



AN/TPS-79
3D Tactical Air Surveillance Radar





AN/TPS-79 3D Performance, Versatility, and High Mobility

Lockheed Martin's AN/TPS-79 Air Surveillance Radar is the most effective medium range tactical radar for today's demanding air surveillance and air traffic control environments.

The AN/TPS-79, a modern solid-state commercial-off-the-shelf radar, provides the most advanced 3D medium range, multi-mission, highly mobile and rapidly deployable modular radar system in the world today. The AN/TPS-79 is the next generation in medium range air surveillance radars.

High Performance

- Solid-state S-band design
- Enhanced target detection in clutter/ECM environments
- Fail-soft capability
- Three dimensional
- Exceptional signal-to-clutter performance
- Selectable circular (L&R) linear polarization for improved target detection in presence of clutter/rain/ECM
- Adaptive moving target detection
- Automatic frequency selection
- Tailored STC map to maximize receiver dynamic range
- High mean-time-between-failures for low life-cycle costs
- Highly mobile for rapid deployment
- Integrated radar/beacon antenna eliminates dual antenna alignment requirement
- Mode S compatible
- Comprehensive BIT and BITE

Multi-mission Capability

Designed as the most advanced tactical 3D medium range surveillance radar, the exceptional performance of the AN/TPS-79 in clutter and ECM environments makes it a versatile radar with multi-mission capability.



**Air Surveillance and
Air Traffic Control**

Specifications:

Frequency(S-Band):	2.7 GHz to 2.9 GHz
Peak Power:	11 KW
Duty Cycle:	11%
PRF:	Fixed or Staggered
Pulsewidth:	5 usec. and 120 usec
Rotation:	12 or 15 rpm
Signal to Clutter:	≥ 60dB
Detection Performance:	110km for Pd=0.9, 1m ²
3D Height:	30,000ft to 110Km (0-7P)
Instrumented Range:	60 nmi
Accuracies:	
Range:	30m
Azimuth:	0.18P (at 1 sigma)
Height:	6000ft at 60 nmi
MTBF:	>1200 hr
Availability:	>0.99
Deployment:	<45minutes

Note: Performance is based on 12 rpm rotation

High Mobility, Rapid Deployment

The AN/TPS-79 is designed for rapid tactical deployment, set-up and redeployment. The radar can be easily configured for a HMMWV mounted shelter, a fixed site or for transportable operations. No special tools are required for system deployment. The MMSR is transportable by air (C-130, CH-53), sea (cargo ship) and land (truck/train). Set-up/pack-up time is less than 90 minutes.



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