

AN/TPN-18 Radar Set

Status: STD-A; NSN: 5840-00-944-2452

Reference: TM 11-5840-281-12

General Information

The AN/TPN-18 is a lightweight, helicopter-transportable radar set designed for use during all weather conditions. It provides information used for air traffic control, radar surveillance, and ground-controlled approach of aircraft. The AN/TPN-18 is a component of Landing Control Centrals AN/TSQ-71A and AN/TSQ-72. It is capable of remote operation up to 76 m (249 ft).

Major Components

1 Antenna AS-1292/TPN-8	1 Receiver-Transmitter
1 Antenna AS-1291/TPN-8	RT-818/TPN-18
	1 Antenna Pedestal AB-738/TPN-8

Technical Characteristics

Range-----	9, 19, 37, 74 km (6, 12, 23, 46 mi); 148 km (92 mi) for IFF
Type-----	Pulse modulated
Target Indicator-----	Final approach, beta scan surveillance, PPI display in surveillance operation
Beam Data-----	Antenna elevation: 1.1° vertical, 3.4° horizontal with vertical or circular polarization; antenna azimuth: 3.5° vertical, 1.3° horizontal with vertical or circular polarization
Frequency-----	9.0 to 9.6 GHz
Peak Power-----	200 kw nominal
Pulse Repetition Rate-----	1,200 PPS
Pulse Width-----	0.2 or 0.8 microseconds
Power Input-----	120/208 V AC, 400 Hz, 3-phase, wye-connected
Power Source-----	4-kw primary power source; operates within power source voltage variations of ±10 percent and frequency variations of ±5 percent
Weight-----	1,509 kg (3,320 lb)

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