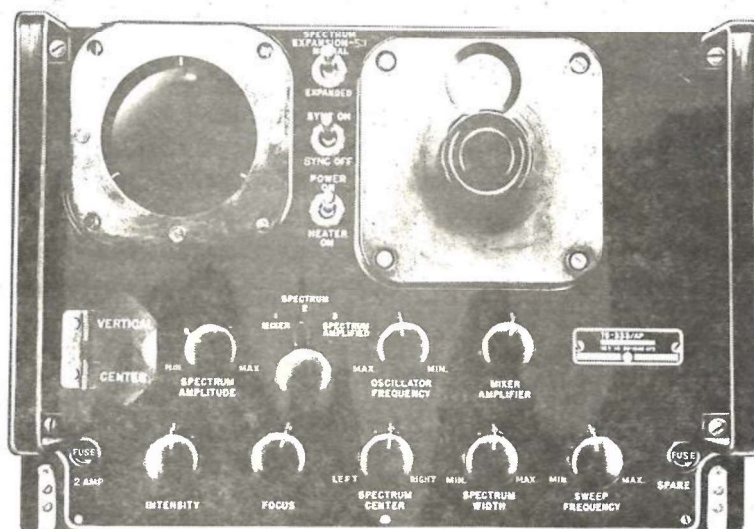


SPECTRUM ANALYZER TS-333/AP (ANALYZER, SPECTRUM, TS-333/AP)

This research was supported by the USAF under Contract AF 33(038)12897 and monitored by the Wright Air Development Center, ARDC - Carl L. Frederick and Associates, Bethesda, Maryland - Multilithed in U.S.A.



FUNCTIONAL DESCRIPTION:

A portable, general purpose test set designed to check the operation of signal generators, local oscillators and magnetrons. It will also measure frequency and supply a low-power radio frequency signal for use in standing wave ratio measurements, for determining the characteristics of T/R and R/T boxes, and for "Q" measurements. A three-inch cathode-ray-tube screen is used to indicate the RF energy spectrum.

RELATIONSHIP TO OTHER EQUIPMENT:

ELECTROMECHANICAL DESCRIPTION:

Circuit Information: The RF oscillator frequency is swept in synchronism with the sawtooth sweep voltage applied to the horizontal plates of the cathode ray tube. The incoming signal "beats" against the oscillator output. The resulting signal is amplified and put through the detector and video amplifier. The output of the video amplifier is applied to the vertical plates of the cathode ray tube. The

(Continued)

	AIR FORCE	NAVY	ARMY
TYPE CLASS.	Standard		
STOCK NOS.		R16-AN-TS-333/AP	
PROCUREMENT INFO.:	Navy Spec. 16T27(RE)		
PROCUREMENT COG.:	Navy	DESIGN COG.:	Navy, BuAer
F.I.I.N.:	FUNCTIONAL CLASS. NO.: 3.4.4		
- Electronics Test Equipment -			TS-333/AP

SPECTRUM ANALYZER TS-333/AP
(ANALYZER, SPECTRUM, TS-333/AP)

ELECTROMECHANICAL DESCRIPTION: (Continued)

frequency meter pip enables reading the frequency to which the frequency meter is set at any point along the resulting curve upon the screen of the cathode ray tube.

Power Supply: 115 volts, ± 10 volts, AC, single phase, 50 to 1600 cycles per second, 150 volt-amperes.

Frequency Range: 23, 500 to 24, 500 megacycles per second.

Sweep Frequency: 4.5 to 70 megacycles per second.

Accuracy: ± 25 megacycles per second of indicated frequency.

Atmospheric Limits: -40°C. to $+55^{\circ}\text{C.}$ at 10,000 feet.

MANUFACTURERS' OR CONTRACTORS' DATA:

Westinghouse Electric Corporation, Horseheads, New York; Navy Contract No. NXsa-91918.

TUBE COMPLEMENT:

1 JAN-3AP1, 1 JAN-5V4G, 1 JAN-6H6GT, 1 JAN-6J5GT, 2 JAN-6SJ7GT, 1 JAN-6SL7GT, 1 JAN-6SN7GT, 1 JAN-6Y6G, 1 JAN-6SK7GT, 5 JAN-7V7, 1 JAN-7A6, 1 JAN-812A, 1 JAN-884, 2 JAN-3B24, 1 JAN-0C3/VR-105, 4 JAN-0D3/VR-150, 2 Type A5022A.

REFERENCE DATA AND LITERATURE:

SHIPPING DATA:

No. of Boxes	Contents & Identification	Volume (Cu. Ft.)	Over-all Dimensions (inches)			Weight Packed (Lbs.)
			H	W	D	

TS - 333/AP - Electronics Test Equipment -

EQUIPMENT SUPPLIED:

Quant. Per Eq'pt	Name and Nomenclature	Case Mat'l	Stock Numbers	Over-all Dimensions (inches)			Weight (Lbs.)
				H	W	D	
1	Spectrum Analyzer TS-333/AP		R16-ANT-S-333/AP	15	13-1/2	10	45
1	Transit Case CY-246/U		7CAC-176555-285	13-1/2	25-1/2	19-1/2	
1	Accessory Case CY-245/U		7CAC-176572-47				
1	Cord CX-464/UP		7CAC-170264-47	48 long			
1	Cord CX-337/U		7CAC-170264-86	72 long			
1	Horn						
1	Choke Adapter						
2	Waveguide Section						
						Total:	70

- Electronics Test Equipment -
TS-333/AP