

SHIPBOARD ELECTRONIC SYSTEMS EVALUATION FACILITY



BACKGROUND

The U.S. Navy's Shipboard Electronic Systems Evaluation Facilities (SESEFs) are land-based fixed and mobile sites established to provide Test and Evaluation (T&E) material readiness assessments of various U.S. Navy, Coast Guard, Military Sealift Command and allied foreign Navy's platform electromagnetic systems. They also provide electromagnetic T&E services in support of the development of new or the modernization of existing platform electromagnetic systems as well provide electromagnetic signals for training purposes.

OBJECTIVES

The overall mission is to provide its various customers with a dependable and technically capable source for various types of electromagnetic T&E, troubleshooting and training support from its various fixed sites and mobile van(s) capabilities.

Specific objectives of the SESEF Program include:

- Determining end-to-end material readiness of platforms tactical electromagnetic systems in accordance Periodic Maintenance System (PMS), Maintenance Requirement Card (MRC), and Maintenance Index Page (MIP) requirements or following overhaul and new construction of platforms.
- Provide electromagnetic T&E support for new construction of ships Builders Trails and to Board of Inspection and Survey (INSURV) for Platform Acceptance and Final Contract Trials.
- Provide reliable partner electromagnetic T&E support to Platform Squadrons for assessing Crew proficiency and Certifications.
- Validate engineering designs by verifying conformance of test results to engineering design and model range performance requirements for new and modernized electromagnetic systems.
- Identify and assist in correction of deficiencies in the platform's electromagnetic Combat Systems electronic suites to optimize material readiness.

CAPABILITIES

As directed by NAVSEA and with strong support of various Fleet Commands, an ever-evolving array of electromagnetic T&E and Training capabilities are available at the SESEF ranges and mobile van(s). Emphasis is placed on providing real-time data analysis while reducing on-station testing time for Fleet units. SESEF sites are manned as required to support Fleet and testing schedules with on-call operations available. Testing is scheduled by the engineering activity, ship or Fleet command with the desired SESEF location. Current SESEF capabilities can be categorized in the following groups:

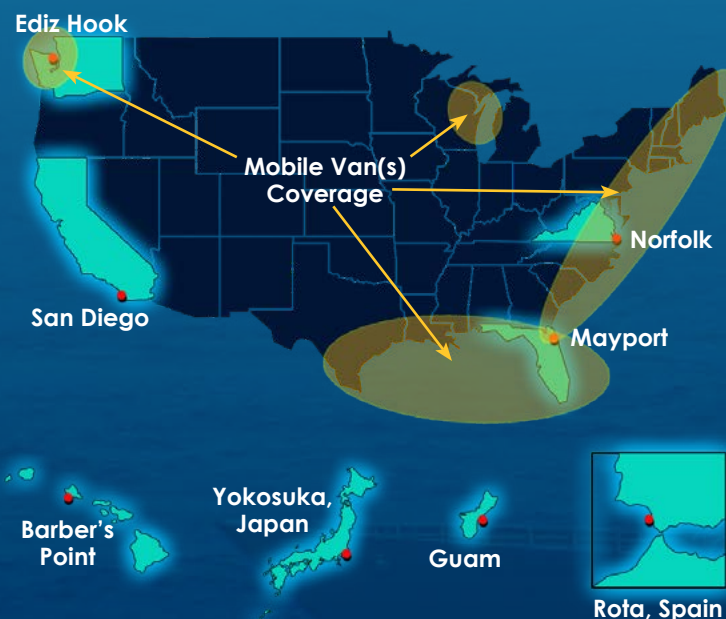
- Quick-Look Operability Tests
- System Performance Testing

Systems Performance Testing

Performance testing provides the ship with a detailed analysis and evaluation of the system(s) under test that are usually performed prior to deployment or after the completion of a recent availability period. Specific performance tests are designed to require the ship to operate in a particular geographical location. These tests include:

- Antenna Radiation Patterns
- Various Electronic Warfare Systems
- TACAN Certification

SESEF'S WORLDWIDE REACH



Mobile test vans are also available to support testing of vessels in shipyards and other locations away from the Fleet Concentration Area ranges.



Quick-Look Operability Tests

Quick-Look tests are conducted on ship's systems either pier side or underway with no prior scheduling or required ship maneuvering. These tests can be performed either from a SESEF fixed range or mobile van to evaluate operability and measure signal quality and parameter conformance to prescribed specifications. Test duration is variable and dependent upon the number of systems to be tested, and the depth of testing required. Quick-Look testing is performed on the following systems:

- Various Communications
- Tactical Air Navigation (TACAN)
- Tactical Data Links
- Various Electronic Warfare Systems
- Secure Teletype

STAFF

The SESEF staff is comprised of a diverse team of engineers and technicians that are Subject Matter Experts (SMEs) of the various SESEF capabilities and have in-depth knowledge of the numerous Platform systems that they test and evaluate. As a result of their expertise, SESEF personnel can analyze test data and shipboard problems quickly and accurately and provide real-time solutions. The engineering staff has the skills necessary to employ state-of-the-art test methodologies in developing new and enhanced automated test equipment. This ability provides our customers with cost-effective testing that optimizes test range time, data acquisition, and analysis. Our staff continually strives to exceed customer requirements and to meet the challenges of future customer demands.

CONTACT US

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