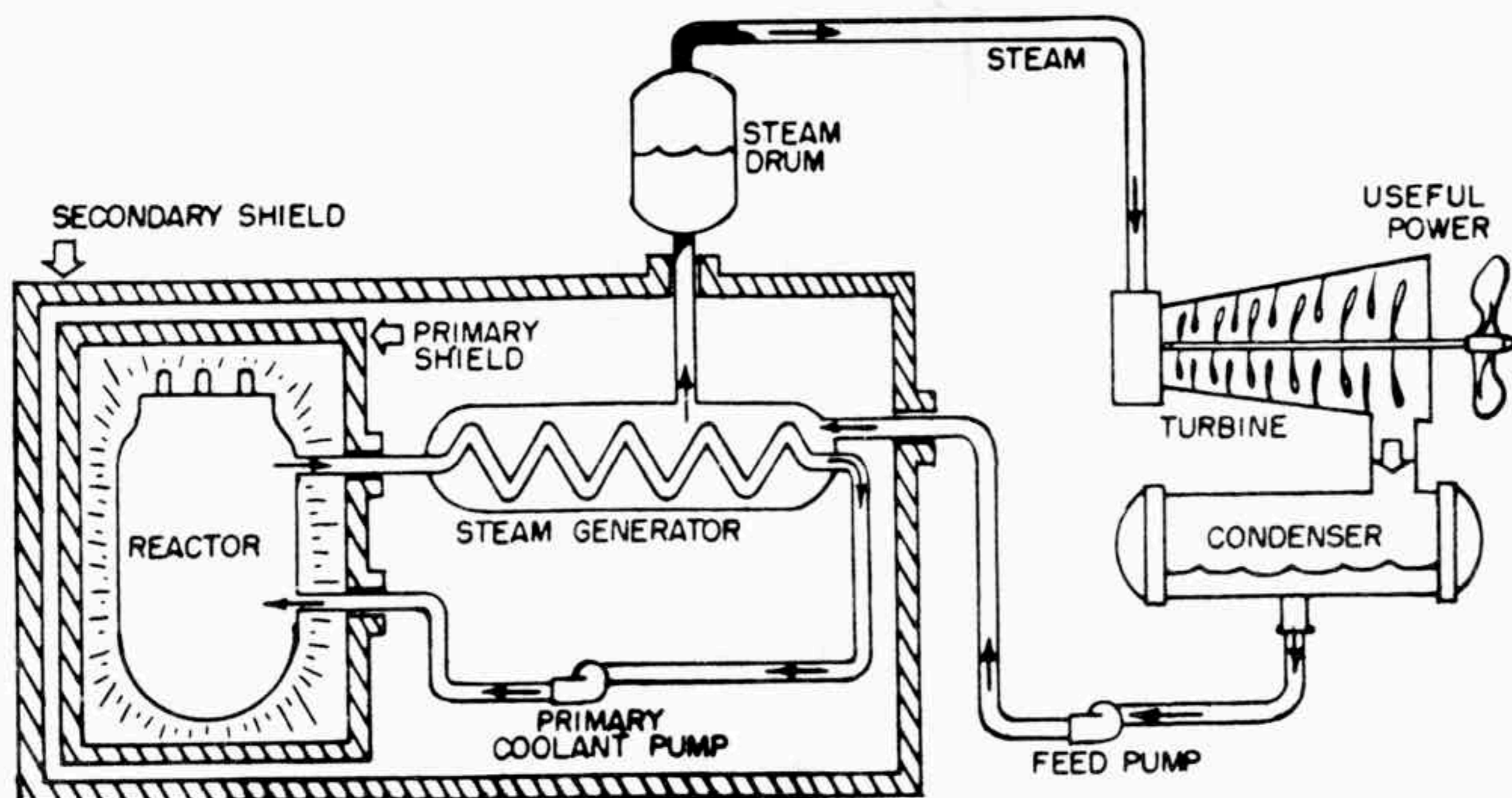
COLDWARBOATS.ORG

Before the first nuclear submarine became a fact, the submarine was at best a hybrid. It was, in simple reality, a small surface ship that could submerge for very short periods of time. In 1950 the real submergence time and the average submerged speed of a submarine were not much greater than those of submarines in use 30 years earlier.

Pre-nuclear submarines using traditional fuels required oxygen to operate and to keep their crew alive. Once submerged, that oxygen supply was cut off. The boat was dependent for its power on short-lived electric batteries, its crew dependent upon the air trapped within the hull or carried in bottles and chemicals.

A nuclear reactor eliminated the combustion engine which limited a submarine's range and speed, the need for a large amount of space to store liquid fuels, and the necessity for surfacing to recharge batteries.

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



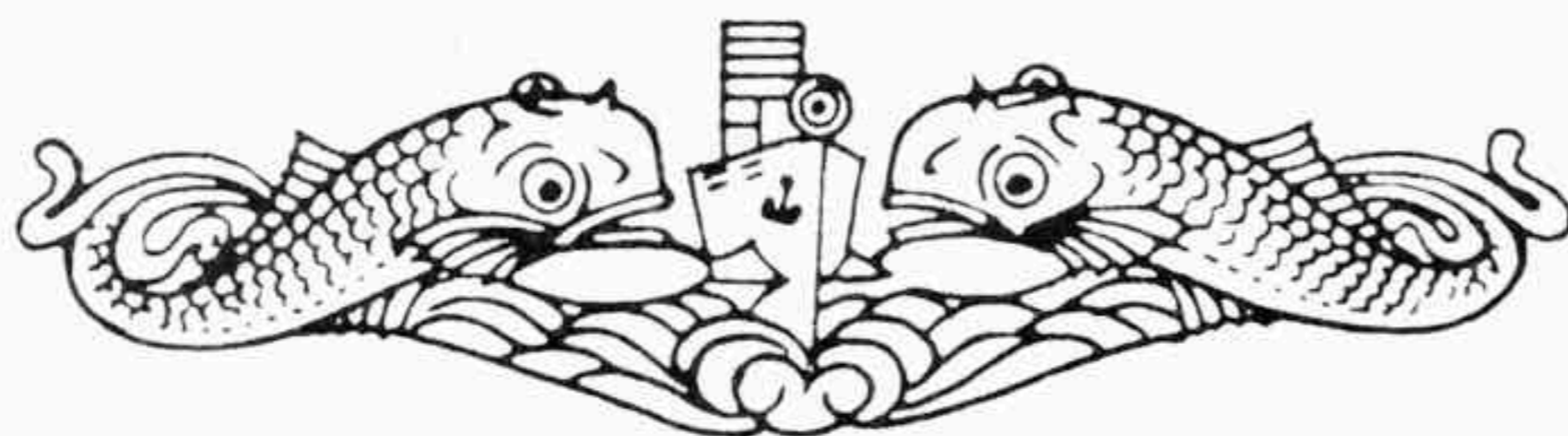
**NUCLEAR PROPULSION PLANT**

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 such that the average crew member receives less radiation on a submerged patrol than he would receive from natural sources ashore.

The USS SARGO is a nuclear powered fast attack submarine. She is the second submarine to bear the name Sargo. The first SARGO was commissioned in 1939. She made twelve war patrols, in the Pacific, during World War II, sinking 41,000 tons of enemy shipping and damaging an additional 41,300 tons. She was 310 feet long and displaced 2350 tons and carried a crew of 55 officers and men. In July 1956 she was decommissioned.

The present SARGO is the first nuclear submarine to be constructed on the Pacific Coast. She was commissioned 1 October 1959 at Mare Island Naval Shipyard, and Lieutenant Commander Daniel P. Brooks, USN, was her first commanding officer. She is 267 feet long, displaces 2600 tons, and carries a crew of ninety officers and men. The principal armament of the SARGO is torpedoes. There are eight torpedo tubes onboard, six located forward and two located aft.



U

S

S



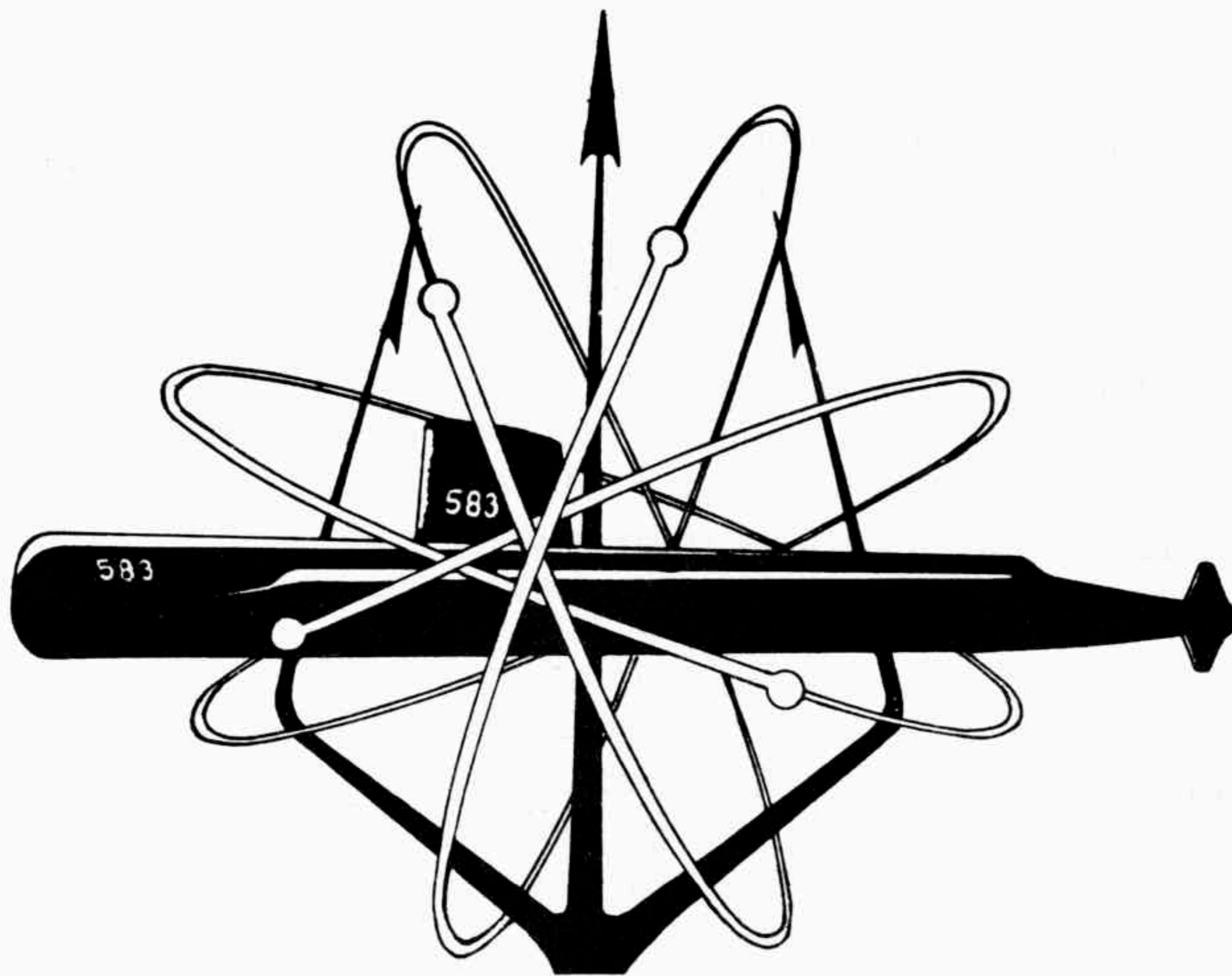
S

A

R

G

O



Sargo has had an illustrious career since her construction. She became a pioneer in under-ice operations, having participated in several cruises under the ice and visited the North Pole. She was the first submarine to surface through the Arctic ice pack during the winter. In November 1971, she received her fourth Navy Unit Commendation, which is a record for any U. S. Navy ship.

In time of war, Sargo's primary mission would be to locate and destroy enemy submarines and surface ships. In peace time she is engaged in maintaining her operational proficiency, material condition and conducting various operations with units of the Third and Seventh Fleets.