Radar (AN/TPS-43D) - 7x

Israel

Type: Mobile Vehicle(s)
Commissioned: 1970
Operator: Air Force
Length: 4 m
Width: 6 m
Crew: 0



Sensors / EW:
- AN/TPS-43D - Radar, Radar, Air Search, 3D Long-Range, Max range: 444.5 km

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OVERVIEW: The AN/TPS-43 is a transportable 3-D air search radar that operates in the "E/F" Band.

DETAILS: The AN/TPS-43 is a lightweight air and ground transportable radar designed for use with manned aircraft or surface-to-air missile batteries in a wide variety of tactical environments. It incorporates extensive clutter rejection and electronic counter-countermeasures features are incorporated in the design, including a digital coherent moving target indicator system, pulse-to-pulse frequency agility, Jamming Analysis and Transmission Selection (JATS), coded pulse anti-clutter system and sidelobe blanking.

Specifications:

Frequency: 2.9-3.1 GHz (E/F Band)
Power output: 6.7 kW(average); 4 MW (peak)
PRF: 250 Hz
Range Resolution: 152 m (range), 1.1 degrees azimuth
On/Off time: unknown
Deploy/Stow Time 60 minutes/30 minutes

Detection Range (AN/TPS-43E)
80% Pd, 2 m2 RCS target:

tgt alt. 100m: 300 km
tgt alt. 18000m: 408 km

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Max Range: 450 km

NOTES: IOC 1968. The entire system can be transported by two trucks.

SOURCES: "AN/TPS-43." Wikipedia, the Free Encyclopedia. Accessed March 22, 2015. http://en.wikipedia.org/wiki/AN/TPS-43 ; "Radar Basics." Grundlagen Der Radartechnik. Accessed March 22, 2015. http://www.radartutorial.eu/19.kartei/karte804.en.html ; http://www.mobileradar.org/radar_descptn_3.html ; Westinghouse; The AN/TPS-43E Tactical Radar System, pg. 12, www.mobileradar.org/Documents/43E_Tactical%20Radar%20System.pdf