How a maritime test bed can be used to address naval C4I capability gaps

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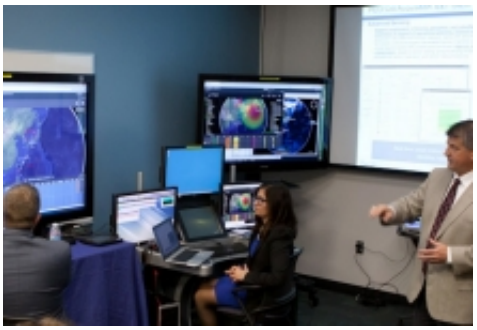
Lockheed Martin recently demonstrated how its leading-edge Maritime Test Bed can help the U.S. Navy accelerate the fielding of various sensor intelligence capabilities in the maritime and joint warfighting environments.

The goal of the demonstration was to show how the test bed can bring significant improvements in advanced sensing, data integration, decision support, electromagnetic support operations, enhanced targeting and fire control and non-kinetic fires. All of these areas were defined as capability gaps in the Acquisition Gaps for Science & Technology memorandum, which was released by the Navy's Program Executive Office for Command, Control, Communications, Computers and Intelligence (PEO C4I).

Using data fusion, workflow automation, and electromagnetic visualization tools, the test bed ingested various types of simulated radar, communications and signals intelligence then depicted the emerging tactical situation. Mimicking sea and ashore naval environments, the test bed successfully expedited the entire intelligence cycle from the initial intercept of the signals through the sharing of a fused tactical picture across multiple naval platforms to combat identification which can be used directly by combat systems to determine an appropriate kinetic or non-kinetic response.

"The amount of sensor intelligence our customers have to analyze is continually escalating," said Dr. Rob Smith, vice president of C4ISR for Lockheed Martin's Information Systems and Global Solutions business. "Using our test bed, we showed how quickly a variety of intelligence, surveillance and reconnaissance capabilities can be validated to expedite the Navy's ability to process and control that intelligence."

Developed with internal research and development funding, the test bed leverages Lockheed Martin's intelligence, command and control, and cybersecurity expertise to provide an empowering capability to share and exploit sensitive information. In the future, the team will refine additional capabilities into the test bed to match the maritime environment and integrate relevant competencies into Navy programs of record. The test bed will also allow classified information to be securely integrated and shared at the highest classification levels, then stripped of sensitive source data and shared with unclassified handlers using a Lockheed Martin cross-domain solution already deployed across the Department of Defense.



Provided by Lockheed Martin