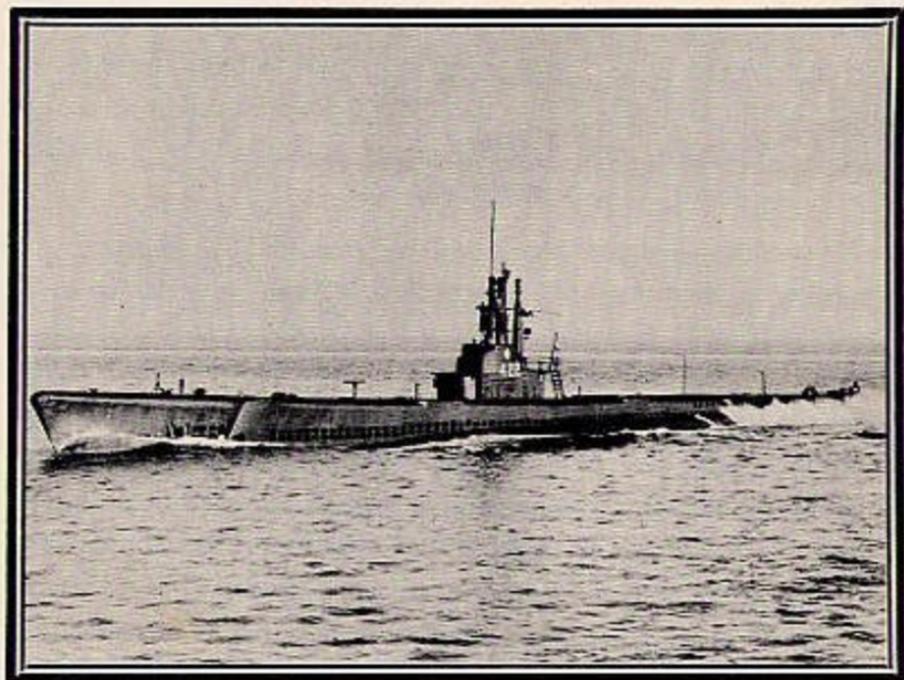


# WELCOME ABOARD



U.S.S. TORO  
SS-422

## SUBMARINES AT PEACE

The mission of submarines in time of peace is the preparation of material and personnel for operations of war. The devastating effectiveness of our submarines during the war is a source of pride to all "Submariners" equal to that to be found in any single branch of the U. S. Armed Forces. It is their intent to maintain that effectiveness continuously and thus guard jealously their reputation.

Submarines are now, and will be, engaged in an extensive program of training both ashore and afloat. In order to have a safe efficient boat, it is said about submarine personnel, everybody must know everything about everything. "Valve twisting by inexperienced personnel will almost certainly endanger the ship and thus cause failure in the mission assigned.

Other peace time assignments include the development of equipment installed, the test and installation of new equipment, and the improvement of operating procedures, hence the reliability of the boat itself. Submarines operate as school boats for new personnel, assist other forces in anti-submarine training and tests for their equipment as may be required from time to time. Submarines make extended cruises to further diplomatic relations in foreign ports and are stationed in outlying posts to represent and protect U. S. interests.

This then is your Submarine Force — ready and willing to protect and support you who are visiting us today.

## A BRIEF HISTORY

U. S. S. TORO's keel was laid on May 28, 1944, at the Portsmouth Naval Shipyard, Portsmouth, N. H. On August 23rd, TORO was launched, christened and sponsored by Mrs. Alan G. Kirk. Three months later, December 8, 1944, Rear Admiral WITHERS delivered TORO to Commander James D. GRANT, USN, for service with the fleet.

TORO conducted two War Patrols during the period April - July 1945, in the waters off the Japanese mainland. She was successful in rescuing 9 downed flyers and destroying 14 mines.

She returned to the East Coast in late 1945 and was decommissioned on February 7, 1946. She remained in "mothballs" at New London until recommissioned on May 13, 1947.

Since this time she has spent 3 years as a submarine research and development ship and the remaining years engaged in submarine student training and as a participant in fleet anti-submarine exercises.

As a milestone in her long career, TORO conducted her 10,000th dive on October 28, 1960. To understand this figure better, one may consider that it represents some 2 dives a day, every day, for the 15 years of TORO's lifetime.

## TORO VITAL STATISTICS

LENGTH - 311 feet 8 $\frac{1}{2}$  inches

BEAM - 27 feet 3 $\frac{1}{2}$  inches

DISPLACEMENT (Surfaced) - 1985 tons

MAX. SPEED (Surface) - 20 knots

MAX. SPEED (Submerged) - 10 knots

SURFACE PROPULSION - Four 1600 HP diesel generators driving four electric propulsion motors

SUBMERGED PROPULSION - 2 batteries consisting of 126 cells each. Each cell is 4 $\frac{1}{2}$  feet high and weighs 1650 pounds. The batteries power the four propulsion motors

ARMAMENT - 10 torpedo tubes. 28 steam-driven torpedoes can be carried or a larger number of electric torpedoes

### Commanding Officers of USS TORO (SS-422)

CDR James D. Grant, USN	8 Dec 1944 - 7 Feb 1946
CDR R. W. Alexander, USN	13 May 1947 - 7 June 1949
CDR E. L. Schwab, Jr., USN	7 June 1949 - 9 July 1951
CDR G. K. Nicodemus, Jr., USN	9 July 1951 - 13 Apr 1953
LCDR W. O. Hudson, II, USN	13 Apr 1953 - 22 July 1955
LCDR G. M. Hayes, USN	22 July 1955 - 12 Sep 1956
LCDR L. H. Lippincott, USN	12 Sep 1956 - 16 Sep 1958
LCDR R. I. Boland, Jr., USN	16 Sep 1958 - 11 Aug 1960
LCDR T. L. Sutton, USN	11 Aug 1960 - Present