AN/FPS-117, AN/TPS-77, AN/TPS-59
AIR SURVEILLANCE RADARS
World's Leading Manufacturer of Ground-Based Radar Systems

Dedicated TBM Track Beams
Track Targets up to 60° in Elevation While Maintaining Coverage in the Normal Surveillance Volume

Clutter-Resistant Pencil Beams Detect Low-Flying Targets Around Windfarms

Utilize MTI and Doppler As Well As Adaptive Beam Forming Processing to Minimize Impact of Clutter

FPS-117, TPS-77 and TPS-59 Radars Offers A Proven Advanced Architecture

• D/L Frequency Band and Scanning Pencil Beam Architectures Makes Radars Highest Performing in Class
• 30+ Years Experience Developing Adaptive Algorithms for Complex Operating Environments (Cognitive Radars)
• Radars Provide Simultaneous Low, Medium and High Altitude Coverage
• Full Monopulse Provides Accurate Target Position in Single Beam Dwell
• Fully Independent Transmit and Receive Beams Allows Multiple Missions Simultaneously
• Proven Radar Design that is Routinely Updated with "State-of-the-Art" Technology
• Radars Delivered Mission Ready with Operator Shelter and Space for Customer Communication Equipment

Active Electronic Elevation Scanning Arrays

• Reliably Developing and Delivering Radar Systems to Our Customers for Over 60 Years
• Utilize State-of-the-Art Technology in All Our Radar Products
• Leader in Solid-State Electronically Steered Phased Array Technology
• Over 175 Long-Range Ground-Based Radars Delivered World Wide - Greater Than any Other
• Proven Operational Performance Under All Environmental Conditions

Long-Range Beams Provide Additional Sensitivity for Detecting Targets at Greater Distances

Ultra-Low Valley Coverage to -6° Without Losing Coverage in the Normal (0° - 20°) Surveillance Volume (No Mechanical Tilt Required)
Pencil Beam Radars Out Perform Stacked Beam Radars

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Stacked Beam Radars More Susceptible to Jamming

D/L-Band Frequency of Choice for Long Range Surveillance Radars

- Significant Performance Advantage in Clutter Over S-Band Radars
- Greater than 20 db Clutter Rejection Improvement Over S-Band Radars
- Lower Frequency Makes Radars Less Susceptible to Different Forms of Clutter
- In 4 mm/hour Rain, L-Band Provides Almost 3.5 Times More Surveillance Volume Than S-Band

Best Support in the Industry

- Each Radar Backed by a Strong Support Network
- For More than 30 Years No Radar Taken Out of Service
- LM Users Conference - Customers Introduced to Latest in Radar Technology