

Conversion of FFG-7 to LCS Mission Package Test Platform

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Due to cut backs to the total number of Littoral Combat Ships (LCS), the operational demand on the current LCS is very high, leaving little opportunity for the developmental testing and evaluation of the Mission Modules. This project examines the feasibility of converting a retiring FFG 7 to a Mission Module Test Platform capable of achieving high Technical Readiness Levels (TRLs).

A module layout was selected for examination that replaced the aft 2/3rds of the existing deckhouse with a large warehouse style mission bay. The layout closely resembled a mission bay on an LCS without comprising the structure of the hull.

Further analysis was performed using, RHINO, POSSE and Seakeeper. Deliverables from this study include a 3D RHINO model with the proposed Mission Module layout, a strength, stability and seakeeping analysis, as well as a cost estimate.

The results of this study showed that a converted FFG 7 would be a suitable test platform for LCS Mission Modules. Stability and seakeeping of the modified ship showed improvements from the original FFG 7 and without changing any of the power and propulsion systems, the FFG 7 is able to meet all interface requirements for the modules.

