

Radar (AN/TPS-59(V)3) - 11x, Anti-TBM

United States

Type: Mobile Vehicle(s)

Commissioned: 1996

Operator: Marine Corps

Length: 4 m

Width: 6 m

Crew: 0



Sensors / EW:

- AN/TPS-59(V)3 - Radar, Radar, Air Search, 3D Long-Range, Max range: 740.8 km

OVERVIEW: The AN/TPS-59(V)3 is an active Electronic Elevation Scanning Array, 3-D, transportable, air search radar that operates in the "D" Band.

DETAILS: The AN/TPS-59(V)3 is used to control air operations, provide long-range surveillance of an assigned airspace, and provide a Tactical Ballistic Missile (TBM) defense capability to the Marine Air Ground Task Force (MAGTF), and is the principal air surveillance radar for the MAGTF. The AN/TPS-59(V)3 will primarily be used to support MAGTF aviation during sustained operations ashore, as part of a joint theater air and missile defense architecture. Weapon systems associated with the AN/TPS-59(V)3 include HAWK and PATRIOT missiles.

Specifications:

Frequency: 1.215-1.4 GHz (D Band (NATO), L Band (IEEE))

Power output: unknown

PRF: unknown

Range Resolution: 1.7 degrees (ABT) 1.85 degrees (TBM) azimuth

On/Off time: unknown

Deploy/Stow Time 240 minutes/ unknown

Detection Range

Max Range (airbreather (ABT)): 555 km

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Max Range (TBM tgt): 740 km

NOTES: IOC for AN/TPS-59 in 1985, IOC for V3 upgrade in 1998. The AN/TPS-59(V)3 is transportable on three single-axle trailers, or by helo or C-130. Users include the USMC, Egypt, and Bahrain.

SOURCES: "AN/TPS-59(V)3 Radar Set." GlobalSecurity.org - Reliable Security Information. Accessed March 22, 2015. <http://www.globalsecurity.org/space/systems/an-tps-59.htm>; Lockheed Martin; The AN/TPS-59(V)3 Tactical Missile Defense Radar System, pg. 2-3, www.radartutorial.eu/19.kartei/pubs/tps-59.pdf ; Defense Industry Daily. "Bahrain Receives TPS-59 Missile Defense Radar." Accessed December 1, 2013. <http://www.defenseindustrydaily.com/bahrain-receives-tps-59-missile-defense-radar-04013/> ; Wikipedia. "AN/TPS-59." Accessed December 1, 2013. <http://en.wikipedia.org/wiki/AN/TPS-59>.