

Lockheed Martin: AI, Data Analytics Will Transform Navy Ship, Aircraft Repairs



Aviation Ordnanceman 3rd Class Mike Schmid conducts maintenance on the weapon system of a MH-60S Seahawk helicopter on the flight deck of the amphibious assault ship USS Bataan (LHD 5). U.S. Navy / Mass Communication Specialist 3rd Class Evan Thompson

BETHESDA, Md. – Sailors will soon spend more time focused on the mission and less on aircraft and ship repairs with a new information system driven by [artificial intelligence](#) and predictive analytics, Lockheed Martin said in a Dec. 9 release.

Digitally re-engineering more than 20 standalone applications into one integrated system, this new tool enables Sailors and Marine Corps maintainers, to anticipate and resolve potential maintenance issues or part failures on aircraft, ships and other systems.

The U.S. Navy is digitally transforming its legacy maintenance systems with a fully modernized, responsive logistics information systems solution developed by Lockheed Martin.

Lockheed Martin partnered with the Navy to rapidly develop and test the integrated logistics information systems solution, emphasizing simplified user interfaces, streamlined workflows, and time-saving features such as auto-population and smart searching.

“Lockheed Martin’s solution is both intuitive and streamlined to maximize end user efficiency,” said Capt. Allan Walters, former program manager of the Navy’s Command and Control Systems Program Office. “The ability to execute rapid and

flexible changes to the software is impressive and designed to improve Navy readiness both ashore and afloat through reduced failure rates and improved repair times.”

The solution’s advanced software capabilities use the latest Department of Defense-approved [DevSecOps tools](#), so software updates can happen in days or weeks instead of months and years, enabling the Navy’s vision of “Compile to Combat in 24 Hours.”

Navy maintainers can create, view and complete maintenance work orders from a mobile device. Instead of referencing a paper or digital manual, sailors can view 3-D models of objects and see where they’re located in the context of an entire ship or aircraft.

“Our logistics solution provides a digital twin capability, integrating 3-D model visualization with material data, maintenance history and the entire operational environment,” said Reeves Valentine, vice president of Lockheed Martin Enterprise Sustainment Solutions. “Sailors can simulate a maintenance action and see its results before doing it on the real thing. Having this capability will result in a greater ability to predict part failure, resulting in optimized maintenance actions to improve asset readiness.”

Smart searching and auto-population functionality help identify proper parts and common issues when creating work orders, which eliminates work and reducing errors.

Lockheed Martin partnered with non-traditional vendors IFS – an enterprise software developer – and Beast Code, a Florida software start-up, to create the logistics information systems solution, which will be initially fielded at 10 Navy sites with about 10,000 users. The delivered solution is part of the U.S. Navy Naval Operational Business Logistics Enterprise (NOBLE) family of systems providing enhanced situational awareness, planning, execution, and management of maintenance

and supply logistics and business functions for more than 200,000 sailors.