Radar (AN/FPS-90 HF) - AN/FPS-6

Spain

Type: Building (Surface)

Commissioned: 0
Operator: Air Force

Length: 12 m Width: 12 m

Crew: 0



Sensors / EW:

- AN/FPS-90 HF - (AN/FPS-6) Radar, Radar, Height-Finder, Long-Range, Max range: 398.2 km

OVERVIEW: The AN/FPS-90 radar was a fixed, nodding height finding radar operating in the "E" band

DETAILS: The AN/FPS-6 was noted for extreme accuracy at long range. The radar consisted of an antenna group, a transmitter group, a receiver group, and an ancillary group. Most fixed sites had a remote group, which allowed the control of the radar from inside the operations center. Also located in operations, was the anti-jam receivers. These receivers were fed with raw video from the tower receiver, and output several types of processed video to enable operators to see through jamming.

Specifications:

Frequency: 2.7-to-2.9 GHz (E Band)

Power output: 3.6 kW(average); 3.5 MW (peak) 4.5 MW (peak prior to downgrade with FPS-6 magnetron)

PRF: 300-405 Hz

Range Resolution: 300 m (range), unknown degrees azimuth

On/Off time: unknown Deploy/Stow Time N/A

Max Detection Ranges: 370 km

NOTES: The AN/FPS-90 were identical to the AN/FPS-6 except for receiver modifications. The AN/FPS-90 radar was designated a high-power model and rated at 4.5 MW peak power, versus the AN/FPS-6 at 3.5 MW peak power. Due to maintenance costs and high failure rates, these radars were all retrofitted to the same magnetron as the AN/FPS-6 by the

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late 1960s, and were no longer high power. The radar maintained its AN/FPS-90 designation due to the receiver modifications. A mobile version, the AN/MPS-14 was also produced.

SOURCES: Wikipedia. "General Electric AN/FPS-6 Radar" Accessed December 2, 2013.

http://en.wikipedia.org/wiki/General_Electric_AN/FPS-6_Radar; "General ElectricElectric AN/FPS-6 Radar." Wikipedia, the Free Encyclopedia. Accessed March 22, 2015.

 $http://en.wikipedia.org/wiki/General_Electric_AN/FPS-6_Radar\ ;\ http://fas.org/nuke/guide/usa/airdef/an-fps-6.htm\ ;\ http://www.radartutorial.eu/19.kartei/karte802.en.html$