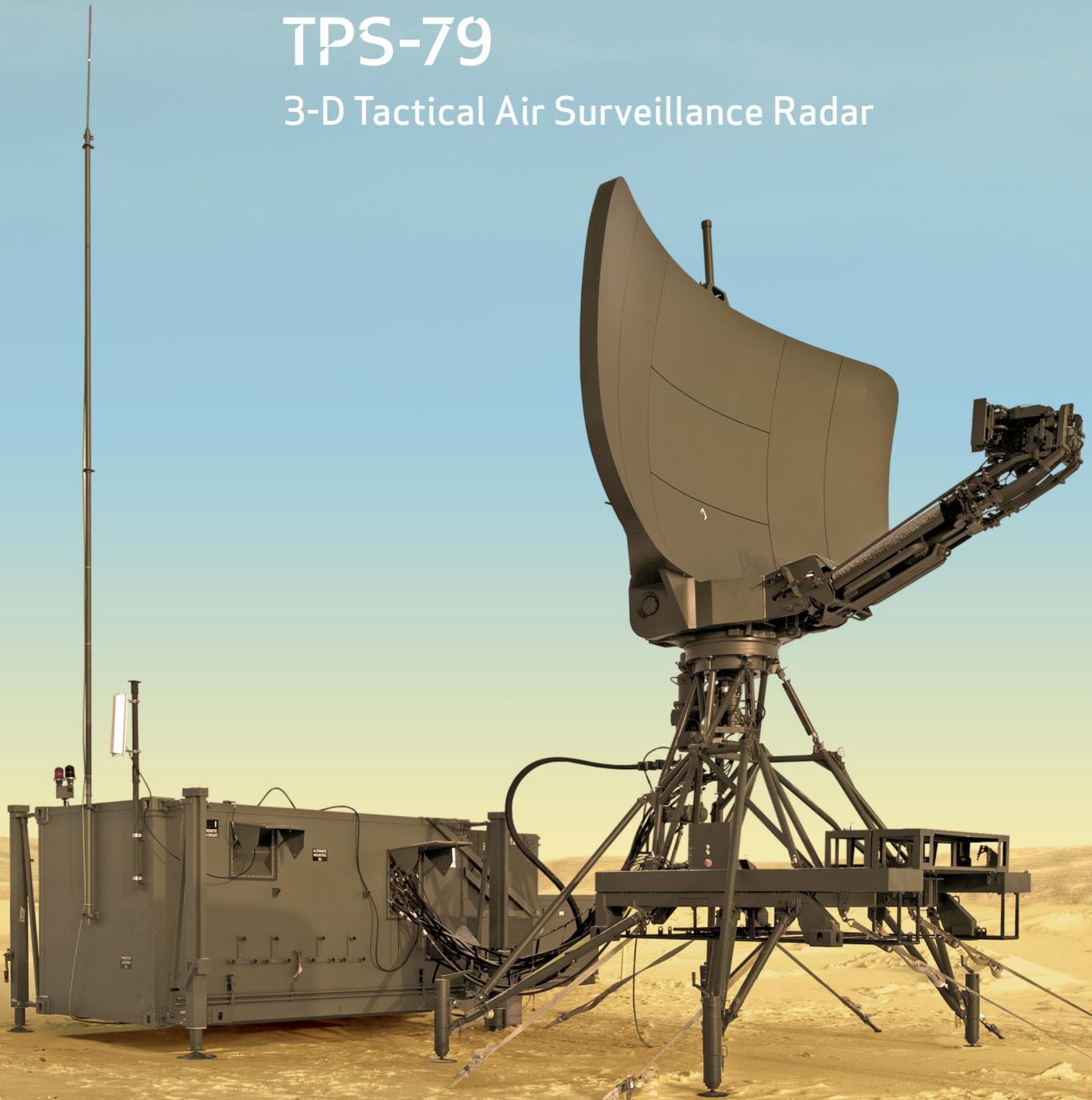




TPS-79

3-D Tactical Air Surveillance Radar



TPS-79, NATO Compatible, Medium Range Radar

The TPS-79 Radar, one of Lockheed Martin's multi-mission surveillance radars, meets the demanding performance requirements of air defense and/or air traffic control, providing critical air surveillance coverage. The radar's performance, high availability, survivability and mobility make it an ideal solution for mid-range airspace surveillance. The TPS-79 provides detection of air targets including commercial, military, rotary wing and general aviation traffic in the presence of various ground, weather, bird, and anomalous propagation clutter with superior performance.

High Mobility, Rapid Deployment

The TPS-79 is designed for rapid autonomous tactical deployment. No additional tools, equipment or personnel are required for system deployment. The highly mobile TPS-79 is transportable by air (C-130), sea (cargo ship), or land by rail or truck (on or off-road).

Multi-Mission Capability

The TPS-79 was designed as an advanced tactical 3-D medium-range surveillance radar, with exceptional performance in clutter and ECM environments. The ability to switch to the ATC mission is accessible via an operator adjustable software mode switch.

Lockheed Martin
Mission Systems and Training (MST)
300 M Street, SE
Washington, D.C. 20003, USA

Copyright ©2013 Lockheed Martin Corporation
All rights reserved
PIRA TOP200712001

Features

- 3-D target height estimation
- Enhanced target detection in clutter/ECM environments
- Solid-state S-band transmitter with fail-soft capability
- Mach 3.5 missile detection
- Selectable polarization (RHC, LHC, V and H) for improved target decision in presence of rain/ECM
- Adaptive moving target detection
- Automatic frequency selection for interference avoidance
- High MTBCF for low life cycle costs
- Highly mobile for flexibility and rapid deployment
- Integrated primary/secondary antenna eliminates need for separate SSR antenna, dual antenna alignment and reduces system weight
- Comprehensive Built-in-Test (BIT) and Performance Monitoring/Fault Localization (PM/FL)
- Optional SSR with Mode S

Performance

Frequency:	S-Band 2.7-2.9 GHz
Peak Power:	21 kW
Signal to Clutter:	> 60 dB SCI
Pd:	> 0.8 on 1m ² @ 148 km (12 rpm) > 0.8 on 2m ² @ 190 km (6 rpm)
Altitude:	8 km (12 rpm) 10 km (6 rpm)
Azimuth:	360 degrees
Elevation:	0 degrees to 30 degrees
MTBCF:	1,300 hours
Availability (Ai):	> 0.99
Deployment:	< 60 minutes

