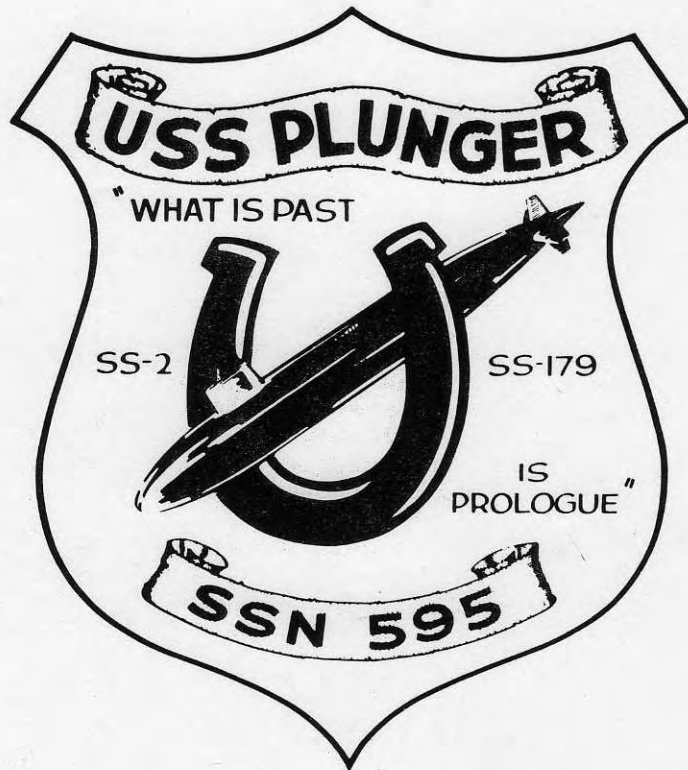


COMMISSIONING



MARE ISLAND NAVAL SHIPYARD

VALLEJO, CALIFORNIA

NOVEMBER 21, 1962

THE COMMANDANT



Rear Admiral E. E. YEOMANS, Commandant Twelfth Naval District, was graduated from the U. S. Naval Academy, Class of 1924. A distinguished submariner, Rear Admiral YEOMANS served aboard the USS R-3 in the Pacific Fleet in 1928. He subsequently commanded the USS S-17 and USS S-20.

During World War II, Rear Admiral YEOMANS commanded Submarine Division FIFTY THREE, later serving as Planning Officer for Commander Submarine Force, Pacific Fleet.

Since World War II, Rear Admiral YEOMANS has served as Chief of Staff for Commander Submarine Force, Atlantic Fleet and for Commander Submarine Force, Pacific Fleet.

In December 1957, Rear Admiral YEOMANS assumed duty as Superintendent of the U. S. Naval Post Graduate School in Monterey, California. Prior to his present duty, he was Commander Naval Forces, Japan.

Rear Admiral YEOMANS was awarded the Legion of Merit for his service while performing duties as Strategic Planning Officer on the staff of Commander Submarine Force Pacific Fleet, from May 1944 to September 1945, and the Bronze Star Medal for his service while performing duties as Operations Officer of Task Force FORTY TWO from May 1942 to November 1942, and additional duty as Commander Submarine Division FIFTY THREE from June 1942 to February 1943.

THE SPEAKER

Rear Admiral Bernard A. CLAREY reported for duty as Commander Submarine Force, United States Pacific Fleet in July 1962. Rear Admiral CLAREY, from Oskaloosa, Iowa, was graduated from U. S. Naval Academy, Class of 1934. Following his graduation, he served on the Cruiser MILWAUKEE for two years. In 1936 he entered the Submarine Service, making a total of 7 war patrols during World War II. For his actions during these war patrols Rear Admiral CLAREY was awarded the Silver Star Medal and the Navy Cross, with 3 Gold Stars. The USS PINTADO, under his command during 3 war patrols, earned the Presidential Unit Citation "For extraordinary heroism in action."

In 1949 Rear Admiral CLAREY served as executive officer aboard the USS HELENA (CA-75) and was awarded the Bronze Star Medal with Combat "V" for his service on that ship during the Korean Conflict.

In addition to the Navy Cross with three Gold Stars, the Silver Star Medal, Bronze Star Medal with Combat "V", and the Presidential Unit Citation Ribbon, Rear Admiral CLAREY has the Korean Presidential Unit Citation Badge, the American Defense Service Medal with Star; American Campaign Medal; Asiatic-Pacific Campaign Medal with one silver and four bronze stars (nine operations); the World War II Victory Medal; National Defense Service Medal; Korean Service Medal with star; the United Nations Service Medal; the Philippine Liberation Ribbon; the Philippine Presidential Unit Citation and the Korean Presidential Unit Citation.



THE CAPTAIN



Commander Will M. ADAMS, Jr., U. S. Navy, of Amarillo, Texas, is a graduate of the U. S. Naval Academy, Class of 1945. He attended Amarillo College; and while taking postgraduate work sponsored by the Navy, obtained a Master's Degree in Engineering from the University of California at Berkeley.

After graduating from the Naval Academy he spent three years in the Destroyers BLACK, KRAUS and AGERHOLM. In 1947 he entered the Submarine School, New London, Connecticut, and from 1948 to 1951 he had duty aboard the submarine QUEENFISH. After more years in submarines, including a tour as Commanding Officer of the PICKEREL, Commander ADAMS was assigned to instruction in naval reactors and nuclear propulsion under Vice Admiral H. G. RICKOVER.

In September 1958 he was ordered to duty aboard the USS TRITON (SSRN-586) as Executive Officer and Navigator, and served in that capacity on the first submerged circumnavigation of the World, February 16 to May 11, 1960. For this latter service he wears the Presidential Unit Citation Ribbon with Globe Device.

His campaign and service medals include the Asiatic-Pacific Campaign Medal with 3 Stars, the China Service Medal, Philippine Liberation Ribbon and the Korean Service Medal.

USS Plunger (SSN - 595)

OFFICERS

CDR W. M. ADAMS, JR.
Commanding Officer

LCDR R. L. KELSEY
Executive Officer

LT W. A. LYNCH
LT A. B. BECKMANN, JR.
LT R. C. MC KINZIE
LT R. C. SODERHOLM

LT L. H. LARSON
LT C. B. WOOTTEN
LT F. R. WIEDEMANN
LTJG R. E. TUGGLE

LT E. M. MC GOWAN (MC)

CREW

H. R. ERICHSON, ENCM(SS)
Chief of the Boat

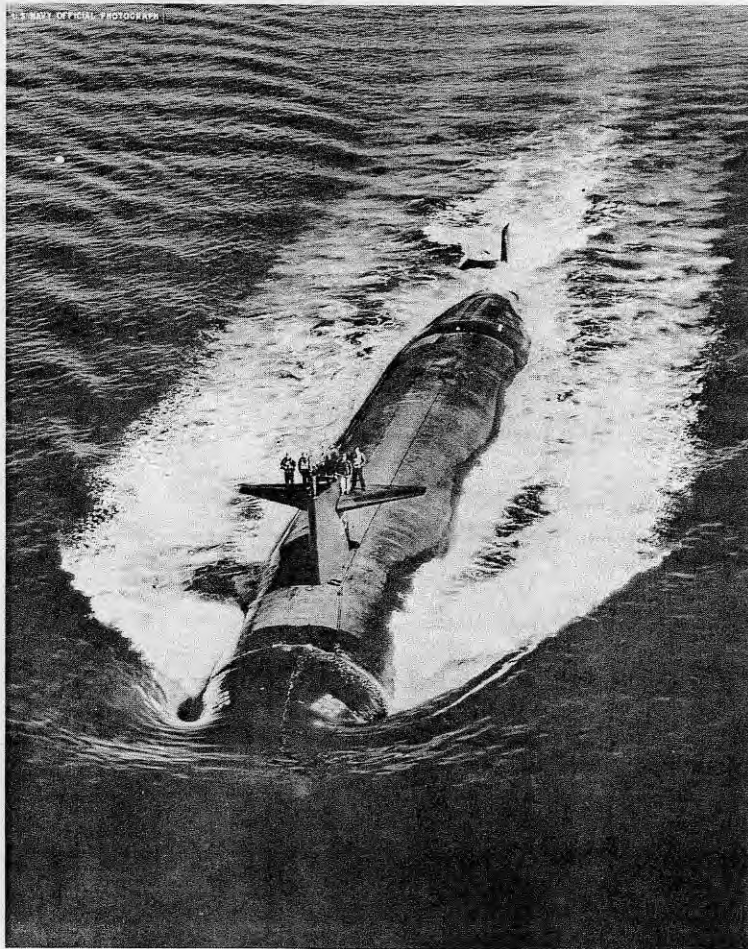
F. M. Caballero, EMC(SS)
R. I. Caylor, ETC(SS)
J. P. Chelstad, MMCA(SS)
R. W. Dickinson, ETCA(SS)
J. E. Drylie, CSCA(SS)
N. F. Emmons, RMCA(SS)
J. R. From, MMCA(SS)
R. D. Gannoe, Jr., HMCA(SS)
F. E. Gomez, EMCS(SS)
R. W. Johnson, ENCA(SS)
R. B. Jones, ENCA(SS)
P. A. La Fond, ENCA(SS)
G. W. Mc Daniel, SOC(SS)
J. W. Miller, ENCA(SS)
R. L. Nelson, ICCS(SS)
D. C. Pacilli, TMCA(SS)
C. T. Parker, ETCA(SS)
D. L. Robinson, TMC(SS)
R. E. Southard, QMCA(SS)
M. J. Walsh, FTC(SS)
R. R. Williams, EMCA(SS)

Allen, L. T., IC1(SS)
Bartke, H. L., MM1(SS)
Baumgartner, M. E., YN3(SS)
Bebermeyer, R. E., ETR2(SS)
Brown, G. J., MM1(SS)
Brown, G. N., Jr., EN1(SS)
Brown, J., SD1(SS)
Burt, R. N., TM2(SS)
Butler, K. L., RM2(SS)

Carney, W. M., TM1(SS)
Cavin, R. V., ETR2(SS)
Clark, C. H. MM1
Conibear, R. L., EM1(SS)
Cooper, J. D., ET1
Cox, G. R., QM2(SS)
Crews, J. M., QM3
Curtiss, L. M., QM1(SS)
Danko, A. D., ETR2(SS)
Darron, C. W., EM2(SS)
Desormier, W. L., SK3
Draper, J. W., MM1(SS)
Eagleston, R. P., MM2
Edberg, J. H., EN1(SS)
Fry, F., YN3(SS)
Genn, K. W., YN1(SS)
Goo, R. P., RM2(SS)
Hardin, J. L., IC1(SS)
Hart, J. E., EN2(SS)
Havener, R. D., FTG1(SS)
Heagy, W. B., EN1(SS)
Hinton, R. E., ET1(SS)
Holden, F. L., EM1(SS)
Holmstrom, P. B., EN1(SS)
Howell, L. R., MM1(SS)
Hubbell, C. D., ETR2(SS)
Jones, N. F., MM2
Jordan, L. J., ET1(SS)
Kirchhofer, R. J., IC2
Kuhn, R. R., MM2
Lawrence, R. E., EM1(SS)

Lee, C. R., EM2(SS)
Lewis, L. C., SO1(SS)
Lindquist, J. A., TM1(SS)
Marley, H. J., Jr., RM1(SS)
Marino, F., CS2(SS)
Martin, A. W., EM2
Mathews, T. A., SK1
Meats, L. E., MM2(SS)
Miller, L. P., SOS2(SS)
Murray, R. B., ET1(SS)
Nagle, F. C., FN
Natividad, R. M., TM2(SS)
Nolke, D. C., TM3(SS)
Polhemus, A. V., SO1(SS)
Powell, G. L., QM1(SS)
Predovich, R. A., FN
Ramsey, H. C., TM3
Roush, R. E., EN1(SS)
Russo, R. M., CS3(SS)
Schmidt, L. L., CS1(SS)
Shipp, A. B., SOS2(SS)
Shields, J. C., MM1(SS)
Stokes, G. M., EM1(SS)
Thiem, E. G., MM3
Tuberg, A. R., IC1(SS)
Turman, W., SD1(SS)
Wasmuth, M. R., MM3
Weakley, D., SO1(SS)
Weaver, E. L., SD3(SS)
Wiedenbeck, W. W., IC2(SS)
Wood, F. H., FTG2(SS)

The Ship

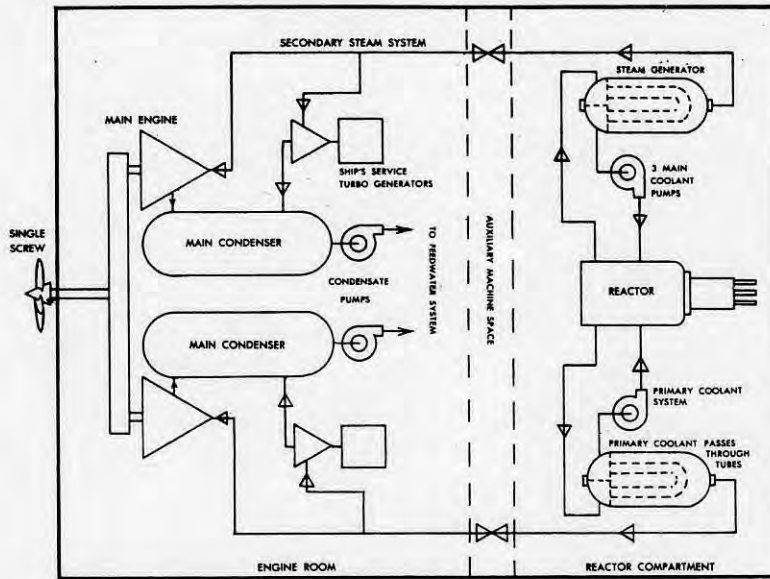


The USS PLUNGER (SSN-595), a fast attack submarine of the THRESHER (SSN-593) Class, combines a Westinghouse S5W reactor plant with a hydrodynamically shaped Albacore hull to give the capability of prolonged submerged operations and high submerged speeds. She is 278 feet in length and displaces about 4400 tons.

Extensive use of sound isolating methods and materials gives PLUNGER a "built in" silent quality. Her ability to operate at greater depths as well as more silently than other class ships makes detection extremely difficult. The advanced sonar is one of the most comprehensive detection systems ever devised for underwater craft. She is equipped to fire the Navy's newest submarine weapons from torpedo tubes located midships. These qualities of PLUNGER make her one of the most effective anti-submarine weapons in the Navy arsenal.

PLUNGER is designed to carry 9 officers and 85 enlisted. She must carry sufficient food and stores to provide for them for approximately 3 months. In addition, she has the capability of providing atmosphere continually purified of contaminants and supplemented by oxygen from high pressure banks.

Engineering Plant Description



PRIMARY SYSTEM

The reactor compartment equipment includes one reactor, and two primary loops.

The reactor gives up heat to the primary coolant water, which then is forced through the steam generator tubes where it gives up heat to form steam on the shell or secondary side of the boiler. The primary coolant is then pumped back into the reactor where it is heated again.

The primary coolant water is kept pressurized to insure that boiling will not take place in the reactor.

SECONDARY SYSTEM

The secondary system is the steam system. It is completely isolated from the primary system since the primary water goes through the tubes of the steam generator while the secondary water, which is boiling to make steam, is on the shell side.

Steam rises to the top of the steam generator where the water carry-over is separated from the steam. The dry saturated steam then flows back to the engine room where it drives ship's service turbogenerator sets (SSTG), and the main propulsion turbines.

Provision is made for declutching the propulsion turbines and reduction gear from the propeller shaft so that the ship can be driven through the water by the electric motor mounted integrally on the propeller shaft. The electric motor can receive power from the battery, from a small diesel engine, or from AC-DC motor generator sets.

RELIABILITY

The PLUNGER's S5W Reactor Power Plant has one reactor and a single propeller. Between these two vital components almost every electrical and mechanical system is installed in duplicate on the port and starboard sides of the ship. In addition, every control feature of the power plant and of the ship has at least one backup method of operation in addition to normal operation. The single propeller is made to the same standards of strength as are ice breaker propellers while the shock resisting and strength characteristics built into the reactor virtually rule out physical damage to the reactor.

RADIATION

When the reactor is in operation, the lower level of the reactor compartment is kept isolated and personnel cannot enter this space. Within a few minutes after shut-down the lower level reactor compartment can be entered to perform routine inspection and maintenance work.

The shield of the PLUNGER reactor reduces the radiation to a level such that, during a cruise lasting the life of the reactor, the average crew member will receive less radiation than he would during a lifetime from x-rays and cosmic rays and natural radioactivity in the sea, air, drinking water and ground. In one year of operation the average crew member will receive less than the Bureau of Standards allowable radiation dosage for one week.

Vital Statistics

| | |
|----------------------------|---------------------------------|
| Length Overall | 278 feet |
| Displacement (approximate) | 4400 tons |
| Armament | 4 tubes midships |
| Depth Capability | In excess of 399 feet |
| Speed | In excess of 20 knots sustained |

| | |
|---------------------|----------------------|
| Auxiliary Machinery | |
| Distilled Water | 9600 gallons per day |
| Air Conditioning | 300 tons |

Atmosphere purification

Carbon Dioxide Scrubbers
Carbon Monoxide-Hydrogen Burners
Oxygen Flasks and Generators
Electrostatic Precipitators
Activated Charcoal filters

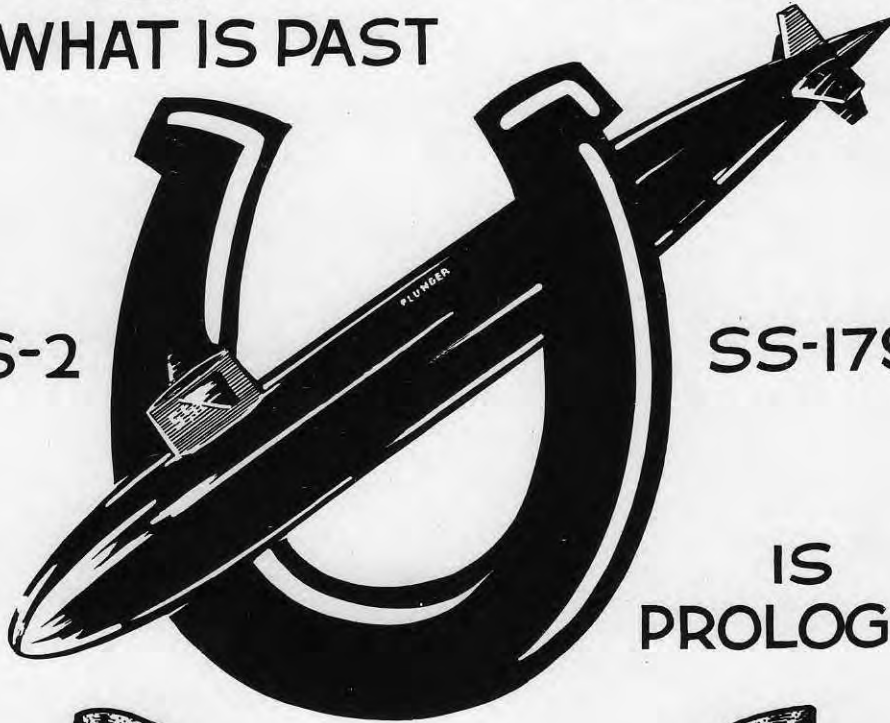
| | |
|--------------------------|----|
| Normal Personnel Manning | |
| Officers | 9 |
| Enlisted | 85 |

| | |
|---------------|---|
| Keel Laid | March 2, 1960 |
| Launched | December 9, 1961 |
| Maiden Voyage | September 16, 1962 |
| Commissioned | November 21, 1962 |
| Built by | Mare Island Naval Shipyard Vallejo, California |

USS PLUNGER

"WHAT IS PAST

SS-2



SS-179

IS
PROLOGUE"

SSN 595