

STATUS: Standard

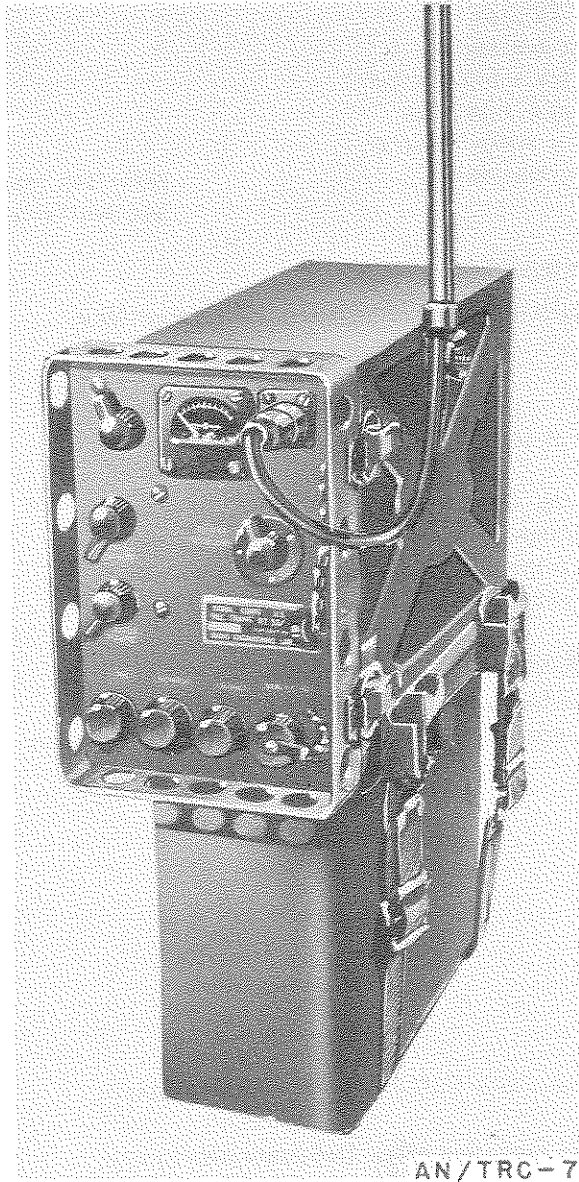
CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Air Force

DATE OF THIS SHEET: 19 May 52

AN/TRC-7

RADIO SET



AN/TRC-7

Radio Set AN/TRC-7 is two-way v-h-f, a-m (voice) equipment normally used for ground-to-air communication, but can be used in point-to-point applications. It is designed to be man-transported in six canvas bags; no one bag weighing over 35 lbs. It is used primarily to provide communication between ground troops and aircraft using v-h-f two-way equipment.

Receiver-Transmitter RT-53B/TRC-7 consists of a single-conversion, crystal-controlled, superheterodyne receiver; the transmitter is crystal-controlled and amplitude modulated. This receiver-transmitter operates on any two preset, crystal-controlled channels (561 channels) in the v-h-f range.

This set is normally controlled locally, but can be controlled from a remote point up to two miles away by means of Remote Control Equipment RC-261.

Power may be supplied either from a Battery BA-70, or from hand-cranked Generator G-3/TRC-7, or both.

Battery life is a minimum of four hours for continuous transmission, and 20 hours maximum for continuous reception.

AN/TRC-7	INSTRUCTION LITERATURE: TO 16-30TRC7-B
	CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force	
DATE OF THIS SHEET : 19 May 52	
RADIO SET	

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-59B/TRC-7	5-1/2 x 19-1/2 x 9	Not Available
1	Antenna Assembly AS-110/TRC-7	30 ft high	" "
1	Antenna AT-59/TRC-7	Not Available	" "
1	Generator G-3/TRC-7	6-3/4 x 7-3/4 x 7-1/2	" "
6	Canvas Bags (overall size of 6 bags)	63-3/4 x 14 x 16	" "
1	Battery BA-70	10 x 7-5/8 x 4-1/2	" "
1 each	Headset HS-30-U, Handset H-23/U	Not Available	Total 143 lbs.
	Microphone T-45 and Cord CX-220/TRC-7	" "	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued as required to advanced installations for ground-to-air communications.

INSTALLATION: Ground, mobile, vehicular.

APPROXIMATE RANGE (IN MILES): (Nominal) Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -19, -28, -36; AN/CRC-2; AN/FRC-7; AN/GRC-30; AN/MRC-16, -20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/URT-7, -10; AN/VRC-1; BC-639, -640; MAR; MBS; R-137/GR; RBK; RBQ; RC-103, -256, -257; RCK; RCO; SCR-522, -542, -573, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 561 channels between 100 to 156.

Plug-in crystal-controlled, on either one of two preset channels (normal operating frequencies are 116.1 and 126.2.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 0.5 to 1.5 w.
Receiver: 60 mw.

POWER REQUIREMENTS: Battery B-70 or Hand Generator G-3/TRC-7 or both. Current drain 1.106 amp (maximum).
Battery Life: 20-25 hours on reception only. (4-5 hours continuous transmission).

PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-7B weighs 143 pounds net, volume 8.60 cu ft. Packed for either domestic or export shipment: total weight 157 pounds, total volume 9.4 cu ft. Shipped in 4 packages both domestic and export.