Sea Node Completes Trident Warrior 2009 Exercise with Positive Military Utility Assessment

Naval Research Laboratory developed "Sea Node" has completed the Trident Warrior 2009 Exercise and officially received a positive Military Utility Assessment. The Sea-Node System adds FORCENet Capability to the AN/SSX-1 Electronic Support (ES) systems to enable collaborative applications, such as geo-locating coastal radars, as well as to improve situational awareness and reduce operator workload. The Office of Naval Research (ONR) is the sponsoring organization. The Trident Warrior exercise is performed annually under NETWARCOM's leadership.

The Sea-Node System is an enhancement to the Navy's existing AN/SSX-1 ES system. This enhancement provides ship-practical, robust geolocation: low bandwidth over existing communications, no post-install calibration requirements, easy to operate and reliably achieve accurate geolocations via the Searchlight algorithm. Additionally, the Sea Node's improved display substantially reduces operator workload and improves situational awareness. The Sea Node is designed to upgrade the Navy's Surface Electronic Warfare Improvement Program (SEWIP) Program of Record (POR) without changing the existing system's form or fit and accepts standard input from NAVSSI. The current AN/SSX-1 system was developed by NRL's EW Support Measures Branch before being transitioned and deployed as a block upgrade to the AN/SLQ-32 Electronic Warfare System within the SEWIP managed by NAVSEA PEO-IWS-2.

The NRL's Tactical Electronic Warfare Division led the technical development and test support of the Sea Node system. This development was part of the Spacecraft Engineering Department's multi-platform prototype, called "Steady Lookout," which demonstrates new capabilities in maritime domain awareness and advanced communications. NRL led an integrated government-industry team to accomplish this development and testing. Industry members included Praxis Inc., Engineering Systems Group LLC, Space-Ground System Solutions Inc., and ITT Corporation.

Given the successful Trident Warrior experimentation, ONR and NRL now intend to continue working with OPNAV N8, NETWARCOM, and PEO-IWS-2 to assure this Sea Node enhancement and its associated new capabilities are deployed to the Fleet as soon as practical.