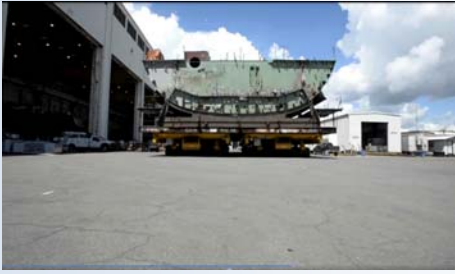


### Project Snapshot



#### Project Lead:

Huntington Ingalls – Ingalls  
Shipbuilding

#### Project Dates:

Aug 2017 – May 2018

#### Objective:

Capitalize on early testing in a shop environment versus later in a more expensive manufacturing environment

#### Estimated Savings:

\$476K per DDG-51 hull

Technology insertion is a key driver to reduce Navy shipbuilding fabrication costs. The Navy ManTech Program is participating in this effort, with specific focus on manufacturing processes for ship construction. The Naval Shipbuilding and Advanced Manufacturing (NSAM) Center and Huntington Ingalls Industries - Ingalls Shipbuilding (Ingalls) have identified an area that can benefit from improved manufacturing processes and technologies to continue cost reduction efforts.

The shipbuilding industry continues to expand its use of equipment and machinery packaging to improve construction cost and outfitting schedules. Machinery packaging enables system/component level testing prior to transporting and landing on the ship. Ingalls strategy for machinery package testing includes accomplishing as much shipboard installation inspections and testing as possible prior to the package leaving the shop. The objective of this project is to evaluate industry 'best practices' to determine the optimal level and type of testing that can be performed on equipment packages. It will determine specific requirements that enable early testing, perform pilot on an existing unit to evaluate construction requirements, evaluate support equipment requirements needed for early testing, and assess support equipment options that capitalize on efficiencies achieved by testing in a controlled environment. The results of this project will develop shop environment testing of packaged units/structures downstream or late stage shipboard testing. This technology and process, once implemented, could potentially save an estimated \$476K per DDG-51 hull and extend to other platforms under construction at Ingalls.

**NSAM** is a Navy ManTech Center of Excellence, chartered by the Office of Naval Research (ONR) to identify, develop and deploy, in U.S. shipyards and manufacturing facilities, advanced manufacturing technologies that will reduce the cost and time to build and repair Navy ships and aviation assets. For additional information on this and other NSAM projects, please visit <http://nsamcenter.org>.

M2742 Package Unit Testing  
Rev A (0917)

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