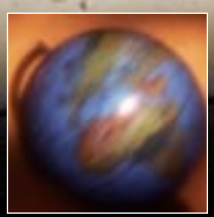
LOCKHEED MARTIN

FPS-117
Long Range Solid-State Radar



Design innovation the world over

Lockheed Martin FPS-117 Long Range Solid-State Radar

The World's Leading 3D Surveillance Radar

NATO certified and proven in more locations around-the-world than any radar in its class, the FPS-117 Long Range Radar offers superior performance even in high clutter environments thanks to its state-of-the-art solid-state design and L-Band operation. This lower frequency band combined with the FPS-117's Advanced Pencil Beam Architecture allows for exceptional detection and tracking as well as outstanding adaptability to changing environmental conditions.

With its highly reliable all solid-state components, continuous automatic performance monitoring, and ease of maintenance, the FPS-117 is second-to-none in system availability and low cost of ownership. The FPS-117 Long Range Radar provides both air surveillance and en route air traffic control and qualifies as a "dual-use" article by the U.S. EXIM bank, making low-interest financing also available.

More than 120 Systems in Operation Worldwide

Lockheed Martin solid-state radar is the radar of choice for over 15 nations on six continents. These systems have accumulated over 1000 system-years of operating experience and are adding one more year every four days. More FPS-117 systems are in operation today than all other competitive radars combined assuring worldwide support.

Transportable Model

Solid-State for High Reliability and Low Cost of Ownership

Solid-state electronics have an impressive field track record for highly reliable performance. In fact, the FPS-117 has a proven availability rate in excess of 99.6%. The modular architecture allows for exceptionally easy maintenance translating into maintenance costs of less than 5% of the system's acquisition costs over a twenty-year period.

L-Band for Unsurpassed Performance in Clutter

The FPS-117 performs exceptionally well in rain or harsh weather conditions where radars operating in higher frequency bands can be virtually blind. The combination of L-Band operating frequencies with MTI/MTD processing, sidelobe nulling, and advanced CFAR processing allows the radar to detect small targets in the presence of ground and weather clutter. The radar automatically adapts to and rejects land, sea, or weather clutter for maximum system performance. Velocity discrimination is also used to reject low velocity targets, such as birds.

Superior ECCM

The inherent design of the FPS-117 includes rapid response to jamming and anti-radiation missiles and offers many other counter counter measures.

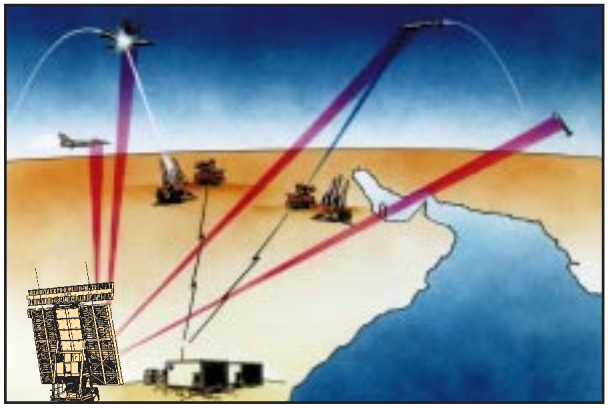
Customized for Your Unique Needs

- Fixed Site or Transportable with C^3I Post Configurable to Specific User Needs
- Missile Detection, Tracking, and Weapon System Cueing
- Remote, Display, Control and Monitoring for Unmanned Operation
- Monopulse Beacon Systems with Mode 4, Mode S, or Other Enhancements
- Enhanced Weather and Clutter Mapping Displays
- Customized Data Formats Including Plots, Tracks, Control and Radar Status
- Local Data Recording and Analysis with Mission Playback
- Enhanced Tracking/Ground-Controlled Intercept (GCI) System, Weapons Control, Flight Plan Correlation, and a Wide Array of Operator Controlled Display Features
- Integration of Electronic Support Measures (ESM) System
- Special Purpose Operating Modes such as Maritime Surface and Land Traffic Surveillance, Detection/Vehicle Rejection, and Missile Tracking
- Radar Environment Simulator (RES) for Advanced Operator Training

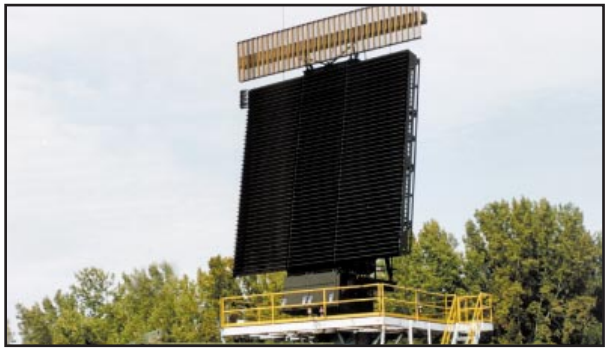
Multi-Mission Capability

Available in both fixed site and transportable models, possible missions include:

- Turnkey Air Surveillance Systems with Local Airspace Control
- Air Surveillance Sensor (Manned or Unmanned) in Networked System
- Dual-Use Air Traffic Control/Air Defense
- Multi-mode Sensor with Missile Detection and Tracking



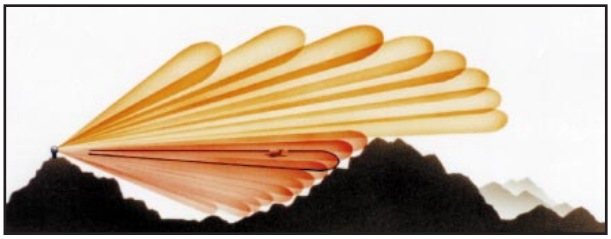
The FPS-117 has optional air and missile defense capability.



Both transportable and fixed site (shown above) models can provide long range surveillance and air traffic control - dual use.

Advanced Pencil Beam Architecture for Superior Overall Performance and Adaptability

The FPS-117 Pencil Beam capability allows complete flexibility in customizing the beam patterns to optimize performance in challenging terrain and clutter applications. The Pencil Beam Architecture offers the flexibility to “look down” from elevated sites to detect aircraft in valleys. The system can also automatically reconfigure to address changing environmental conditions.



Pencil Beam Architecture creates the optimum sensing pattern.

Performance gaps are possible with Stacked Beam Architecture.

To learn more about the FPS-117 Long Range Solid-State Radar contact our Business Development Representatives at Lockheed Martin Ocean, Radar & Sensor Systems
Syracuse, New York
Phone: 315-456-3683
Fax: 315-456-1793
We also invite you to visit our web site at www.lmco.com/orss/.

B006/12-96
B093 8/98

Electronics
Lockheed Martin
Ocean, Radar & Sensor Systems
Electronics Park
Syracuse, New York 13221-4840
www.lmco.com/orss/