Navy Awards Second Multi-Year Electronic Warfare Systems Contract to Lockheed-Martin for E-2D Carrier-based Early Warning Aircraft

An E-2D Hawkeye assigned to the "Bluetails" of Carrier Airborne Early Warning Squadron (VAW) 121 performs an arrested landing on the flight deck of the Nimitz-class aircraft carrier USS Abraham Lincoln (CVN 72). Mass Communication Specialist 3rd Class Amber Smalley / U.S. Navy

WASHINGTON – Lockheed Martin is progressing with a second multi-year contract to upgrade electronic warfare (EW) systems on the Navy's E-2D Advanced Hawkeye carrier-based early warning aircraft.

The five-year, $50.9 million contract covers continued digital upgrading of AN/ALQ-217 Electronic Support Measure (ESM) systems for the Advanced Hawkeyes, including the remaining 75 E-2D aircraft the Navy is expected to purchase under the current program of record, Lockheed Martin officials told reporters Oct. 28, at the Association of Old Crows Symposium.

The AN/ALQ-217 ESM is a passive sensor system that autonomously scans the environment, providing a broad situational awareness by detecting, intercepting and geolocating radio frequency signals. It also can identify weapon systems for operators, including the type, function and mode of intercepted emitters. The system architecture divides the RF operating range into three bands: low, medium and high to allow a full 360-degree acquisition in each band. Deliveries will run from 2021 through 2024. Lockheed Martin began providing analog

ALQ-217 to E-2 aircraft in 1999.

The AN/ALQ-217 “uses a lot of the same technology we have across our EW capability,” said Joseph A. Ottaviano, Lockheed Martin’s director of Electronic Warfare Systems. In addition to the second E-2D contract, awarded by the Navy on July 28, Ottaviano discussed two other Navy EW programs Lockheed Martin is working on: the Multifunction Modular Mast (MMM) subsystem of the AN/BLQ-10 electronic warfare system for Virginia, Los Angeles and Seawolf-class submarines; and Block 2 of the long-term surface warfare improvement program (SEWIP).

SEWIP is an acquisition and incremental development program to upgrade the existing AN/SLQ-32 (V) electronic warfare system, which was developed by Raytheon in the 1970s. SEWIP enhances shipboard EW for early detection, analysis, threat warning and protection from anti-ship missiles. Block 2 will upgrade the EW system’s receiver and antenna group with modern digital technologies to meet the latest threats. Modified software will set up a single, unified interface with existing ship combat systems.

Block 2 is in full rate production, Ottaviano said adding the new technology currently is mounted mostly on destroyers but “it is designed for every ship class” of combatants, including cruisers, aircraft carriers and landing transport docks (LPDs).

The Multifunction Modular Mast (MMM) subsystem is part of an upgrade of the AN/BLQ-10 EW system for Navy submarines under terms of a $47 million order made in 2018. The AN/BLQ-10 provides automatic detection, classification, localization and identification of potentially hostile radar and communications signals at sea.

The AN/BLQ-10 processes signals from the submarine’s imaging mast or periscope when the boat is at periscope depth. It

provides threat warning to avoid counter-detection and collision; determines the number and location of targets for subsequent prosecution; and conducts intelligence, surveillance and reconnaissance (ISR) to support the fleet or battle group.

Naval Expeditionary Creates Five ‘Tech Bridges’ to Spread Workforce Agility

James F. Geurts (center), assistant secretary of the Navy for research, development and acquisition, announced on Sept. 3 a plan to rapidly expand collaboration capabilities through the creation of “tech bridges.” U.S. Navy/Bobby Cummings

ALEXANDRIA, Va. — In its effort to spread innovation and procurement agility across the workforce, the U.S. Navy has created regional “tech bridges” in five areas of the country that will serve as “combustion chambers” of ideas and encourage collaboration among stakeholders.

The tech bridges, with support from the Office of Naval Research and the Navy’s Systems Commands, will partner with start-ups, academia, nonprofits, government entities, small businesses and large corporations to share ideas, experiences and best practices that can make the Navy and U.S. Marine Corps faster and more agile at developing and acquiring

problem-solving technologies, according to the Naval Expeditions (NavalX)
agility office.

NavalX was created last February by Assistant Secretary of the Navy for Research, Development and Acquisition James Geurts. The central idea was to create a workforce “super-connector” that could link people with ideas to individuals and organizations with needs, across all the sea, air and space domains. Successes, lessons-learned and subject-matter expertise could be shared servicewide and eventually across the Defense Department.

“Everything from Marines learning how to 3-D print to writing software to getting folks who don’t normally interact with the military to learn from each other,” Geurts told reporters during a media roundtable Sept. 3 at the NavalX’s temporary offices in Virginia.

The first five tech bridges (more are planned) are in Newport, Rhode Island; Keyport, Washington; San Diego; Orlando; and Crane, Ind. All the bridges must have a local Navy Department sponsor willing to dedicate funding, personnel or programming. For example, Newport is home to the Navy War College as well as a Naval Undersea Warfare Center, said Navy Cmdr. Sam Gray, the tech bridge director at NavalX. Additionally, the regional bridges must have non-Navy local or regional partners providing funding or in-kind services and a sustainable business plan independent of NavalX support after 12 months.

The tech bridges will operate on a “franchise” model, allowing each region to develop their own way to connect to their unique innovation ecosystem. Geurts stressed that the tech bridges will not create platforms or systems. “This is not the place to invent things, this is the place to share knowledge, so others can invent,” he added.

The idea of tech bridges is to create “a gathering spot, kind of a combustion chamber” for innovative ideas that “close that distance” between the end-user, developer and acquiring agency, Geurts said.