

AN/APS-147 Multi-Mode Radar

Maritime Inverse Synthetic Aperture Radar (ISAR)



The increasingly complex nature of maritime operations demands increasingly sophisticated equipment to quickly and positively identify radar contacts of interest while avoiding detection by those contacts. To identify others without being detected yourself is a distinct tactical advantage.

To make this possible, the radar experts at Telephonics have combined leading-edge processing with lightweight hardware to produce a Multi-Mode Radar (MMR) which meets the U.S. Navy's highest performance standards.

UNMATCHED PERFORMANCE

Telephonics' multi-mode radar utilizes the latest in high throughput signal and data processing. It detects small targets and displays them with a resolution unmatched by other radar. Its many radar modes address a myriad of situations, from short

range Search-and-Rescue operations, to long range surveillance, to inverse synthetic aperture imaging for classification or identification, to enhanced LPI searches.

The modular design inherent in its signal processing give it the upgrade flexibility to meet the new challenges of the 21st century.

The key to Telephonics' AN/APS-147 radar is its extremely efficient signal processing. Advanced processing allows the MMR to use a collection of waveforms to perform its mission at much lower output power levels than traditional maritime surveillance radar. Efficient processing means low-probability of intercept and lightweight design.

LOW PROBABILITY OF INTERCEPT

Combining low peak power waveform with frequency agility, our radar detects medium to long range targets without the threat of Electronic Support Measures (ESM) interception. This results in a radar with an extremely low probability of intercept by hostile forces.

LIGHTWEIGHT DESIGN

The AN/APS-147 is lightweight because improved processing requires less hardware for optimum performance. Telephonics is also using composite materials to further decrease the weight of the unit.

Through the sophistication of off-the-shelf processors and proven, reliable software, our radar supports a number of operational modes.

RADAR MODES

- Target Imaging
- Small Target/Periscope Detection
- Long Range Surveillance
- Weather Detection and Avoidance
- All Weather Navigation
- Short Range Search-and-Rescue
- Enhanced LPI Search
- Target Designation

IDENTIFICATION FRIEND OR FOE INTERROGATOR

- Integrated Internal IFF
- Mark XII Capable
- Enhanced Antenna Performance



Specifications subject to change without prior notice.

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