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AN/UPM-1A

Radar Maintenance Equipment AN/UPM-1A is a ground portable beacon and monitor test set used to test and monitor radar beacons and other equipment operating in the frequency range of 155-235 mc, and 460-570 mc.

This test equipment may be used to measure or check transmitter frequency, power output pulse width and pulse shape; measure and check receiver sensitivity and bandwidth; measure or check pulse shape at receiver output; give an indication of the approximate repetition rate of transponders; provide for beacon monitoring; and measure or check delay time in transponder or beacons.

A 3- inch oscilloscope is used as an indicator and voltage measuring instrument. The usual focus, intensity and centering control are provided by a linear sweep of 40, 200, or 2000 micro-seconds duration. Horizontal timing calibration is provided.

Oscillators of pulse radio frequency signals are provided in each frequency band. They may be synchronized from an external source or from an internal synchronizing generator.

Wavemeters with separate diode detectors measure the frequency of either the internal pulse signal generators or external pulse radio frequency signals over the range of 155 to 235 mc, and 460 to 570 mc.

Antennas may be connected to the r-f jacks for monitoring permanently installed equipments. When connected in this way the voltage indicating detectors and fre-

quency meters are actuated by both internal and external generated signals. The r-f jacks may also be interconnected with the equipment under test through a 6-foot cable and shielded diode head. The probe is provided with a detector for indicating peak voltages (or power) at the output terminals of the probe. Both sensitivity and power output of associated equipment may be measured.

The equipment is mounted in an all metal case with compartments provided for storing accessories and cordage.

POWER INPUT	200 WATTS @ 80/115/230 VOLTS; 50-60 CPS
FREQUENCY	155-235 MC AND 460-570 MC.
TYPE OF SIGNAL	PULSE

TUBE COMPLEMENT			
NO.	TYPE	NO.	TYPE
10	6SN7GT	3	6C4
1	2X2	3	9005
2	6SH7	2	9006
1	6AG7	2	6J6
1	OD3/VR-150	1	3BP1
		1	5U4G



RADAR MAINTENANCE EQUIPMENT AN/UPM-1A TOTAL WEIGHT 140 LBS.

Component	Nomenclature	Size	Weight
Detector Junction Box	J-94/UPM-1	4" x 3" x 3"	
Console Rack	MT-189/UPM-1	16" x 26" x 12"	
Dust Cover	CW-24/UPM-1		
Oscillator (155-235 mc)	O-12/UPM-1		
Oscillator (460-570)mc)	O-13/UPM-1		
Wavemeter (155-235 mc)	TS-133/UPM-1		
Wavemeter (460-570)mc)	TS-134/UPM-1		
Antenna	AT-50/U		
Cord Set	AT-51/U		
Diode Head	CV-11/UPM-1		

All the above listed components are mounted or stored with Console Rack MT-189/UPM-1
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