## U.S.S. GATO (SS212)

## BATTLE DAMAGE REPORT

The U.S.S. GATO arrived at Mare Island on 14 July 1943 for a major overhaul and battle damage repairs. The submarine departed on the 18th of August 1943 after completion of repairs and alterations.

Heavy pressures from Jap depth charges exploding near the stern partially crushed the four (4) after torpedo tubes, formed numerous indentations in shell plating under the after torpedo room flat, buckled transverse framing slightly causing a misalignment of torpedo loading tracks and hydraulic steering rams in after torpedo room, twisted frames and caved in cover plates on both stern diving planes.

The battle damage repairs consisted of the following:

- 1. Removing damaged after torpedo tubes and installing four (4) new torpedo tubes furnished by the Electric Boat Company.
- 2. Realigning torpedo loading tracks and hydraulic steering rams in after torpedo room.
- 3. Straightening "B" strake shell plating and renewing "A" strake shell plating between frames 119 and 126, port and starboard.
- 4. Straightening the frames and renewing cover plates on both port and starboard stern diving planes.

Actual cost of battle damage repairs is as follows:

L I M T \$20423.52 \$7263.01 \$25572.79 \$53259.32

Y OF

#1

Four (4) stern torpedo tube barrels were examined and a considerable amount of distortion was found as shown in the following table:

Tube	Vertical Plane		Horizontal Plane	
No.	Mien Dia.	Extreme Dia.	Mien Dia.	Extreme Dia.
7 8 9 10	21.112 in. 21.108 " 21.026 " 20.981 "	21.165 in. 21.175 " 21.170 " 21.182 "	21.105 in. 21.117 " 21.094 " 21.091 "	21.156 in. 21.165 " 21.234 " 21.248 "

The designed diameter of above noted tubes is 21.125 inches. The four (4) damaged torpedo tube barrels were renewed and existing appendages repaired for normal service wear and reinstalled. The port and starboard propeller shaft struts were bore sighted and found to be approximately .250 inches out of alignment. The bearing areas were built up by welding and rebored to designed dimensions on a true center line basis.

The steering rams were found out of alignment with the guide cylinders, the rams were shifted on their foundations and realigned with the guide cylinders.

The vessel arrived at Mare Island Navy Yard 14 June 1943 and departed 12 August 1943.

Estimated time for repairs - 50 days.

Estimated cost to repair battle damage to machinery items under L-1:

Barnes, Est.

## ELECTRICAL.

No items to be repsired.