

Radar (AN/TPS-43G) - 4x+Xx

Saudi Arabia

Type: Mobile Vehicle(s)

Commissioned: 1983

Operator: Air Force

Length: 4 m

Width: 6 m

Crew: 0

Sensors / EW:

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

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