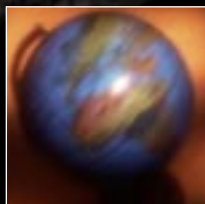


LOCKHEED MARTIN



AN/TPS-59 (V)3



Design innovation the world over

AN/TPS-59 (V)3 Tactical Missile Defense Radar



Features:

- Full 360° coverage
- 400 nmi (720 km) range to 10⁶ ft (305 km) altitude
- Accurate launch and impact point determination
- Target classification and debris/missile discrimination
- Effective anti-missile battery cueing
- Increased alert time for military and civilian personnel
- Increased defended footprint

Lockheed Martin's AN/TPS-59 (V)3 solid-state radar provides HAWK with an immediate enhanced TMD capability. Lockheed Martin's world-wide solid-state radar installation base insures continued system support.

Proven in "live fire" tests, the AN/TPS-59 (V)3 radar is the most capable long range radar for TBM detection, track, and classification for anti-missile batteries in production today.



In August 1996, at White Sands Missile Range, the AN/TPS-59 (V)3/HAWK system completed a "live fire" test program which included successfully engaging and destroying multiple targets including simultaneously launched multiple ballistic missiles and mixed ballistic and cruise missile targets.

Developed for the United States Ballistic Missile Defense Organization (BMDO) and the United States Marine Corps, the TPS-59 (V)3 is designed to operate with HAWK and Patriot. When integrated with HAWK, the TPS-59 (V)3/HAWK system is the most cost effective TMD system currently in production with successfully validated performance against ballistic missiles as well as air breathing threats. The radar has been designed to be rapidly transported by truck, helicopter, or C-130 cargo plane.



The TPS-59 radar's 740 km range and full 360° azimuth scan results in a surveillance volume of 603 million km³ for tactical missile defense.

System Characteristics	
Performance	
Frequency	1215-1400 MHz
Transmitter Power	46 kW
Tactical Ballistic Missiles	
Range	400 nmi (740 km) with continuous coverage to 10 ⁶ ft (305 km)
Elevation Beam Steering	-5° to 60°
Azimuth Sector Coverage	360°
Launch/Impact Point Prediction	3-5 km circular error probability for 50-700 km range TBMs
Surveillance Volume	95 x 10 nmi ³ (60 ³ x 106 km ³)
Air Breathing Targets	
Range	300 nmi (555 km) with continuous coverage to 10 ⁵ ft (30.5 km)
Elevation Beam Steering	-2° to 20°
Azimuth Sector Coverage	360°
Deployment	
Air Transportable	C-130, CH 53, and CH 46 transportable
Truck Transportable	2.5 ton truck transportable
Shelter	Single S-280 shelter for low embarkation footprint
Setup	Full operation in 4 hours from site selection
Site Preparation	Deployable to unprepared sites
Reliability/Maintenance	
MTBF	2000 hours
Availability	.9947

World-Wide Radar Deployment

Lockheed Martin has deployed more solid-state radars world-wide than any other supplier.

The TPS-59 is an all solid-state L-Band, three-dimensional air defense radar which provides long-range surveillance and ground-control intercept capability in a tactically mobile environment.

With over 126 radars deployed in seventeen countries world-wide, the TPS-59/FPS-117 family of solid-state radars has a record for performance and reliability which is unsurpassed.

TPS-59	USMC	12
TPS-59	Egypt	5
GE592	Belgium	1
Type 92	United Kingdom	2
FPS-117	USAF Hawaii	1
FPS-117	USAF Alaska	16
TPS-59M/34	Egypt	9
FPS-117	Saudi Arabia	17
FPS-117	Korea	8
FPS-117	Canada	15
FPS-117	Kuwait	1
FPS-117	Taiwan	2
FPS-117	Belgium	1
FPS-117	Mid-East	3
TPS-117	Brazil	6
FPS-117	Iceland	5
FPS-117	Germany	9
FPS-117	Italy	4
FPS-117	Turkey	3
FPS-117	Asia	1
FPS-117	Romania	5

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