

CASE STUDY

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THE CHALLENGE

After 74 years of wear the rudder clearance exceeded standards and needed to be replaced. 13 rudder bearing staves 3" w x 10" long mostly 9/16" thick held in place by vertical bronze keepers and one key stave. Top staves saw very little wear. Staves had to be varying thicknesses because at time of repair rudder was offset from center.

THE PROJECT

Replace original rudder bearing with lignum vitae, the original rudder bearing material. Composite material was considered but was more expensive with longer lead time for delivery and installation and did not have the performance history of lignum vitae. The new lignum vitae bearing will be used to bring the rudder back into alignment.

THE RESULTS

The rudder bearing replacement took fewer than two weeks out of the six-week yard period. Lignum Vitae North America and repair team was solutions focused, so problems that did arise were handled promptly. The lignum vitae bearing staves took approximately one day to install and the installation went smoothly. To date the solution is performing perfectly - no rocking, no sticking, moves freely.

TYPE

Lignum vitae stave bearings

EQUIPMENT

Class EC-S-CI (Liberty Ship)
Launched June 19, 1943

