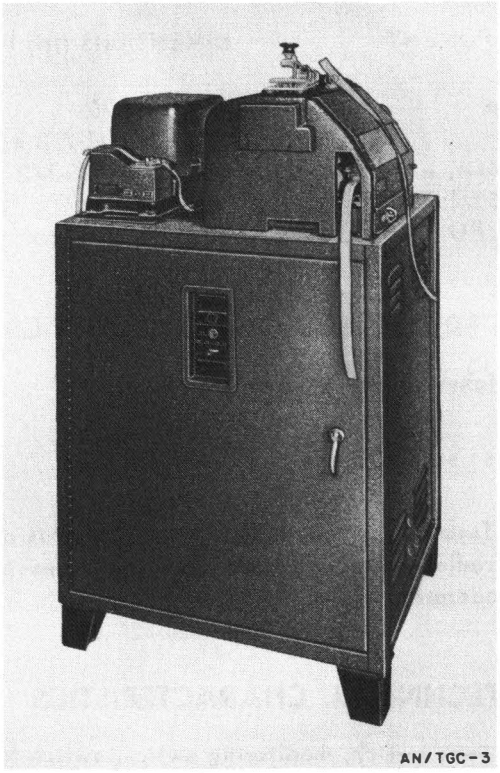
STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Dec 51

AN/TGC-3

TELETYPEWRITER SET



Teletypewriter Set AN/TGC-3 is automatic teletypewriter transmitting and receiving equipment used at army and higher headquarters for torn-tape switching or teletypewriter relay applications by means of typed and perforated paper tape.

This equipment consists essentially of a transmitter-distributor and a receiving-only typing reperforator. It includes an operating table and related accessories. Tape received by means of the reperforator unit can be used to transmit through the transmitter- distributor.

Operates in neutral or polar channels and can be used with telegraph terminal equipment and with Teletypewriter Repeater-Mixer AN/FGQ-1.

Operates from 115-v a-c or 120-v d-c, source.

AN/TGC-3

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2214
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 18 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter table	34 x 22 x 26	205
1	Power supply	13-5/16 x 11-7/8 x 20-3/4	89
1	Distributor-Transmitter, Teletypewriter TT-52/FG	9 x 9-3/8 x 15-1/2	33
1	Reperforator TT-53/FG	11-3/4 x 13-1/2 x 16-3/4	62.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Power switch, monitoring switch, switch for operation with radio terminal equipment, switch for testing equipment. Automatic transmission to line circuits from perforated tape. Automatic reception from line circuits in chadless perforated tape with typing. No keyboard. No facility for page printing.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed motor; 87.6 cyc, 2,100 rpm.

POWER REQUIREMENTS: With power unit: 300 w, 95/125/190/250 v, 25/60 cyc ac.
Without power unit: D-c supply,-- 120 v (3), 0.8-amp drain.
A-c supply,-- 115 v, 60 cyc.

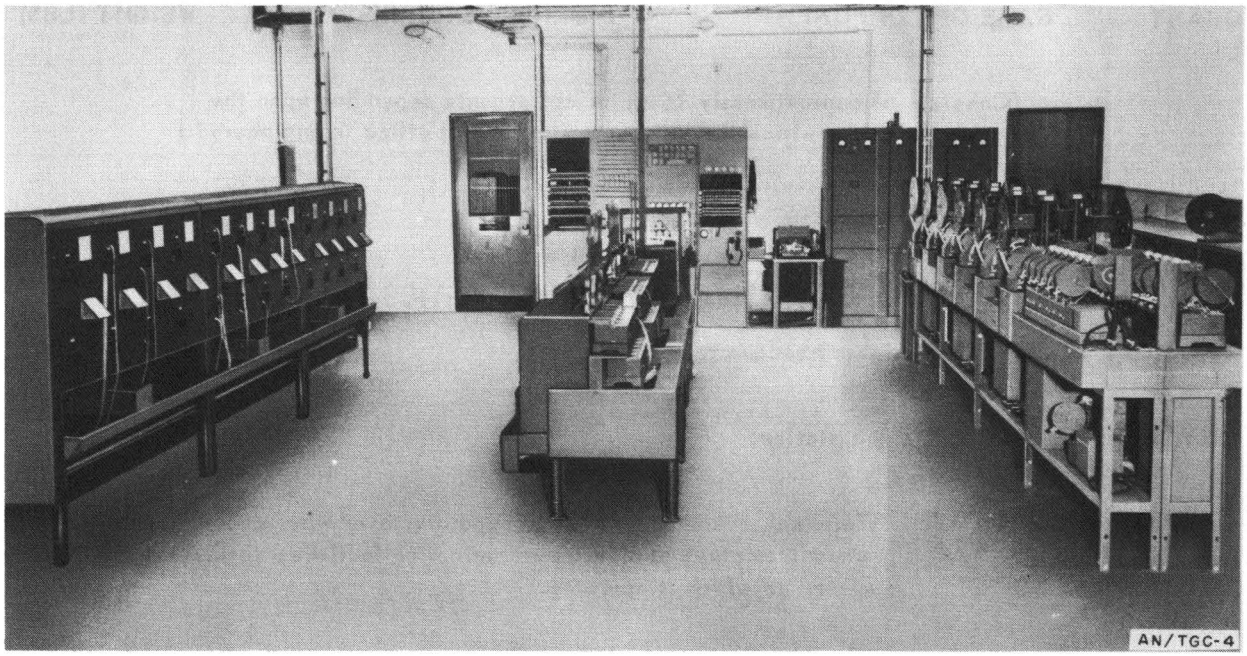
PHYSICAL CHARACTERISTICS

Teletypewriter Set AN/TGC-3 weighs 490 pounds net, volume 16 cu ft. Packed for either domestic or export shipment: total weight 663 pounds, total volume 33.8 cu ft, 0.86 ship ton. Shipped in 3 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

AN/TGC-4

TELETYPEWRITER CENTRAL OFFICE SET



Teletypewriter Central Office Set AN/TGC-4 is a large semiautomatic tape relay facility for handling a large volume of teletypewriter traffic in fixed station applications. It must be specifically engineered and arranged for the traffic-handling requirements of the headquarters in which it is used.

It consists of automatic line finding, switching, transmitting, and receiving components and related items.

Provides for automatic reception and transmission of traffic, but operators are required to supervise and route messages.

Regulated 115-v, 60-cyc ac is required for the reperforator and transmitter motors, and for the pneumatic tube exhaust and other small motors.

A d-c supply at approximately 115 v (both positive and negative) with grounded neutral leg is required for various line and relay circuits.

AN/TGC-4

TELETYPEWRITER CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-2212
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 5 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Consists of approximately 16 major components depending upon the requirements for which the teletypewriter central office is engineered.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: Ground, fixed station.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception, tape perforation with typing. Automatic transmission, perforated tape sending. Automatic line switching. Manual supervision.

OPERATING SPEED: 60 wpm (368 opm) but can be adjusted for operation at 66 wpm (404 opm) or 100 wpm (600 opm).

MOTOR CHARACTERISTICS: A-c synchronous motors, a-c series-governed motors, d-c supply.

POWER REQUIREMENTS: 115 v, 60 cyc ac and 115 v dc. Dependent upon quantity of operating components and their arrangement.

PHYSICAL CHARACTERISTICS

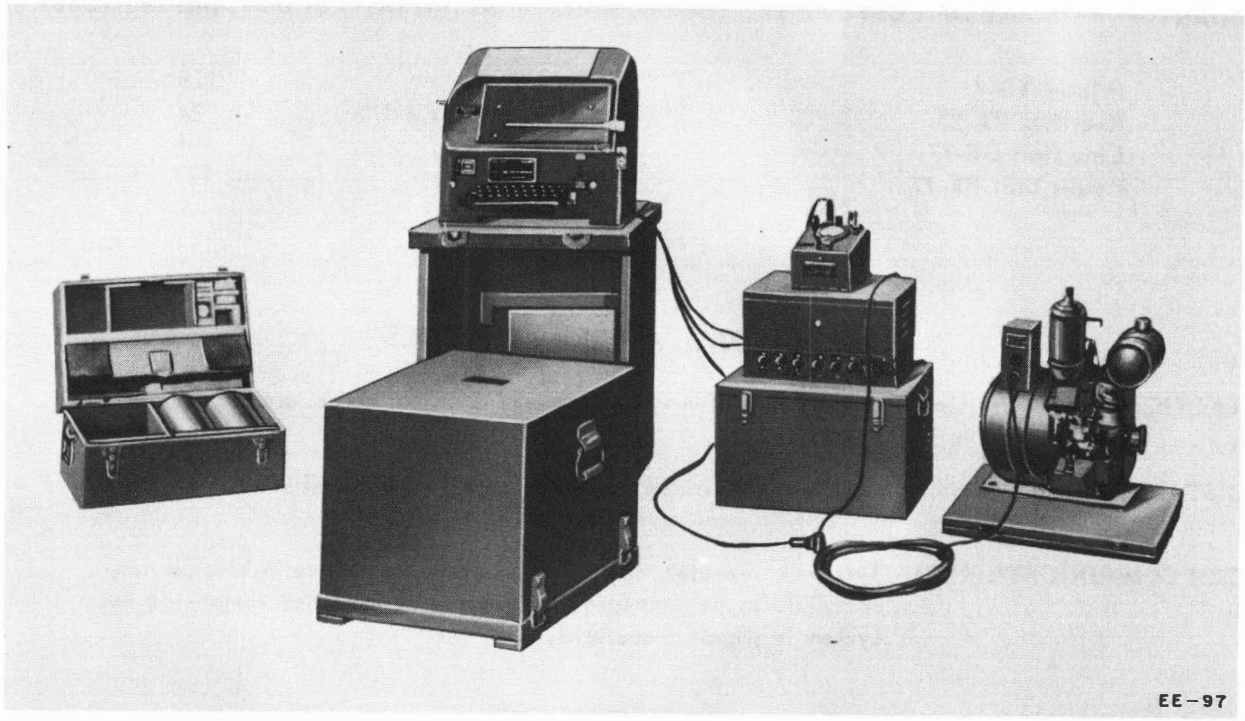
The dimensions, volume, and number of packages in which this equipment is shipped vary according to the requirements for which the teletypewriter central office set is engineered.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 2 Jan 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: EE-97

TELEGRAPH PRINTER SET



EE-97

Telegraph Printer Set EE-97 is a complete transportable, field teletypewriter station used for transmitting and receiving telegraph communications at battalion and higher headquarters.

This equipment consists primarily of a conventional page-printing, sending and receiving teletypewriter (printer), line control unit, and power generating equipment contained in carrying cases.

Designed for quick installation in the open or under shelter, the set requires only connection to wire facilities to operate.

It operates as a teletypewriter terminal on field wire or cable facilities and radio circuits or operates in conjunction with carrier equipment.

Operates on 115 v dc or 50/60 cyc ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-354
	CLASSIFICATION OF EQUIPMENT: Unclassified
EE-97 : SERVICE TYPE NUMBER	USING SERVICE : Army
TELEGRAPH PRINTER SET	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Printer TG-7	19 x 20 x 42	225
1	Rectifier RA-37	12-1/2 x 8-1/4 x 6-1/2	24
1	Line Unit BE-77	7-3/4 x 6 x 6	6
1	Power Unit PE-77	22 x 12 x 22	127

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division headquarters; infantry and armored division; corps, army.

INSTALLATION: Ground; transportable; operates in fixed location, under shelter or in the open.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard communication keyboard; break-in key; remote motor stop; shift and unshift; space-repeat; CAR-RET; line feed.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

MOTOR CHARACTERISTICS: Series governed; 0.4 amp at 115 v dc from PE-77.

POWER REQUIREMENTS: PE-77; 250 w at 115 v dc.

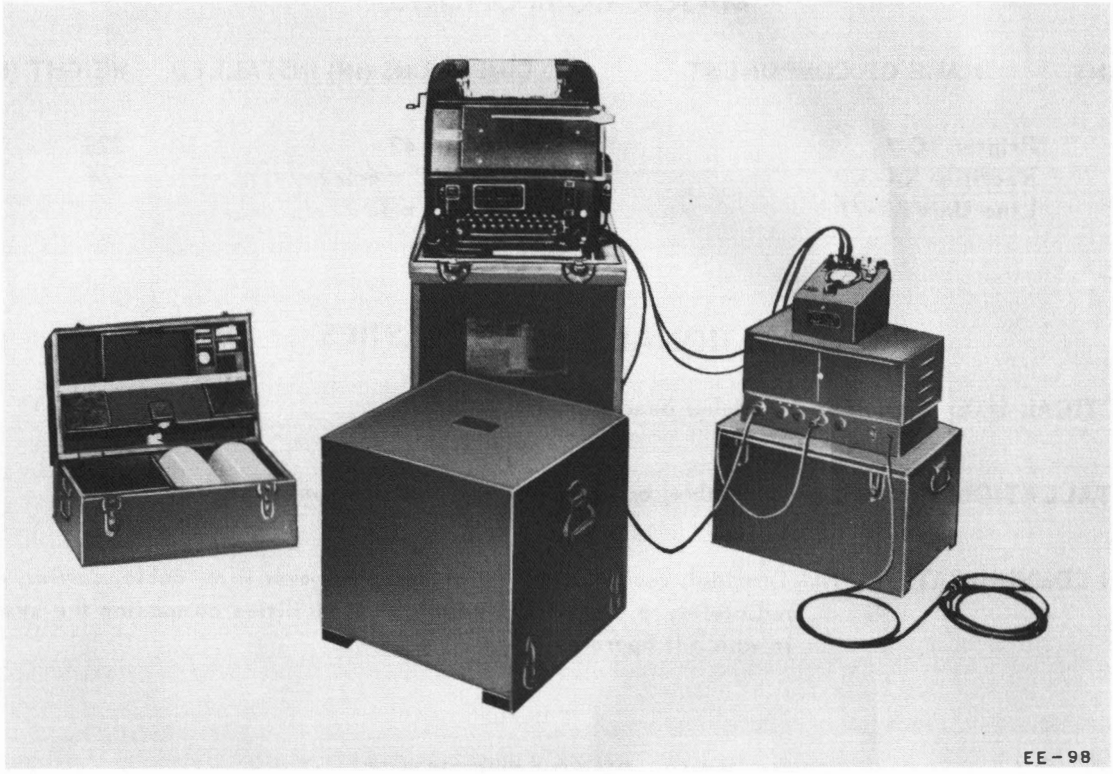
PHYSICAL CHARACTERISTICS

Telegraph Printer Set EE-97 weighs 412 pounds net, volume 16 cu ft. Packed for domestic shipment: total weight 431 pounds, total volume 18 cu ft. Packed for export shipment: total weight 700 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 6 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 2 Jan 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: EE-98
TELETYPEWRITER SET



Teletypewriter Set EE-98 is a complete, transportable field teletypewriter station which requires only connection to power and communication lines in order to operate. It is used by battalion and higher headquarters.

This equipment consists of a conventional page-printing teletypewriter, line control unit, rectifier, and related accessories contained in carrying cases.

It can be used in conjunction with carrier terminal facilities and at teletypewriter centrals and radio terminals.

Designed for quick installation in the open or under shelter and connected for operation by means of cords and plug connectors.

Operated on power supplied by a conventional power source or by a field power unit.

AN/TGC- TYPE	INSTRUCTION LITERATURE: TM 11-354
EE-98 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER SET	USING SERVICE : Army
	DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Printer TG-7	19 x 20 x 42	225
1	Rectifier RA-37	12-1/2 x 8 x 6-1/2	24
1	Line Unit BE-77	7-3/4 x 6 x 6	6

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion and higher headquarters.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, carrier, or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Standard communication keyboard; break-in key, remote motor stop; bell, shift and unshift; space-repeat; CAR-RET; line feed.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

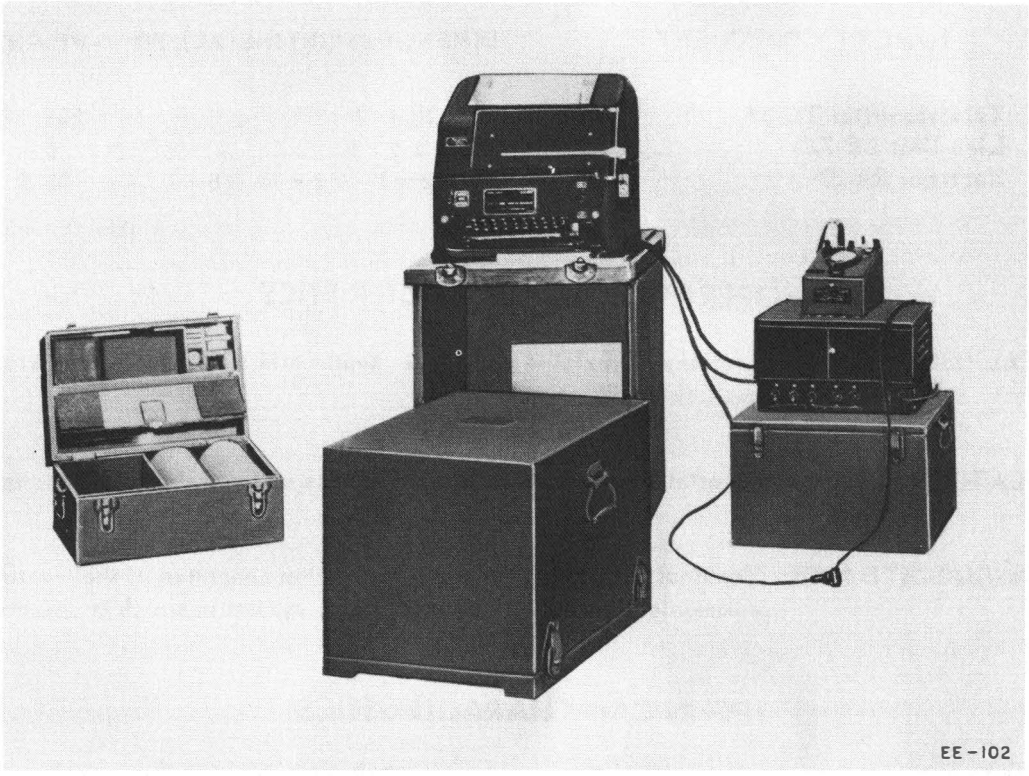
MOTOR CHARACTERISTICS: Series governed, 115 v dc or 250 v 50/60 cyc ac, 87.6 vps tuning fork speed adjusting frequency 1,800 rpm.

POWER REQUIREMENTS: 200 w, 115 v dc or 115 v 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Set EE-98 weighs 326 pounds net, volume 11.75 cu ft. Packed for domestic shipment: total weight 431.5 pounds, total volume 18 cu ft, 0.6 ship ton. Packed for export shipment: total weight 560 pounds, total volume 32 cu ft, 0.8 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: EE-102 TELETYPEWRITER SET



Teletypewriter Set EE-102 is a transportable field teletypewriter equipment used in weather reporting stations at division and higher headquarters, air fields, and stations of the Air Weather Command for communication of weather data.

This equipment consists primarily of a page-printing field teletypewriter having a weather symbol keyboard, a line unit, power supply, rectifier, and associated accessories contained in carrying cases.

Designed for quick installation in the open or under shelter and connected for operation by means of cords and plug connectors.

Operates on 115v dc or 50/60 cyc ac or from 85/135 and 179/270 v ac by means of appropriate rectifier equipment.

AN/TGC-TYPE

EE-102 :SERVICE TYPE NUMBER

TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-354

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TG-37	19 x 20 x 42	225
1	Line Unit BE-77	7-3/4 x 6 x 6	6
1	Rectifier RA-87	18-1/2 x 10-3/4 x 13-5/8	58.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At weather stations at division and higher headquarters, air fields, and stations of Air Weather Command.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter or in the open.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Weather symbols; break-in key; CAR-RET; line feed; space-repeat; bell, shift and unshift.

OPERATING SPEED: 60 wpm (368 opm) adjustable to 66 wpm (404 opm).

MOTOR CHARACTERISTICS: Series governed; 115 v dc or 115 v 25/50/60 cyc ac; 87.6 vps tuning fork speed adjusting frequency; 1,800 rpm.

POWER REQUIREMENTS: 200 w, 115 v dc or 50/50 v ac; 85/135 and 179/270 v ac through Rectifier RA-87.

PHYSICAL CHARACTERISTICS

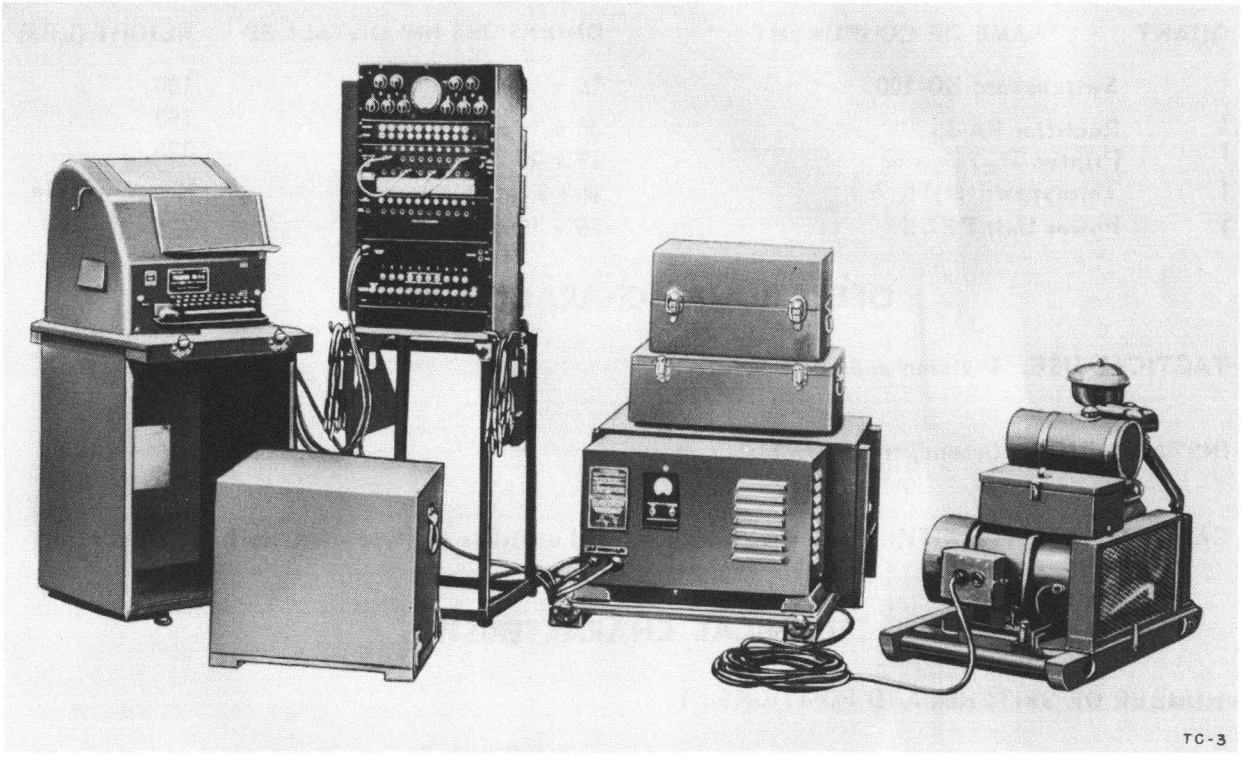
Teletypewriter Set EE-102 weighs 326 pounds net, total volume 11.75 cu ft. Packed for domestic shipment: total weight 328 pounds, total volume 12.25 cu ft, 0.6 ship ton. Shipped in 5 packages. Packed for export shipment: total weight 560 pounds, total volume 32 cu ft, 1.5 ship tons. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-3

TELEGRAPH CENTRAL OFFICE SET



Telegraph Central Office Set TC-3 is a complete transportable central office for receiving, transmitting, and switching tactical teletypewriter traffic in a field wire or cable system serving division or higher headquarters.

This equipment consists essentially of a switchboard, teletypewriter, and associated accessories. The switchboard (BD-100) provides switching and full repeating facilities for 10 lines (maximum) which may be ground return or metallic. Provides for supplying line current alone, or in conjunction with the remote station, or by the distant station alone.

Up to two switchboards may be added and operated in multiple with the switchboard of this equipment, when necessary to expand the capacity of this telegraph central office.

Operates on about 500 w of a-c power through appropriate current rectifying equipment.

AN/TGC-TYPE

TC-3 :SERVICE TYPE NUMBER

TELEGRAPH CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-358

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Navy

DATE OF THIS SHEET : 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-100	16 x 16 x 26	180
1	Rectifier RA-43	30 x 16 x 19	190
1	Printer TG-7-A - or	19 x 20 x 42	225
1	Teletypewriter TG-7-B	Not Available	Not Available
1	Power Unit PE-75	36 x 19 x 26	325

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and corps level.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Receives, transmits, and switches teletypewriter traffic in field wire or cable systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

MAXIMUM: 3.

MINIMUM: 1.

NUMBER AND TYPE OF CIRCUITS: (Per position):

Number of cord circuits: 1 (operator's).
Number of line circuits: 10.
Number of trunk circuits: 0.

POWER REQUIREMENTS: Rectifier RA-43 requiring about 500 w operates from 115/230 v, 50/60 cyc, single-phase ac and furnishes maximum output of (4.5 amp) dc at 115 v. Power Unit PE-75 furnishes 115 v, 60 cyc ac.

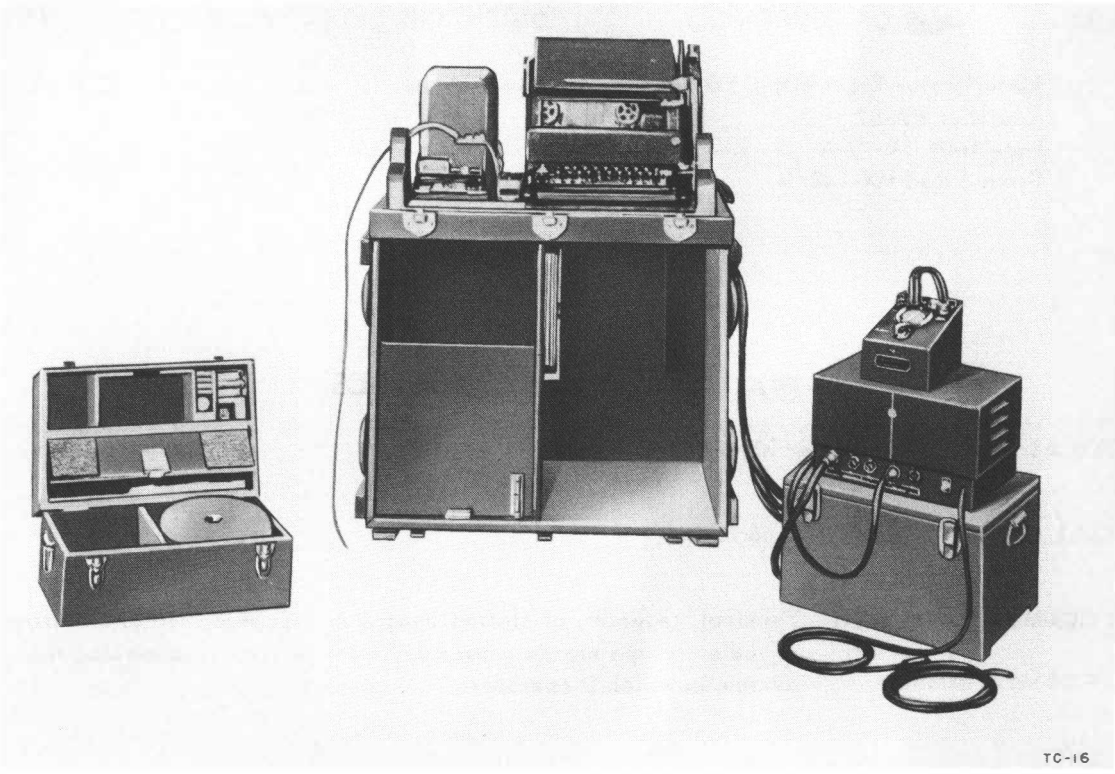
PHYSICAL CHARACTERISTICS

Telegraph Central Office Set TC-3 weighs 1,154 pounds net, volume 43.5 cu ft, 1.1 ship tons. Packed for domestic shipment: total weight 1,400 pounds, total volume 63.8 cu ft, 1.6 ship tons. Shipped in 9 packages. Packed for export shipment: total weight 1,683 pounds, total volume 93.3 cu ft, 2.4 ship tons. Shipped in 8 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-16
REPERFORATOR-TELETYPEWRITER SET



Reperforator-Teletypewriter Set TC-16 is a field, transportable, standard communication, automatic tape sending and receiving teletypewriter station equipment used at division and higher headquarters.

This equipment consists essentially of a reperforator transmitter having standard communication keyboard and type pallets, plus a transmitter-distributor, a line unit, rectifier, and accessory items. The line unit provides a means for measuring and adjusting for bias and distortion of line signals.

Can be connected to other teletypewriters in field wire or cable, open wire, carrier, or radio systems.

Operates from sources of 300 w, 85/135 v and 170/270 v ac.

AN/TGC-TYPE

TC-16 :SERVICE TYPE NUMBER
REPERFORATOR-TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2201
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator-Transmitter TG-26-A	19 x 33 x 38	225
1	Rectifier RA-87	12-1/2 x 18-1/2 x 10-1/2	57
1	Line Unit BE-77-A	6 x 8-1/4 x 6-3/8	31
2	Ground Rod MX-148/G	72 long (each)	20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal, repeater, or station apparatus over wire, cable, or carrier or radioteletype standard communication facilities composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368.1 opm and 404 opm.

MOTOR CHARACTERISTICS: Series a-c governed.

POWER REQUIREMENTS: 300 w, 85/135 v and 170/270 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

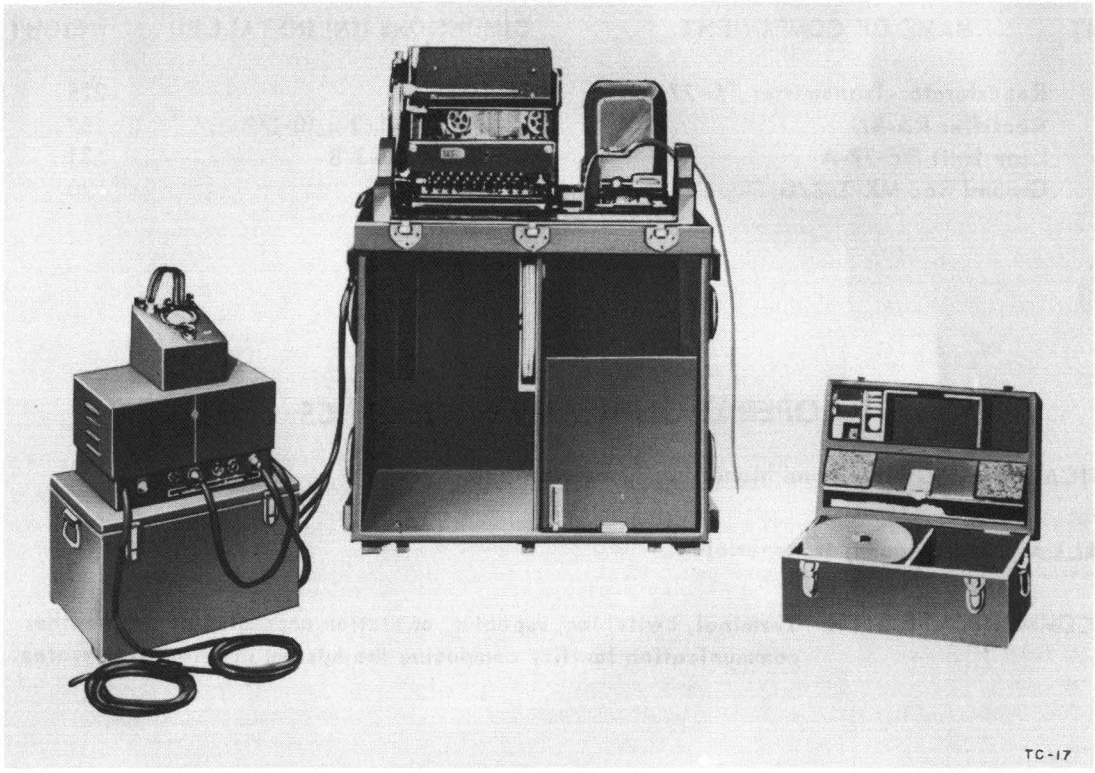
Reperforator-Teletypewriter Set TC-16 weighs 331 pounds net, volume 15 cu ft. Packed for export shipment: total weight 587 pounds, total volume 33 cu ft, 0.8 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-17

REPERFORATOR-TELETYPEWRITER SET



Reperforator-Teletypewriter Set TC-17 (the weather communication version of Reperforator-Teletypewriter Set TC-16)is a transportable, field, automatic tape sending and receiving teletypewriter station equipment used for transmission and reception of weather data at air station of division and higher headquarters.

This equipment consists essentially of a reperforator transmitter having weather communication keyboard and type pallets, plus a transmitter-distributor, line unit, rectifier, and accessory items. The line unit is included to provide a means for measuring and adjusting for bias and distortion of line signals.

This set can be used in conjunction with other teletypewriter terminal equipment and station units and is powered by a 300-w 85/135-v or 170/270-v a-c source.

AN/TGC- TYPE

TC-17 :SERVICE TYPE NUMBER

REPERFORATOR-TELETYPEWRITER SET

INSTRUCTION LITERATURE: TM 11-2201

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator-Transmitter TG-27-A	19 x 33 x 38	225
1	Rectifier RA-87	12-1/2 x 18-1/2 x 10-1/2	57
1	Line Unit BE-77-A	6 x 8-1/4 x 6-3/8	31
2	Ground Rod MX-148/G	72 long (each)	20

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: Terminal, switching, repeater, or station apparatus of the weather communication facility composing the system in which it operates.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368.1 opm and 404 opm.

MOTOR CHARACTERISTICS: Series a-c governed.

POWER REQUIREMENTS: 300 w, 85/135 v and 170/270 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

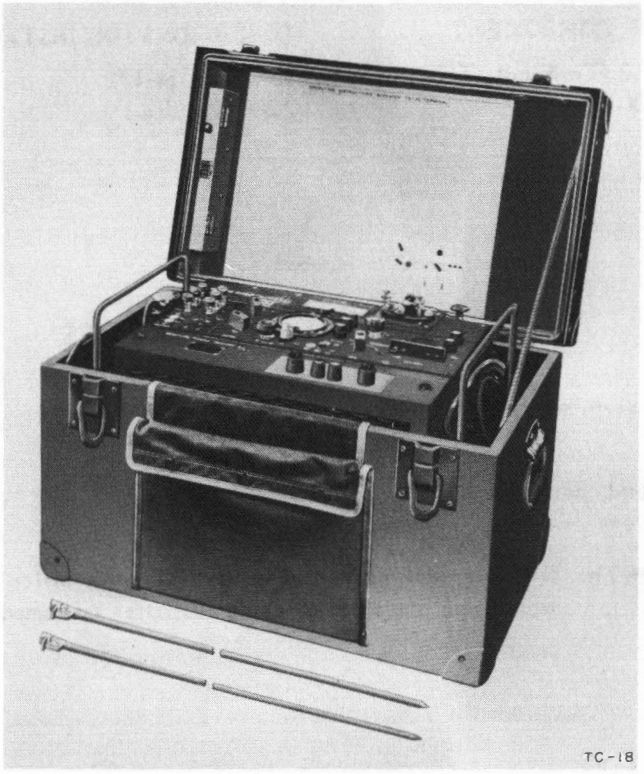
Reperforator-Teletypewriter Set TC-17 weighs 331 pounds net, volume 15 cu ft. Packed for export shipment: total weight 587 pounds, total volume 33 cu ft, 0.8 ship ton.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 17 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-18

REPEATER SET



Repeater Set TC-18 is a transportable, d-c telegraph terminal repeater equipment used in simplexed field-wire line circuits or in open-wire, composited, ground-return facilities which serve division and higher headquarters.

This equipment consists of a single primary operating component (Repeater TG-30) and two ground rods. It is used in facilities terminating at the remote end at another TG-30.

It is equipped with a hand telegraph key for use of supervisory and maintenance personnel and is usually operated on a half-duplex basis providing one channel of teletypewriter communication. It is designed to extend the operating range of teletypewriter station equipment.

It is operated from 95/125 or 190/250 v ac or 115 v dc.

AN/TGC-TYPE

TC-18 :SERVICE TYPE NUMBER
REPEATER SET

INSTRUCTION LITERATURE: TM 11-2004
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater TG-30 (Terminal, Telegraph)	25 x 16 x 14-1/2	130
2	Ground Rod MX-148/G	72 x 3/4 (dia.)	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: D-c telegraph repeater, terminal, central-office and station equipment which operate in connecting facilities or compose the system.

TECHNICAL CHARACTERISTICS

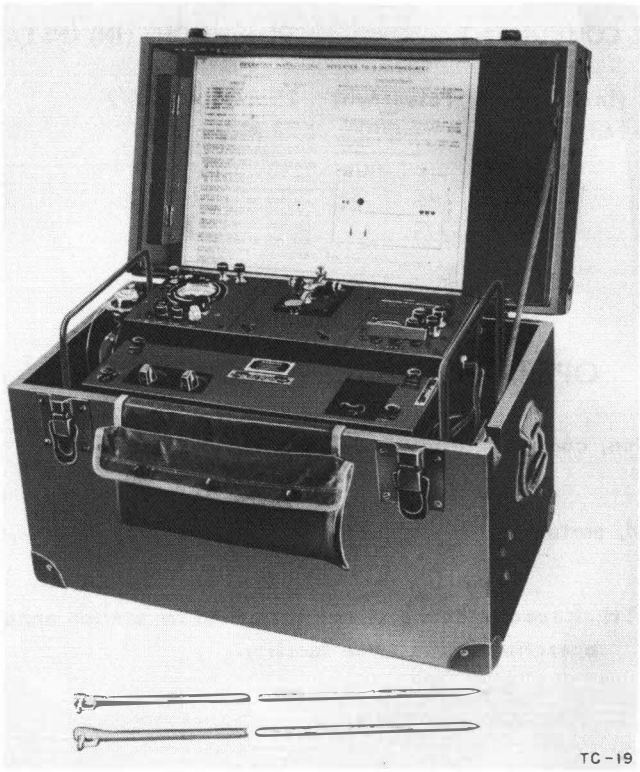
NUMBER AND TYPE OF FACILITIES: Simplexed field-wire, or open-wire (composited, ground return).
Line side: Polarential send, differential send; two-path.
Local side: 30- to 60-ma neutral-type circuit.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 50/60 cyc ac or 115 v dc.

PHYSICAL CHARACTERISTICS

Repeater Set TC-18 weighs 140 pounds net, volume 3.4 cu ft. Packed for export shipment: total weight 195 pounds, total volume 6.5 cu ft.

STATUS: Standard	AN/TGC-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: TC-19
USING SERVICE: Army	REPEATER SET
DATE OF THIS SHEET: 18 Feb 52	



Repeater Set TC-19 is a portable, field, d-c telegraph repeater used for single operation at intermediate points between terminal repeater equipment in facilities serving division and higher headquarters.

This equipment consists essentially of a repeater, contained in a field-type carrying case, and two ground rods. It can repeat signals in either direction but in only one direction at a time. It provides one channel for telegraph communication on a simplexed, or composited, ground-return basis. When used as an intermediate repeater only one set can be used in the line circuit between two terminal repeaters.

The operating range of Repeater Set TC-18 can be extended by using this equipment.

It requires 95/125 or 190/250 v ac, or 115v dc, or a 12-v storage battery.

AN/TGC-TYPE

TC-19 :SERVICE TYPE NUMBER

REPEATER SET

INSTRUCTION LITERATURE: TM 11-2005

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Repeater TG-31 (Intermediate Telegraph)	25 x 16 x 14-1/2	120
2	Ground Rod MX-148/G	72 x 3/4 (dia)	9.5 (ea)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Repeater, terminal, central office, or station apparatus and equipment operating in the same facility.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Field wire or open wire; simplexed or composited.

POWER REQUIREMENTS: 190 w, 95-125 v or 190-250 v, 50/60 cyc ac; 115 w, 115 v dc; or 12-v storage battery.

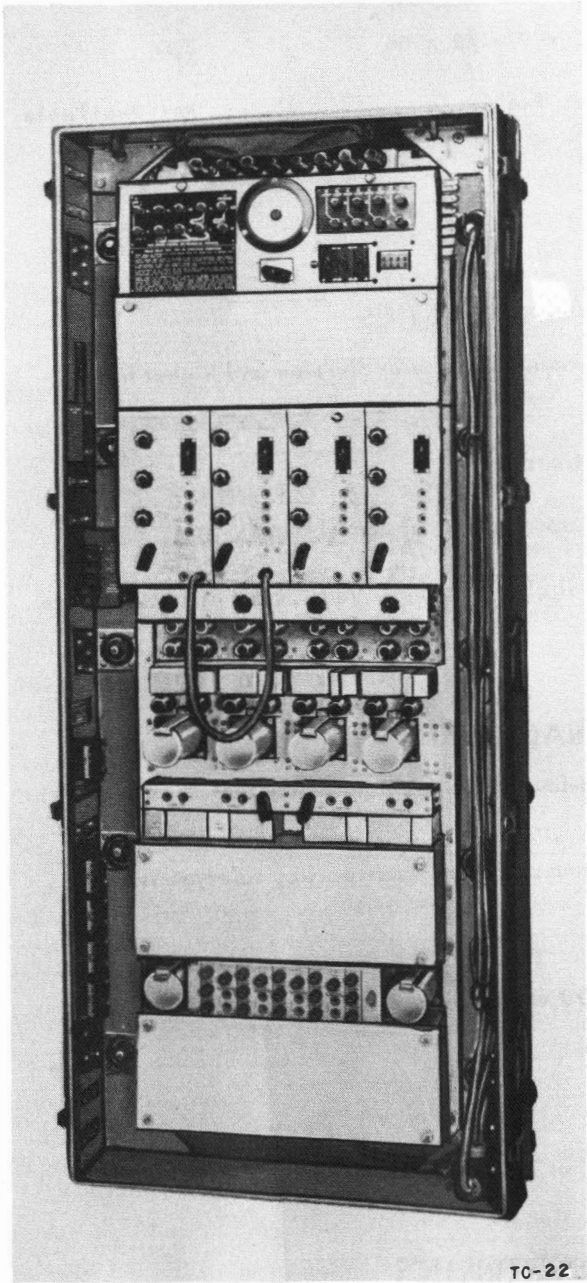
PHYSICAL CHARACTERISTICS

Repeater Set TC-19 weighs 140 pounds net, volume 3.5 cu ft. Packed for export shipment; total weight 186 pounds, total volume 13.23 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 12 Feb 52

AN/TGC-TYPE

SERVICE TYPE NUMBER: TC-22
TELEGRAPH TERMINAL SET



Telegraph Terminal Set TC-22 is a transportable four-channel, v-f carrier telegraph terminal equipment which provides two-way transmission of teletypewriter signals in each channel, (operating in one channel of a carrier-telephone facility in which Telephone Terminal Set CF-1, and Repeaters CF-3, and related equipment are used). It is used at division or higher headquarters.

There are two models of this equipment: Telegraph Terminal Set TC-22-A consists of panel-mounted apparatus covering four channels, contained in two floor type cabinets; Terminal Set TC-22-B (illustrated above) consists of equivalent panel-mounted apparatus covering four-channels, contained in a single floor type cabinet.

This terminal set may be installed adjacent to a carrier-telephone terminal, or it may be operated over a two-wire and four-wire circuit (which has a net loss not exceeding 8 db) between telephone and telegraph terminals located at a distance from each other. It can also be operated over a telephone circuit terminating on a two-wire or four-wire basis (of the required stability and freedom from interference, and having a net loss not exceeding 25 db at 500 - 2,050 cps).

Operates on 200 - 250-w of 115- or 220-v ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-355
TC-22 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEGRAPH TERMINAL SET	USING SERVICE : Army
	DATE OF THIS SHEET : 12 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Telegraph Terminal CF-2-A (2 bays each)	19 x 27-1/2 x 66	530
1	Maintenance Equipment ME-75	Not Available	Not Available
1	Chest BC-5	" "	" "
2	Clamp TM-106	" "	" "
2	Ground Rod MX-148/G	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Telegraph (teletypewriter) carrier terminal facility at division and higher headquarters.

INSTALLATION: Ground, transportable, in fixed locations.

MAXIMUM SYSTEM LENGTH: 100 or more, depending upon quality of connecting facility.

CAN COMMUNICATE WITH: Repeater, terminal, central office, or carrier equipment operating in the same facility or system.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four, or equivalent quality facilities.

FACILITIES AFFORDED: Two-wire teletypewriter communication, four-two-way teletypewriter channels.

FREQUENCY: 500 to 2,050 cps, 8 channels spaced 170 cps apart.

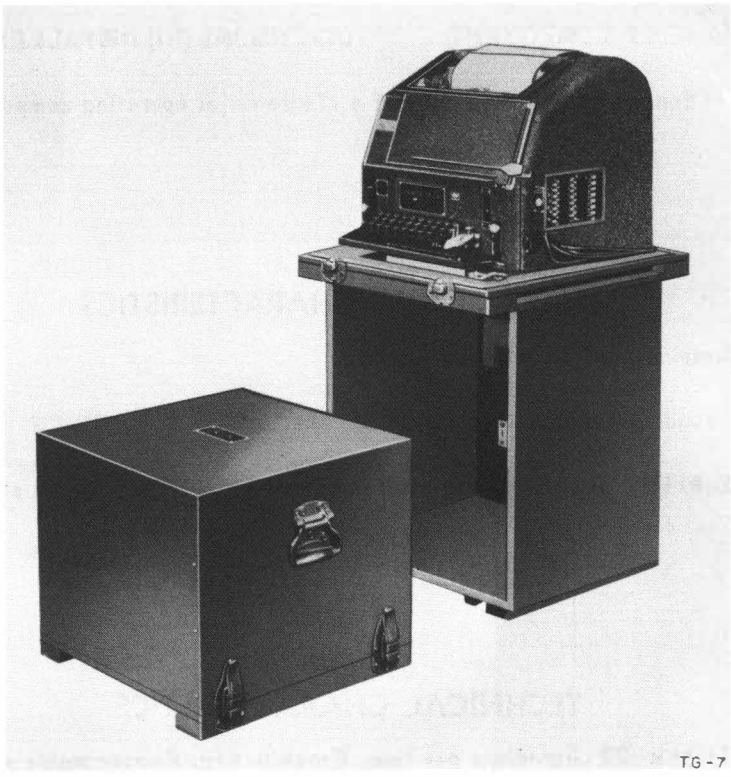
TYPE OF MODULATION: Am.

POWER REQUIREMENTS: 200 to 250 w, 100 - 125 v, or 200 - 250 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Telegraph Terminal Set TC-22 weighs 1,130 pounds net, volume 45 cu ft. Packed for export shipment: total weight 1,540 pounds, total volume 85 cu ft, 2.2 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: TG-7 PRINTER



Printer TG-7 is a portable, page-printing, field teletypewriter station equipment and is used at regimental and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter modified in accordance with military requirements and includes a keyboard transmitter, typing unit and associated base, a motor, and related accessories. It has a standard communication keyboard and type pallets. Teletypewriter TG-37 is used for weather data transmission.

The carrying case of this equipment is used as the operating table.

The equipment can be set up rapidly by means of plug-terminated cords which are provided.

Operates from 115-v dc, or 25/50/60-cyc, ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-352
	CLASSIFICATION OF EQUIPMENT: Unclassified
TG-7 :SERVICE TYPE NUMBER	USING SERVICE: Army
PRINTER	DATE OF THIS SHEET: 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regiment and higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: 72 characters per line, Break in key, Remote motor stop, Bell, Shift and Unshift, Space-Repeat, Carriage-Return, Line Feed.

OPERATING SPEED: 60 wpm, 368.1 opm, or 66 wpm, 404 opm.

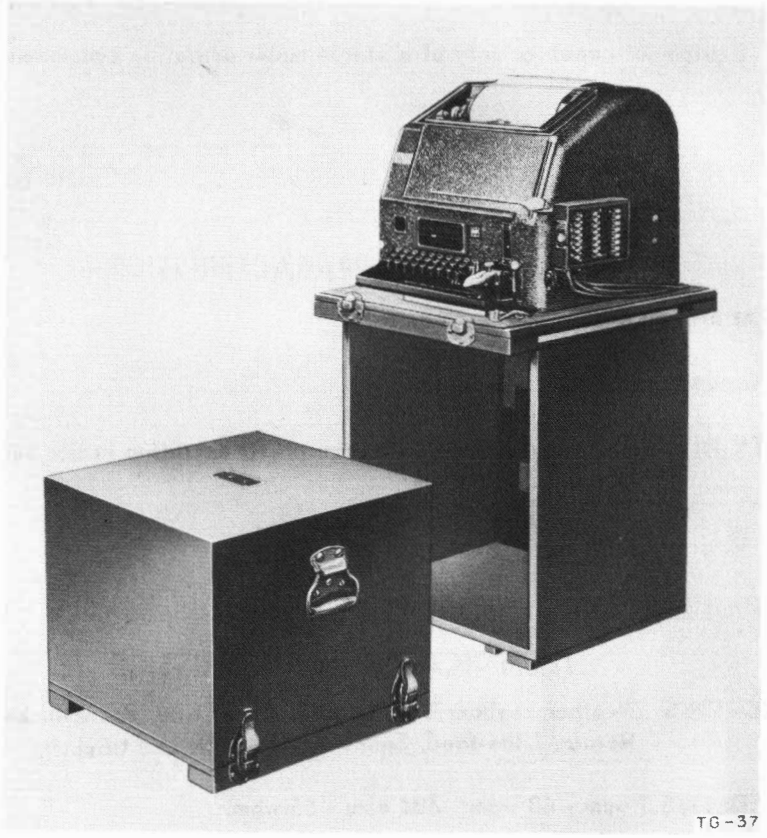
MOTOR CHARACTERISTICS: Series-governed, 115 v, dc, 25, or 50/60 cyc ac, 87.6 vps tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v, dc, 140 va on 115 v, 25 cyc ac, or 115v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Printer TG-7 measures 20 x 19 x 42 inches, net weight 225 pounds, volume 8.8 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 13.8 cu ft. Shipped in 2 packages. Packed for export shipment: total weight 557 pounds, total volume 42 cu ft, 1.1 ship tons. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/TGC-TYPE** SERVICE TYPE NUMBER: TG-37 TELETYPEWRITER



TG-37

Teletypewriter TG-37 is a portable, field, page-printing, teletypewriter station equipment having weather communication keyboard and type-pallets, and is used at division and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter which has been modified for tactical use It includes a base, motor unit, keyboard, typing unit, and related accessories and is carried in field-type cases which are used to form the operating table and operator's seat.

It can receive and transmit messages but is not used for full-duplex operation. It is the weather communication version of Teletypewriter TG-7.

Operates on 110-v dc; 115-v, 25-cyc, or 50/60-cyc, ac.

AN/TGC-TYPE	INSTRUCTION LITERATURE: TM 11-352
TG-37 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army
	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALL ED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division or higher headquarters.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: Terminal and repeater equipment operating in the same system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Weather keyboard; 76 characters per line, Break-in key, Bell, Carriage-Return, Line-feed, Space repeat, Shift and Unshift.

OPERATING SPEED: 368.1 opm - 60 wpm: 404 opm - 66 wpm.

MOTOR CHARACTERISTICS: Governed-series, 115 v, dc, 25/50/60 cyc, ac, 87.6 vps tuning fork frequency, 1,800 rpm.

POWER REQUIREMENTS: 110 w on 115 v dc,
140 va on 115 v, 25 cyc ac; or
115 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TG-37 measures 20 x 19 x 42 inches, net weight 225 pounds, volume 8.8 cu ft. Packed for domestic shipment: total weight 250 pounds, total volume 13.8 cu ft. Shipped in 2 packages. Packed for export shipment: total weight 557 pounds, total volume 42.0 cu ft, 1.1 ship tons. Shipped in 3 packages.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/TGC–TYPE

TH–5/TG

TERMINAL, TELEGRAPH

NO PHOTOGRAPH AVAILABLE

Telegraph Terminal TH–5/TG is a small, transportable, frequency-shift modulator and demodulator equipment used in one-way reversible operation of teletypewriter circuits over two-wire, four-wire, or radioteletype facilities.

This equipment can be operated in conjunction with associated equipment in circuits controlled by either local-battery or common-battery switchboards. It can also transmit and receive 20-cycle signaling current.

AN/TGC–TYPE

INSTRUCTION LITERATURE: TM 11–2239

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

TH–5/TG

TERMINAL, TELEGRAPH

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Assoc freq-shift conv and tty equip.

FACILITIES AFFORDED: Modulation of dc into 1,225- and 1,325-cy sig; demodulation of 1,225- and 1,325-cy sig to dc impulses for use; two-wire or four-wire termination.

FREQUENCY: 1,225 cy (space); 1,325 cy (mark).

TYPE MODULATION: Fsk.

TYPE RINGING: 20 cy.

POWER REQUIREMENTS: 60 w, 115 v, 50/60 cy ac.

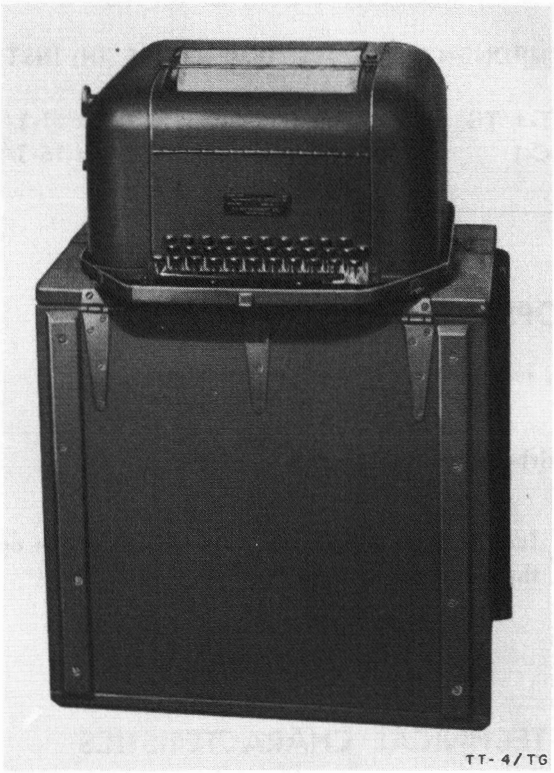
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	11 x 10½ x 7½	18.5	.5		
DOMESTIC PACK:		22.5	.78		1
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 28 Dec 51

AN/TGC-TYPE

AN/COMP TYPE NUMBER: TT-4/TG
TELETYPEWRITER



Teletypewriter TT-4/TG is a portable, lightweight, page-printing teletypewriter for the transmission, monitoring, and reception of messages at battalion headquarters and communications centers of higher headquarters. It is immersionproof and may be floated during amphibious operations and can be carried on a standard QM packboard.

Normally used in neutral circuits only, this equipment may be adapted to receive and transmit polar signals. Can be connected to distant teletypewriters in field wire or cable, open wire, carrier, or radio systems. Can be arranged for half-duplex, full-duplex, receiving-only, or sending-only operation.

When suitable power for the motor and line is available, two or more Teletypewriters TT-4/TG may be connected directly and operated without associated line equipment.

This teletypewriter is the major operating component of tactical Teletypewriter Set AN/PGC-1 and fixed station Teletypewriter TT-61/FG.

AN/TGC-TYPE

TT-4/TG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2234
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 28 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter TT-4/TG	22-1/2 x 18-7/8 x 11-1/4	43
1	Case CY-694/PGC-1	24-3/8 x 20-7/8 x 16-3/8	43.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Battalion, regiment, or higher headquarters.

INSTALLATION: Ground, airborne and shipborne.

CAN COMMUNICATE WITH: Identical, or equivalent, station equipment operating in or terminating the same connecting facility.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Keyboard operation, remote motor stop, and break-in facilities.

OPERATING SPEED: 368.1 opm (60 wpm); gears furnished for 600 opm (100 wpm). 72 characters per line.

MOTOR CHARACTERISTICS: Universal (ac or dc) series type; tuning fork speed adjusting frequency 180 vps; 3,600 rpm.

POWER REQUIREMENTS: 105-125 v dc or 105-125 v ac, 50/60 cyc, single phase, 150 w.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-4/TG measures 36-1/2 x 20-7/8 x 16-3/8 inches, net weight 48 pounds, volume 2.73 cu ft. Packed for domestic shipment: total weight 90 pounds, total volume 5.98 cu ft. Packed for export shipment: total weight 95 pounds, total volume 12.15 cu ft. Shipped in 1 package both domestic and export.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

AN/TGT–TYPE

TA–255/TT

NETWORK, HYBRID CIRCUIT

NO PHOTOGRAPH AVAILABLE

Hybrid Circuit Network TA–255/TT is a portable unit used to connect four-wire line equipment (such as Telephone Terminal CF–1–( ) or Repeater CF–3–A) to a two-wire line. It can also be used to connect Radio Terminal Set AN/TRC–3 to a two-wire line.

This equipment will permit operation of a phantom circuit, two ground-return dc telegraph circuits, or one ground-return dc signaling and one ground-return dc telegraph circuit on the two-wire line.

One network is used at each junction of two-wire and four-wire lines. This equipment is designed for operation over open-wire lines but, in an emergency, it may be used on field wire or on one pair of Cable Assemblies CC–358.

This unit is similar to and interchangeable with Carrier Hybrid CF–7

AN/TGT–TYPE

INSTRUCTION LITERATURE: TM 11–2003A

USING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

TA–255/TT

NETWORK, HYBRID CIRCUIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Dc tlg and carrier tel.

TYPE OF COMMUNICATION CIRCUITS: Four two-way carrier tel ckt; two dc tlg ckt.

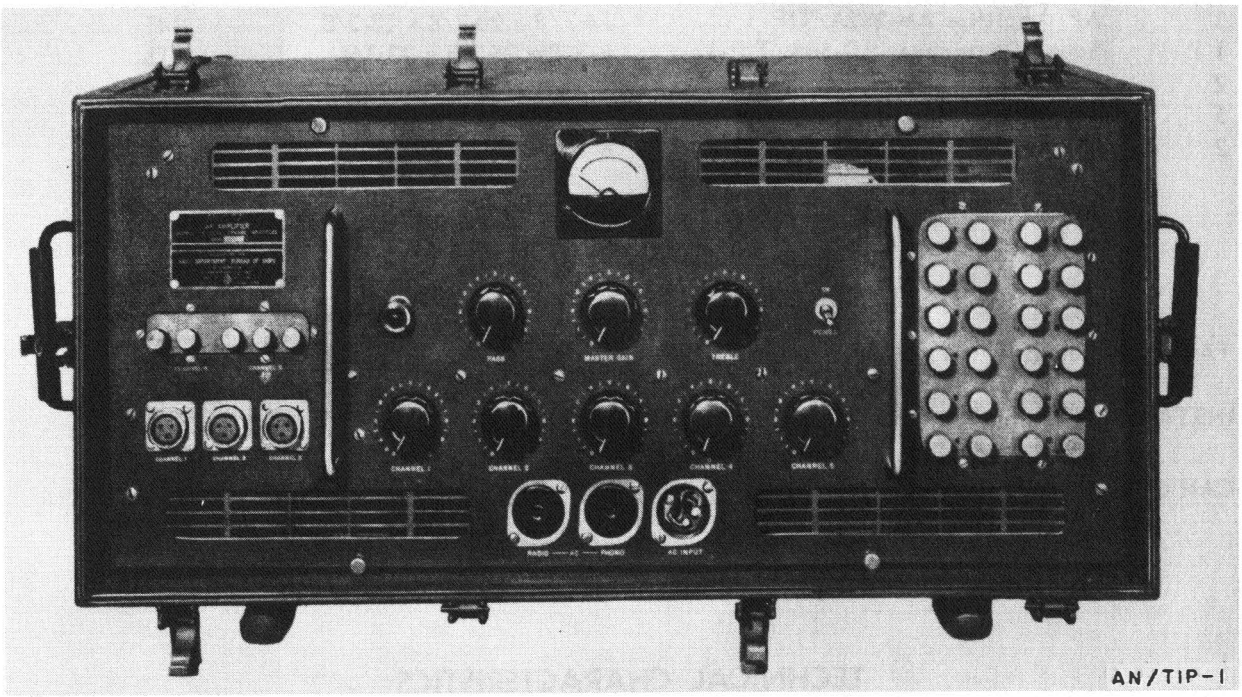
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	7 x 10 x 18½	45	.75		
DOMESTIC PACK:		48	.87		1
EXPORT PACK:		78	4.17		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 14 May 52

AN/TIP-1

PUBLIC ADDRESS SET



Public Address Sets AN/TIP-1 and AN/TIP-1A are designed to provide a high quality loudspeaker system for projecting voice, music, or other signals from microphones, electrical transcriptions, and radio receivers in auditoriums, stadiums, or buildings.

As many as 12 loudspeakers may be connected to the a-f amplifier.

This amplifier provides five separate input channels; three for microphone and/or reproducer, one for radio input, plus one miscellaneous channel. Each channel has an individual volume control, but all channels are controlled at a master volume control which regulates the over-all gain.

Radio Receiving Equipment RBO is usually used in conjunction with this equipment.

AN/TIP-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: NavShips 91168, 91419
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AF Amplifier AM-282A/TIP-1	14-7/8 x 28-7/8 x 18-3/8	141
1	Sound Reproducer RD-56A/TIP-1	8-3/8 x 25-5/8 x 20-1/4	75
2	Dynamic Speaker CUL-491888A	18-1/4 x 28-7/8 x 23-3/4	60
5	Loudspeakers, Radial CUL-491887	18-1/2 x 54-3/8 x 19-1/2	22
2	Microphone CAFI-51096	8-1/4 x 37-5/8 x 15-5/8	42

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: This is sound-projecting equipment for directing speech or music to groups of personnel assembled as an audience.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Input: 5 channel; microphone, phonograph, and radio.
Output: 12 speakers.

TYPE CONTROLS: One volume control for each channel, master volume control for all channels, and separate bass and treble controls.

POWER OUTPUT: 60 w into 30 ohms.

POWER REQUIREMENTS: 300 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Public Address Set AN/TIP-1 and -1A measures 14-7/8 x 49 x 18-1/2 inches, net weight 664 pounds, volume 49.8 cu ft, 1.25 ship tons. Packed for domestic shipment: total weight 910 pounds, total volume 78.2 cu ft, 1.96 ship tons.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/TIP–2

PUBLIC ADDRESS SET

NO PHOTOGRAPH AVAILABLE

Public Address Set AN/TIP–2 is a transportable, high-level, high-gain system for the distant projection of af signals during landing operations. It can be operated from a microphone or telephone-line signal input over a wide temperature range and under adverse weather conditions.

This equipment consists of an audio amplifier, a tripod-mounted loudspeaker, and an engine generator.

AN/TIP–2

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11–5554

USING SERVICE: USA, USN

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	AF Amplifier AM–302/TIP–2	14¼ x 34 x 19¾	220
1	Case CY–719/TIP–2	16¼ x 43¾ x 15¾	169
1	Case CY–760/TIP–2	20⅝ x 30⅛ x 19¾	190
1	Loudspeaker Assembly LS–153/TIP–2	24 x 17¼ x 13	106.5
1	Engine Generator PU–177/U	24¼ x 28¼ x 20⅝	215

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Directing landing operations.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Sound projection; 10,000 ft (optimum conditions) 2,500 ft (battle conditions)

TYPE CONTROLS: Gain cont w/vol ind.

POWER OUTPUT: 500 w (350 to 5,000 cy).

POWER REQUIREMENTS: 1,100 w, 115 v, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,059	33		
DOMESTIC PACK:					
EXPORT PACK:		1,477	45	1.1	6

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 15 Feb 52

AN/TIQ-2

PUBLIC ADDRESS SET

Public Address Set AN/TIQ-2 is a transportable, medium-power, sound amplifying and projecting equipment used to project speech, music, or signals from radio, communication circuits, or records, for special service and morale applications or for use by military police and security troops.

This equipment consists essentially of a medium-power audio amplifier, a phonograph turntable, loudspeakers, and related accessories. It is contained in field-type carrying cases.

It can be operated from sources of 115/230-v a-c power or from a 6- or 12-v storage battery through Vibrator Power Supply PP-31/TIQ-2.

AN/TIQ-2

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2586
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Case CY-38/TIQ-2 (Amplifier AM-20/TIQ-2)	10 x 16 x 21	75.0
1	Case CY-38/TIQ-2 (Turntable MX-39/TIQ-2)	10 x 16 x 21	47.0
2	Loudspeaker LS-103/TIQ-2	19 x 25 (diameter)	22.0
2	Loudspeaker Stand MT-128/TIQ-2	48 (collapsed)	18.5
2	Microphone M-2/U	Not Available	0.875
2	Microphone stand	" "	4.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal company, infantry regiment of infantry divisions, military police company.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Seven input channels; two high-impedance microphones, two low-impedance microphones, one carbon microphone, one radio, one line or phonograph. Output transformer is vari-tapped for speaker matching. Output circuit tapped to provide input voltage for additional amplifier.

TYPE CONTROLS: Amplifier: Volume controls, tone control, on-off switch, power selector switch, and input selector switch.
Turntable: Off-voltage selector switch and motor switch.

POWER OUTPUT: 20 w (at less than 5% distortion).

POWER REQUIREMENTS: 175 w from: 115/230-v, 60-cyc source or 6- or 12-v storage battery through Vibrator Power Supply PP-31/TIQ-2.

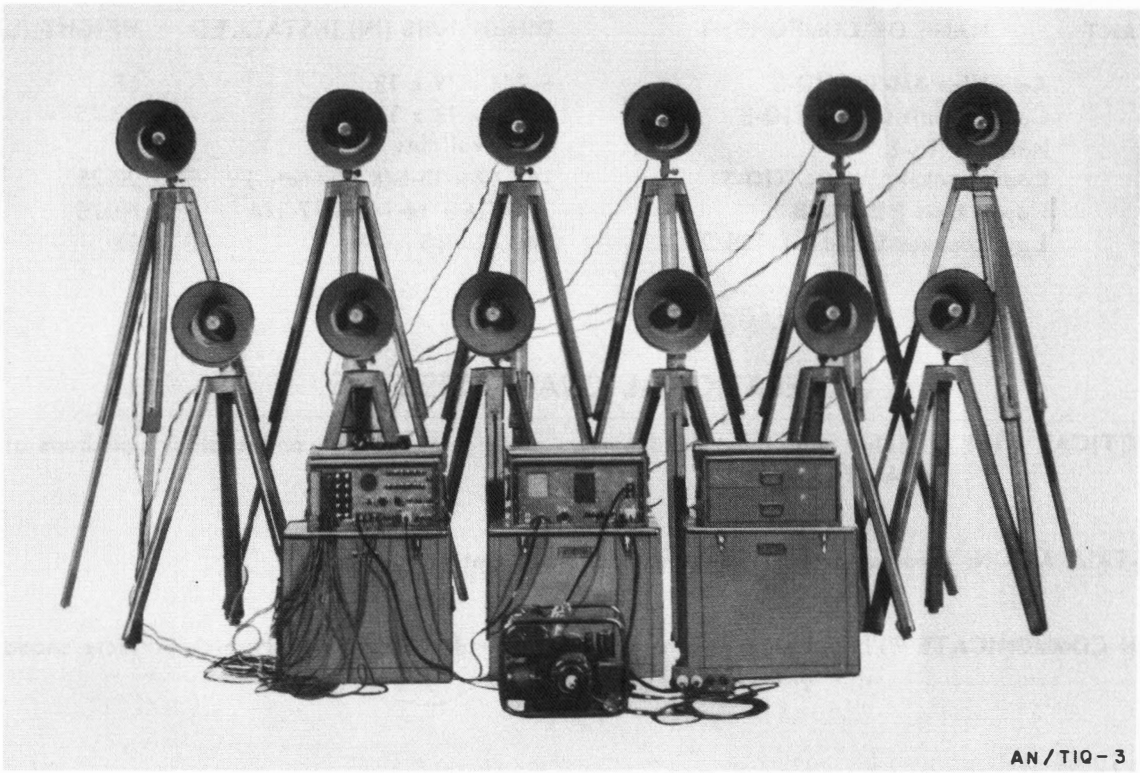
PHYSICAL CHARACTERISTICS

Public Address Set AN/TIQ-2 packed for export shipment: total weight 576 pounds, total volume 31.04 cu ft, 0.8 ship ton. Shipped in 3 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TIQ-3

PUBLIC ADDRESS SET



Public Address Set AN/TIQ-3 is a portable, sound amplifying and projecting equipment used for delivering commands or briefing instructions or for the control of groups of personnel at air fields and at division and higher headquarters.

This equipment consists essentially of an amplifier, a control unit, loudspeakers, a power unit, and accessories.

It can be modulated by a handset or microphone, its loudspeaker components (which are designed to function as speaker-microphones), a phonograph, or similar sound pick-up devices. It has a tone generator for signaling over the system.

Power is supplied by its power unit or an equivalent source of 115/230 v ac.

AN/TIQ-3

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2531
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier AM-34/TIQ-3	8-3/4 x 19 x 13	65
1	Control Unit C-104/TIQ-3	8-3/4 x 18 x 13	40.75
1	Handset TS-13	Not Available	1
12	Loudspeaker LS-104/TIQ-3	15-1/2 x 13-5/8 (diameter)	20.25
1	Power Unit PE-214-B	12-3/16 x 14-1/8 x 17-3/4	60.75
12	Loudspeaker Stand MT-128/TIQ-2	84-1/2 high	19

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters and fighter, bomber, and weather squadrons of the Air Force.

INSTALLATION: Ground, portable, designed for fixed station operation.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: 12 loudspeakers, tone generator for signaling over system, provision for piped-in sound, intercommunication among any and all stations.

TYPE CONTROLS: Sound-mixing, volume, loudspeaker selector, press-to-talk.

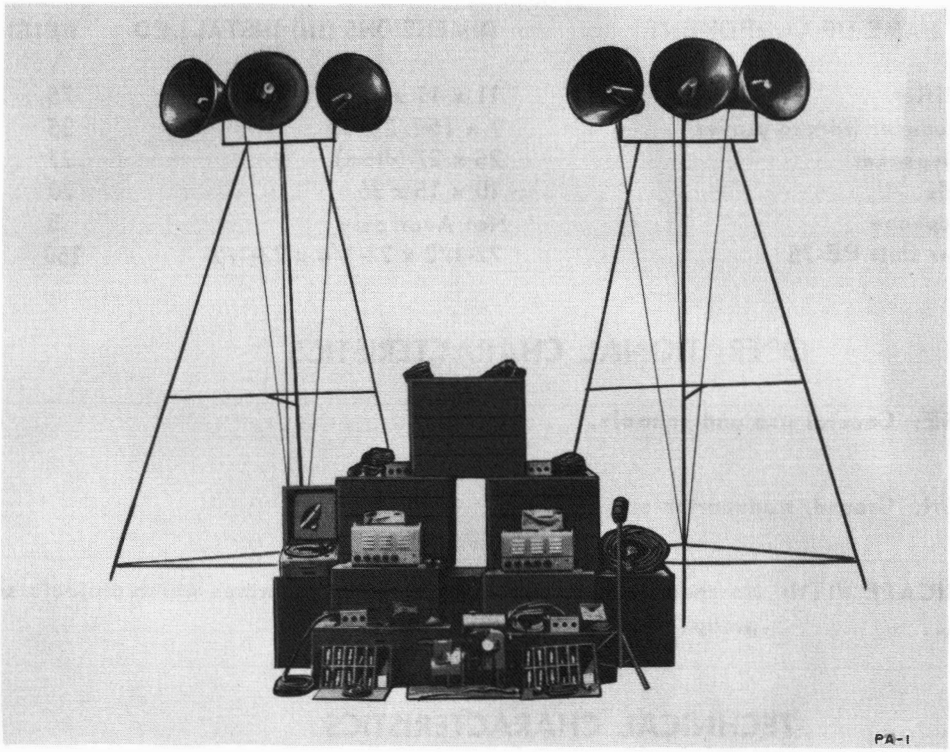
POWER OUTPUT: 50 w (not more than 10% distortion).

POWER REQUIREMENTS: 275 w, 115/230 v, 50 to 60 cyc ac. or Power Unit PE-214-B, or equal.

PHYSICAL CHARACTERISTICS

Public Address Set AN/TIQ-3 packed for export shipment: total weight 1,324 pounds, total volume 67.4 cu ft, 1.68 ship tons. Shipped in 8 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/TIQ- TYPE** SERVICE TYPE NUMBER: PA-1 PUBLIC ADDRESS SET



Public Address Set PA-1 is a transportable, medium-power sound amplifying and projecting equipment used in conjunction with microphone, record player, radio, or equivalent sound signal sources for commands, briefing instructions, training and morale applications, and similar uses at posts, camps, and stations.

This equipment consists essentially of two 50-w audio amplifiers, an adjustable speed (78 and 33-1/3 rpm) record turntable, six loudspeaker units, power equipment, and accessories.

Provision is made for connection of a radio tuner. The set can cover an area of about 8,000 square feet and can be heard at a distance of 3,000 feet.

Operates on 115v ac.

AN/TIQ-TYPE	INSTRUCTION LITERATURE: TM 11-442
PA-1 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PUBLIC ADDRESS SET	USING SERVICE : Army
	DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier	11 x 11 x 18	75
1	Reproducer (record player)	9 x 15-1/2 x 19	35
6	Loudspeaker	25 x 27 (diam)	27
2	Stands	10 x 15 x 96	70
2	Microphone	Not Available	3
1	Power Unit PE-75	22-1/2 x 22-1/4 x 22-1/2	150

OPERATIONAL CHARACTERISTICS

TACTICAL USE: General use and schools.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two microphone input; one two-speed (78- or 33-1/3-rpm) record player input; provision for radio tuner input. Two loudspeaker output channels.

TYPE CONTROLS: Amplifier: On-off, microphone, record, radio, master-gain, tone, music-speech, volume.

Record player: On-off, volume, tone.

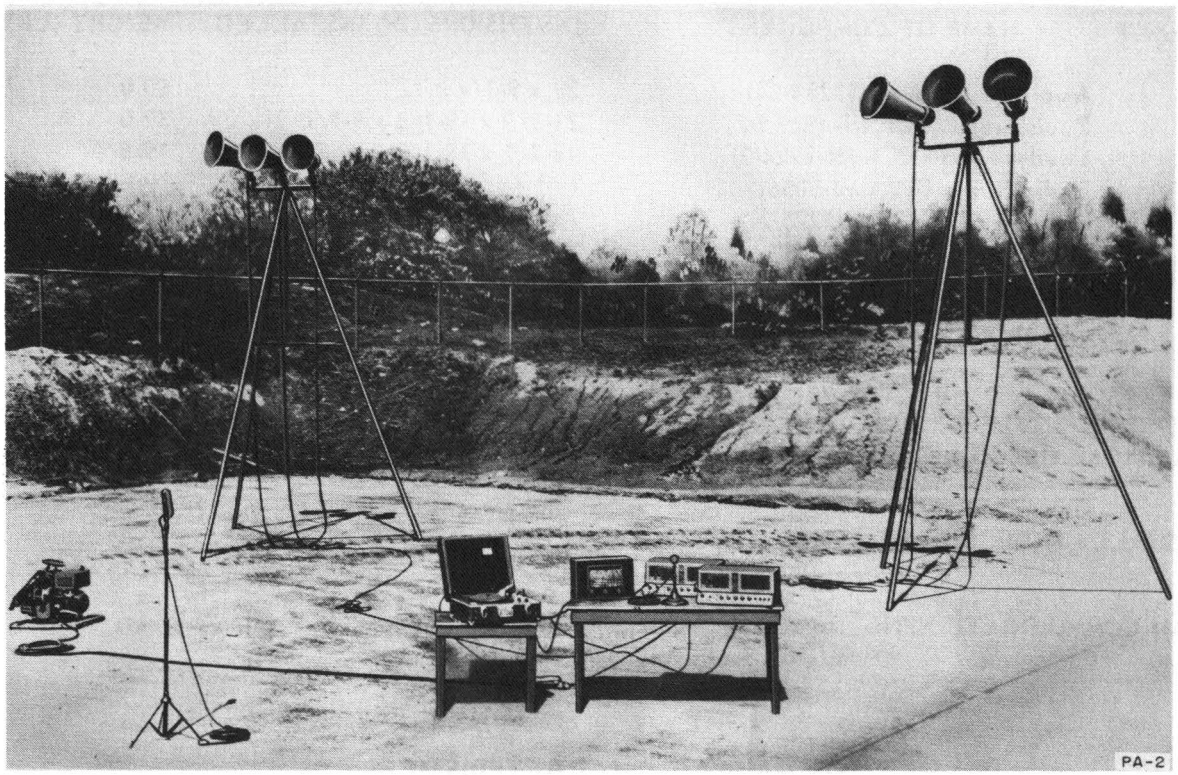
POWER OUTPUT: 50 w (normal); 100 w (maximum).

POWER REQUIREMENTS: 285 voltamperes at 105-125 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Public Address Set PA-1 packed for export shipment: total weight 1,578 pounds, total volume 65 cu ft, 1.63 ship tons.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/TIQ- TYPE** SERVICE TYPE NUMBER: PA-2 PUBLIC ADDRESS SET



Public Address Set PA-2 is a transportable, medium-power, public address, or sound projecting equipment by means of which voice or music from a microphone, record player, or radio tuner can be amplified and projected to audiences. It is used for delivering commands, briefing, and training or for recreational and morale activities. It can be used on the ground, either indoors or outdoors.

This equipment consists essentially of two audio power amplifiers, a record player, an all-wave radio tuner, a power unit, microphones, loudspeakers, and related accessories.

The radio tuner has a frequency range from 0.54 to 22.5 mc which is covered in five bands. The announcing microphone and unidirectional pick-up microphone may be used independently or simultaneously. The record player is an adjustable two-speed (78 or 33-1/3 rpm) unit.

This equipment operates on commercial or auxiliary 115 v ac.

AN/TIQ-TYPE	INSTRUCTION LITERATURE: TM 11-449
PA-2 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
PUBLIC ADDRESS SET	USING SERVICE : Army
	DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier (RCA MI-12214-GI)	29 x 9-1/4 x 12	50.0
1	Phonograph (RCA MI-4829-B)	21-1/2 x 19-1/8 x 9-1/2	32.0
6	Loudspeaker (RCA MI-2924-2)	18-1/2 x 18-1/2 x 29-3/4	19.5
1	Radio Tuner (RCA MI-5056)	Not Available	Not Available
1	Microphone (RCA MI-6226-J)	2-5/8 x 3 x 3-5/8	2.25
1	Microphone (RCA MI-2199)	3-3/4 x 8 x 2-5/8	2.0
1	Power Unit, 1 kw		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and equivalent levels.

INSTALLATION: Ground, transportable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two microphone input channels, one record player input channel, one radio tuner input channel, and two loudspeaker output channels.

TYPE CONTROLS: Amplifier: MIC-1, MIC-2, master gain, low tone, high tone, on-off.
Record player: volume, tone, speed shifter, speed control, on-off.
Radio tuner: tuning, volume-on-off, tone, band selector.

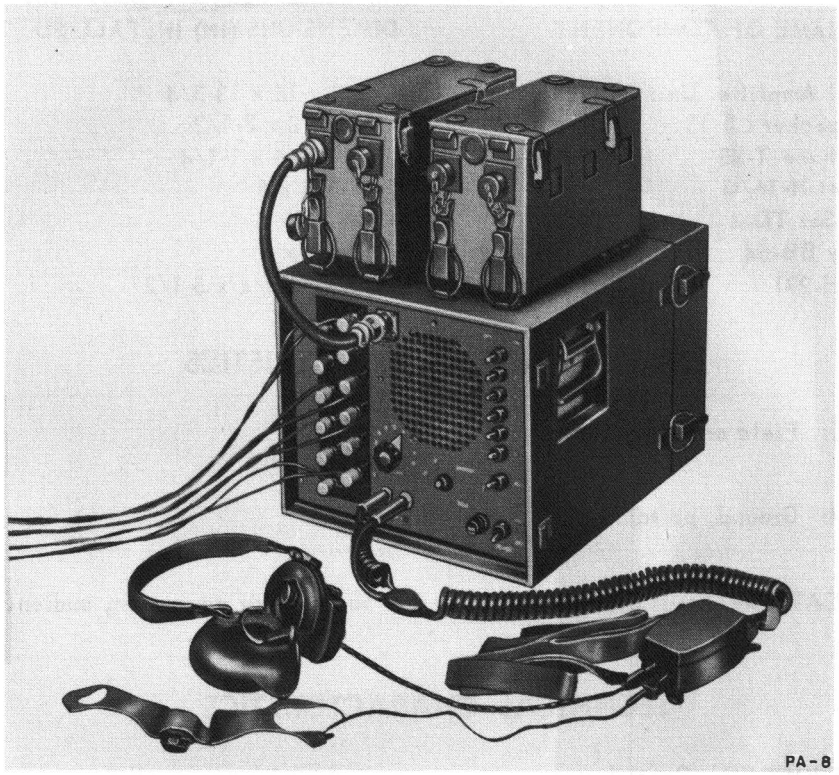
POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 640 to 1,000 w, 115 v, 60 cyc ac from commercial power source or Power Unit PE-75, or equal.

PHYSICAL CHARACTERISTICS

Public Address Set PA-2 packed for export shipment: total weight 2,000 pounds, total volume 80 cu ft, 2 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	AN/TIQ-TYPE SERVICE TYPE NUMBER: PA-8 INTERCOMMUNICATION SET



Intercommunication Set PA-8 is rugged, portable, sound-amplifying and projecting equipment used as a loudspeaker intercommunication system serving displaced elements of a field artillery battery.

This equipment consists of a single amplifier unit, battery boxes, a head-and-chest set, and related accessories. The master control unit and remote station speaker units are blastproof and waterproof.

It can be used for two-way half-duplex type communication and can interconnect up to six remote speaker station units on a single station or all call basis. Provides for calling the master or control station from a speaker station unit only when the master station selector switch is "on."

Operates from rechargeable 2-v batteries (Battery BB-54).

AN/TIQ-TYPE

PA-8 :SERVICE TYPE NUMBER
INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: TM 11-2564
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 31 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Amplifier Unit BC-1346	10-5/8 x 16 x 13-3/4	36.
4	Loudspeaker LS-13	7 x 11-7/8 x 8-1/2	11.25
1	Microphone T-45	3/8 x 1-1/4 x 1-1/4	0.11
1	Headset H-16/U	8 x 3-3/4 x 6	0.75
1	Chest Set TD-4	1-3/8 x 3 x 6	0-7
9	Battery BB-54	5-1/2 x 3 x 4	3.25
1	Box CH-291	6-1/4 x 11-3/4 x 5-1/2	3.25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Field artillery battery.

INSTALLATION: Ground, portable.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air equipment, audiences, or groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Central station can communicate with one or all remote stations on a listen-talk basis. Remote station can communicate with central station only if central station is standing by for that (or all) remote station.

TYPE CONTROLS:

Control-amplifier: Six speaker off-on switches; all-speakers off-on switch; listen-talk switch; volume control; on-off power switch.

POWER OUTPUT: 1.5 w.

POWER REQUIREMENTS: Three BB-54 in series 6 v from three batteries in series or from six batteries in series parallel.

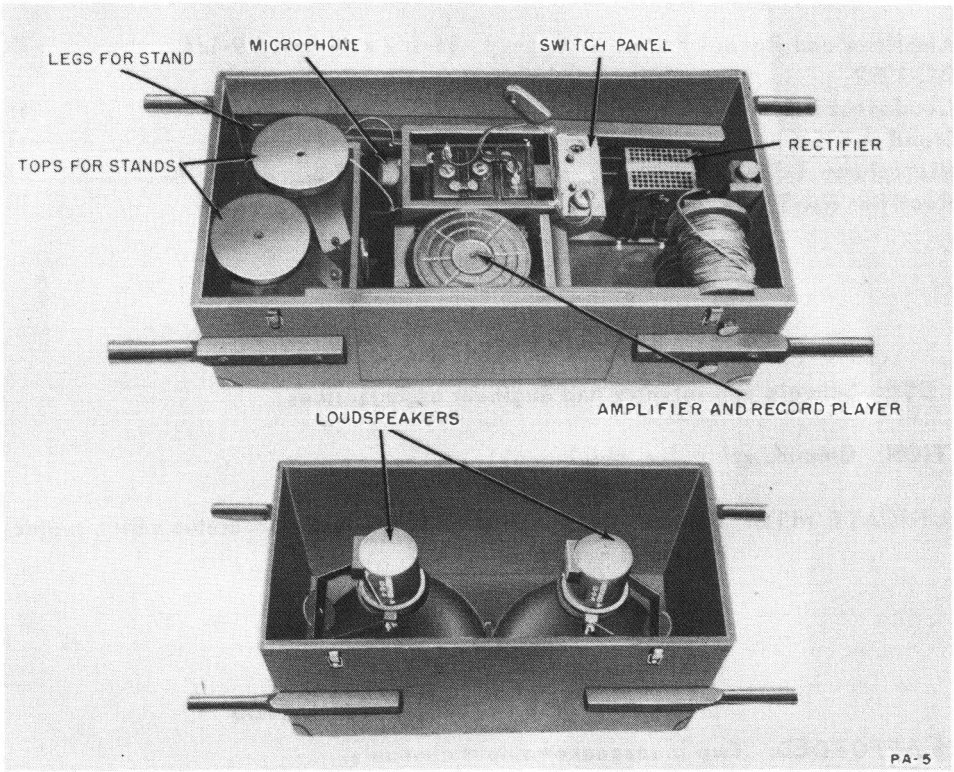
PHYSICAL CHARACTERISTICS

Intercommunication Set PA-8 weighs 125 pounds net, volume 4.5 cu ft. Packed for export shipment: total weight 296 pounds, total volume 17 cu ft. Shipped in four packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TNP-TYPE

SERVICE TYPE NUMBER: PA-5
PUBLIC ADDRESS SET



Public Address Set PA-5 is a portable public address or sound projecting equipment by means of which voice or music from a microphone or record input can be amplified and projected to audiences. It is used for delivering commands or for briefing in forward areas.

This set consists essentially of an amplifier-turntable, loudspeakers and microphone equipment, batteries, interconnecting cords, and other accessories. The complete equipment is contained in three chests, each of which can be carried by two men. Includes provision for mounting loudspeakers on tripods or on the cover of the largest chest. May be operated from a conventional 115-v power source or from a 6-v storage battery. Includes spare battery and battery charger. Does not include provision for input from wire or radio signals, piped-in sound, sound mixing, or for monitoring.

AN/TNP- TYPE

PA-5 :SERVICE TYPE NUMBER
PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2504
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier and Record Player BC-1292	16-1/2 x 16-1/2 x 9-1/4	33.5
2	Loudspeaker LS-12	19-1/4 x 19 (diameter)	45.0
2	Stand M-405	48 x 36 x 32	1.13
1	Microphone T-55	5-3/16 x 2-5/8 x 1-15/16	Not Available
1	Rectifier RA-103	9-1/4 x 6-1/4 x 5-3/4	10.75

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Schools and infantry and engineer organizations.

INSTALLATION: Ground, vehicular, shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two loudspeaker output channels.
One microphone or amplifier-record-player input.

TYPE CONTROLS: Amplifier and record player: On-off, microphone volume, phono-volume, tone.
Rectifier charger: On-off.

POWER OUTPUT: On 115 v, 60 cyc, ac: 20 w.
On 6-v storage battery: 16 w.

POWER REQUIREMENTS: Amplifier only: 85 w, 115 v, 60 cyc, ac or 6-v storage battery, (11.5-amp) drain.
Amplifier and record player: 110 w, 115 v, 60 cyc, ac or 6-v storage battery, (15.5-amp) drain.

PHYSICAL CHARACTERISTICS

Public Address Set PA-5 packed for domestic shipment: total weight 475 pounds, total volume 18.1 cu ft. Packed for export shipment: total weight 575 pounds, total volume 22 cu ft, 0.55 ship ton. Shipped in 3 packages both domestic and export.

STATUS: Std

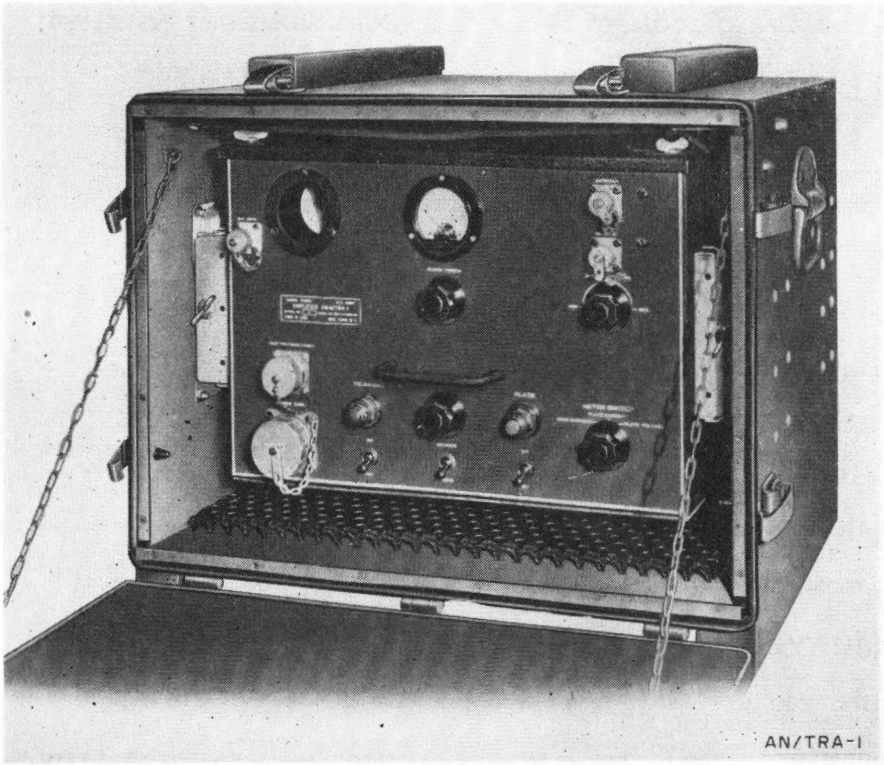
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/TRA–1

AMPLIFIER EQUIPMENT



Amplifier Equipment AN/TRA–1 is a transportable, fm, high-power amplifier used to increase the power output and range of Radio Set AN/TRC–1, Radio Terminal Set AN/TRC–3, and Radio Relay Set AN/TRC–4.

The frequency range and power output of the various models of the amplifier are the same; it can be used with all models of Radio Transmitter T–14/TRC–1 (part of the AN/TRC–1, –3, and –4).

AN/TRA-1

AMPLIFIER EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2601

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier AM-8/TRA-1	10¾ x 12¾ x 19⅛	48
1	Power Supply PP-13/TRA-1	9⅜ x 14 x 25	130

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70 to 100.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 200 w.

POWER REQUIREMENTS: 800 w, 115 v, 50/60 cy ac (from Power Supply PP-13/TRA-1).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		403			
DOMESTIC PACK:					
EXPORT PACK:		547			3

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRA-2

REMOTE CONTROL EQUIPMENT

Remote Control Equipment AN/TRA-2 is a transportable assemblage that permits operational control of Radio Set AN/TRC-1, Radio Terminal Set AN/TRC-3, and Radio Relay Set AN/TRC-4 from distances up to 2 miles. This equipment also enables automatic radio-relay operation when the transmitter and receiver of the radio set are more than 10 feet apart, and provides intercommunication between local and remote operating locations.

AN/TRA-2

REMOTE CONTROL EQUIPMENT

INSTRUCTION LITERATURE: TM 11-2621

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Remote Control Unit C/112-TRA-2		
1	Control Unit C-113/TRA-2		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 2.

TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 115 or 230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRA–19

AMPLIFIER-POWER SUPPLY GROUP

NO PHOTOGRAPH AVAILABLE

Amplifier-Power Supply Group AN/TRA–19 is auxiliary equipment used with such vhf radio equipment as Radio Set AN/TRC–8, Radio Terminal Set AN/TRC–11, and Radio Relay Set AN/TRC–12 to extend the effective transmission range of the transmitter components of these equipments.

This group consists essentially of a Class C rf power amplifier and a power supply unit contained in a standardized equipment cabinet.

It can be used to improve transmission over long distances, grazing paths, and shadow areas, and to overcome other adverse conditions.

AN/TRA–19

AMPLIFIER-POWER SUPPLY GROUP

INSTRUCTION LITERATURE: TM 11–618A

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM–456/TRA–19	11 x 12 7/8 x 13 1/16	46
1	Case, Standardized Components, Electrical CY–1204/TRA–19	26 1/2 x 18 3/8 x 17 3/4	53
1	Power Supply PP–840/TRA–19	10 1/2 x 12 7/8 x 14 3/4	64

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100 (nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 to 250.

TYPE MODULATION: Fm (F1, F3, F4).

TYPE OF SIGNAL: Voice, tty, facsimile.

POWER OUTPUT: 75 w (nom).

POWER REQUIREMENTS: 400 w, 115 or 230 v ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		164.2			
DOMESTIC PACK:					
EXPORT PACK:		275	13.7		1

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRA–TYPE

C–292( )/TRA–7

CONTROL UNIT

Control Unit C–292( )/TRA–7, together with other components of a radioteletype system, provides facilities for establishing radioteletype full-duplex, half-duplex, one-way reversible, emergency cw, or frequency-shift transmission and reception.

This equipment is a single component containing an integral power supply and may be used in several different systems such as those using Radio Set AN/GRC–26 or AN/MRC–2.

It is an electronic repeater of polar and neutral teletypewriter signals and converts polar telegraph signals received from a dual diversity converter into neutral signals received from a receiving teletypewriter. This control unit also translates neutral signals from a sending teletypewriter into polar signals for transmission over a wire line to control a frequency-shift exciter.

When not used in a specific system, this control unit may be located at the receiving station, the transmitting station, or any desired location within 10 miles of the two.

The C–292/TRA–7, C–292A/TRA–7, and C–292B/TRA–7 are functionally interchangeable and differ from each other in design details.

AN/TRA–TYPE

INSTRUCTION LITERATURE: TM 11–262

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

C–292( )/TRA–7

CONTROL UNIT

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL:

Input: Mark, +.025 amp; space, —.025 amp.

Output: Mark, +.02 amp; space, —.025 amp.

POWER REQUIREMENTS: 170 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRA–TYPE

CV–31( )/TRA–7

DUAL DIVERSITY CONVERTER

NO PHOTOGRAPH AVAILABLE

Dual Diversity Converter CV–31( )/TRA–7 is a component of a radioteletype system that provides full-duplex, half-duplex, or one-way reversible, as well as emergency frequency-shift or cw transmission and reception.

This equipment consists of one component that contains its own meters, power supply, and oscillator. The oscillator provides an audible means of indicating mark and space signals, when required.

The output of each of the two receivers is applied to the dual diversity converter to combine the received frequency-shifted signals and to convert the stronger receiver output into dc neutral and polar signals.

The CV–31/TRA–7, CV–31A/TRA–7, CV–31B/TRA–7, CV–31C/TRA–7, and CV–31D/TRA–7 are identical except for minor electrical and mechanical differences.

AN/TRA–TYPE

CV–31( )/TRA–7

DUAL DIVERSITY CONVERTER

INSTRUCTION LITERATURE: TM 11–261

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 400 to 470 kc (–31, –31A, –31B, early –31C); 440 to 510 kc (late –31C, –31D).

TYPE OF COMMUNICATION CIRCUITS: Radioteletype.

POWER REQUIREMENTS: 175 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	25¼ x 20⅝ x 22	220			
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 13 June 1956

AN/TRA–TYPE

O–39( )/TRA–7

FREQUENCY SHIFT EXCITER

NO PHOTOGRAPH AVAILABLE

Frequency Shift Exciter O–39( )/TRA–7 generates low-power rf signals to key such signals in accordance with the intelligence of a radioteletype code, and to feed them to a cw radio transmitter.

This equipment, which functions as the master oscillator of the radio transmitter with which it is used, is composed of a single primary operating component and accessory items.

The O–39/TRA–7, O–39A/TRA–7, and O–39B/TRA–7 are substantially identical except for minor electrical and mechanical differences.

AN/TRA–TYPE

O–39( )/TRA–7

FREQUENCY SHIFT EXCITER

INSTRUCTION LITERATURE: TM 11–257

USING SERVICE: USA

DATE OF THIS SHEET: 13 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL:

Dc Input: Mark, ±.02 amp; space, —.025 amp.

Frequency Shift: 212.5 to 850 cy (depending on the freq multiplication of the assoc rad xmtr).

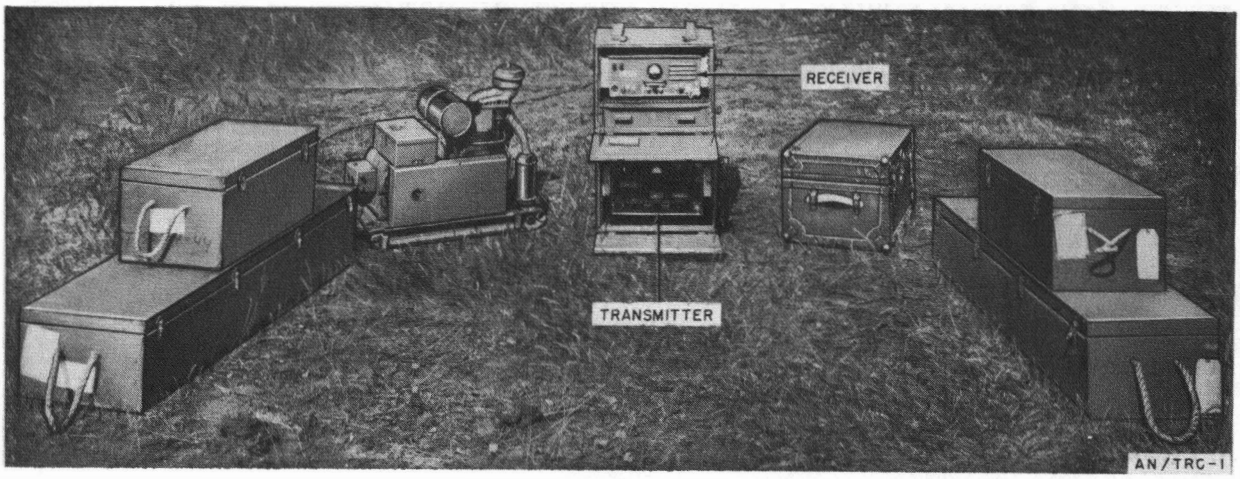
OUTPUT FREQUENCY: 2 to 6 mc.

POWER REQUIREMENTS: 185 w, 115 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 20 Dec 51	**AN/TRC-1** RADIO SET



Radio Set AN/TRC-1 is a transportable, crystal-controlled, f-m radio receiving and transmitting equipment for radio relay or point-to-point communication in the v-h-f band. It is used at regimental or higher headquarters. When operated as the terminal of a radio relay link in a tactical communication system it provides one-way or simultaneous two-way facilities.

With appropriate auxiliary equipment, four channels of radioteletype or a single channel of facsimile signals can be accommodated.

The set can be operated from a distant control point on a two-wire or four-wire basis by means of Remote Control Equipment AN/TRA-2. Amplifier Equipment AN/TRA-1 can be added when necessary to increase transmitter power output. Antenna tower, dipole elements, power supply, and accessory items are included.

This equipment is intended for operation on an intermittent or prescheduled basis only. It does not include spare operating components.

For continuous operation, Radio Terminal Set AN/TRC-3, composed essentially of two Radio Sets AN/TRC-1, is available. Also, two AN/TRC-1 sets (including necessary spares) operating back-to-back at an intermediate point in a system constitute Radio Relay Set AN/TRC-4.

AN/TRC-1

RADIO SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-19/TRC-1	22-1/2 x 16 x 17-3/4	95
1	Radio Transmitter T-14/TRC-1	22-1/2 x 16 x 17-3/4	108
2	Antenna System AS-19/TRC-1	Not Available	470
1	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental or higher headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 — 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

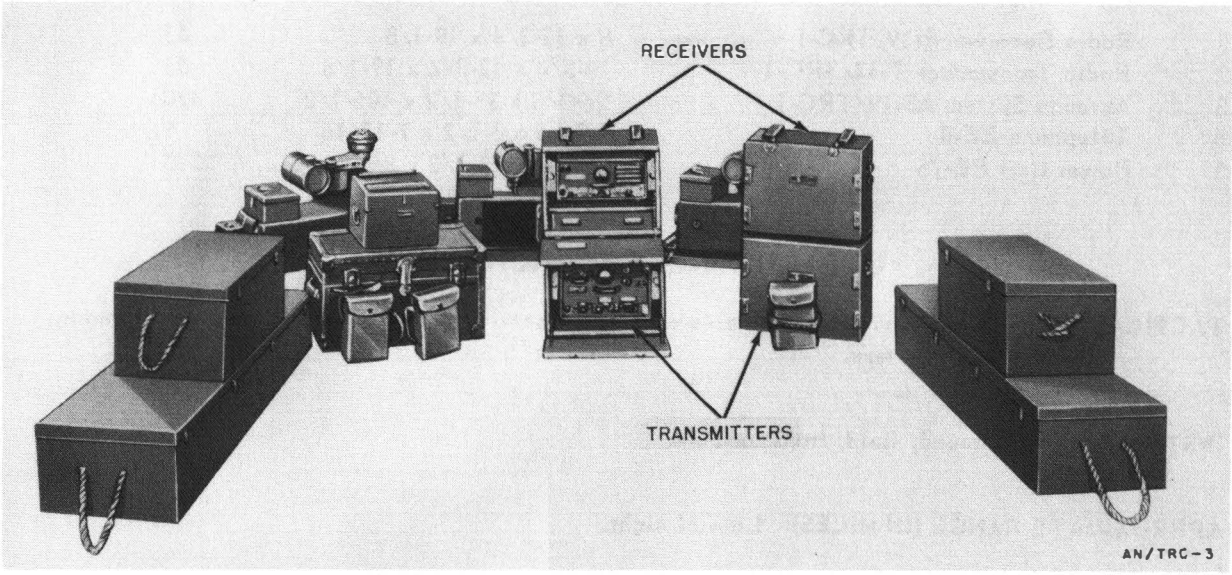
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-1 weighs 1,435 pounds net. Packed for export shipment: total weight 2,000 pounds, total volume 78 cu ft, 2 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-3

RADIO TERMINAL SET



Radio Terminal Set AN/TRC-3 is a transportable, crystal-controlled, f-m, field, radio transmitting and receiving equipment which can be used in point-to-point, single or multichannel communication or as the terminal of a radio relay link in a system serving division and higher headquarters.

This equipment consists essentially of two Radio Sets AN/TRC-1, one of which is a spare, assuring continuous operation. It can be used in conjunction with telephone and telegraph equipment to provide various combinations of voice, telegraph or teletypewriter, and facsimile communication.

It can operate in a system in which the remote terminal consists of another Radio Terminal Set AN/TRC-3, or Radio Set AN/TRC-1, and in which Radio Relay Set AN/TRC-4 may be used as the intermediate repeater facility.

When it is necessary to increase power output of the transmitter, Amplifier Equipment AN/TRA-1 (not a component of this equipment) can be used.

Operates from 115 v ac supplied by its power unit component.

AN/TRC-3

RADIO TERMINAL SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receiver R-19/TRC-1	8 x 12-3/4 x 19-1/8	43
2	Radio Transmitter T-14/TRC-1	10-3/4 x 12-3/4 x 19-1/8	66
3	Antenna System AS-19/TRC-1	26-3/8 x 33-1/2 x 105-1/2	470
3	Telephone EE-8	9-9/16 x 3-1/2 x 7-11/16	9.75
3	Power Unit PE-75	26 1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division signal companies and signal service teams at corps, army, and theater headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 – 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac
Commercial power source or Power Unit PE-75, or equal.

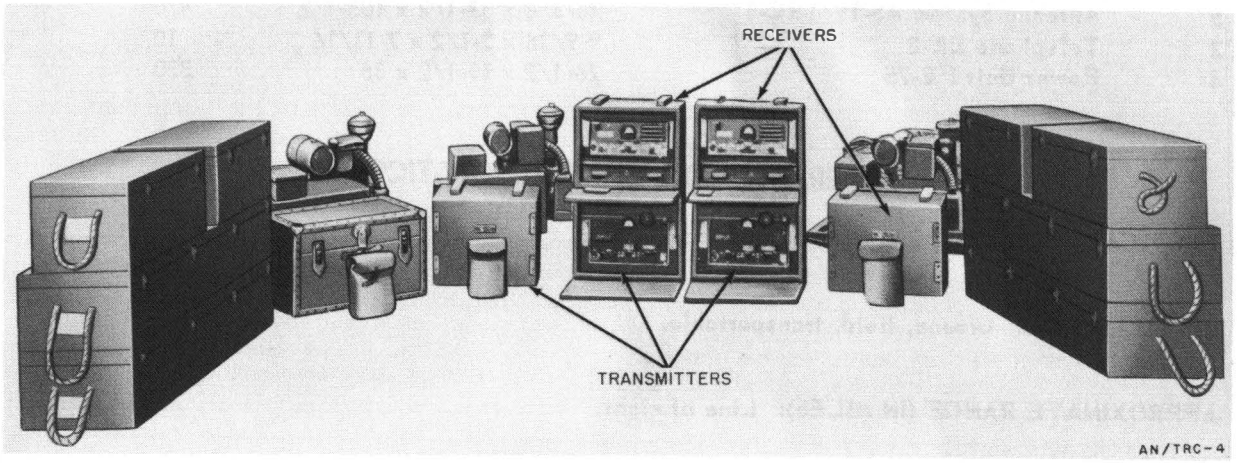
PHYSICAL CHARACTERISTICS

Radio Terminal Set AN/TRC-3 weighs 2,560 pounds net. Packed for export shipment: total weight 3,150 pounds, total volume 132 cu ft, 3.3 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-4

RADIO RELAY SET



Radio Relay Set AN/TRC-4 is a transportable, crystal-controlled, f-m, field, radio transmitting and receiving equipment which can be used in point-to-point, single or multichannel communication or as the repeater facility of a radio relay link of a system serving corps and equivalent headquarters.

This equipment consists essentially of two Radio Sets AN/TRC-1, operating back-to-back at intermediate points of a radio relay facility terminated by Radio Set AN/TRC-1 or Radio Terminal Set AN/TRC-3. It provides various combinations of voice, telegraph, teletypewriter, and facsimile channels. It includes spare operating components, antenna, power, and accessory items.

Amplifier Equipment AN/TRA-1 may be used to increase the transmitter output power of this radio relay set.

Operates from 115 v ac supplied by its power unit component.

AN/TRC-4

RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11-2601
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Radio Receiver R-19/TRC-1	8 x 12-3/4 x 19-1/8	43
4	Radio Transmitter T-14/TRC-1	10-3/4 x 12-3/4 x 19-1/8	66
5	Antenna System AS-19/TRC-1	26-3/8 x 33-1/2 x 105-1/2	470
2	Telephone EE-8	9-9/16 x 3-1/2 x 7-11/16	10
4	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and equivalent headquarters.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4; AN/URR-10, -12; BC-787; R-137/GR; RBK; SCR-687.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70.0 — 99.9.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 50 w maximum, 10 w low power.

POWER REQUIREMENTS: Receiver: 100 w, 115 v, 50/60 cyc ac.
Transmitter: 250 w, 115 v, 50/60 cyc ac.
Commercial power source or power Unit PE-75, or equal.

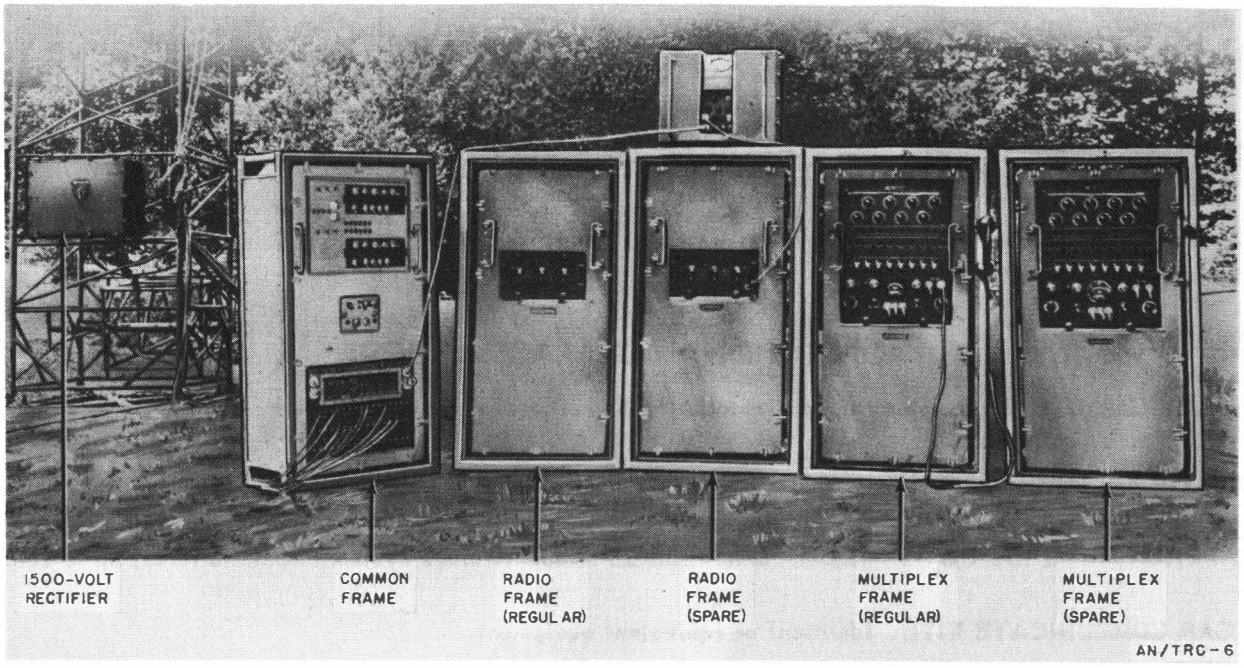
PHYSICAL CHARACTERISTICS

Radio Relay Set AN/TRC-4 packed for export shipment: total weight 4,500 pounds, total volume 187 cu ft, 4.7 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 20 Dec 51

AN/TRC-6

RADIO SET



Radio Set AN/TRC-6 is a transportable, pulse-position-modulated, superhigh-frequency radio relay set used at terminals of a multichannel radio relay system in conjunction with v-f or carrier telegraph and telephone facilities. It is usually installed at permanent or semipermanent locations at higher headquarters.

This equipment provides eight two-way channels which may be terminated on a two-wire or four-wire basis with talking, monitoring, and ringing on each channel.

Equipment consists essentially of two receivers, two transmitters, two multiplex frames, a rectifier power unit antenna, and accessory components. It may be installed and operated in Shelter HO-17 or HO-27 and transported on a 2-1/2-ton cargo truck. It includes a trailer-drawn field power unit.

Two Radio Sets AN/TRC-6 can be operated back-to-back to provide radio relay or repeater facilities at an intermediate point of a radio relay link in a tactical communication system.

AN/TRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-631
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Common Frame Assembly CY-75/TRC-6	48-1/4 x 13 x 25-1/2	190
2	Radio Frame Assembly CY-74/TRC-6	48-1/4 x 13 x 25-1/2	200
2	Multiplex Frame Assembly CY-76/TRC-6	48-1/4 x 13 x 25-1/2	260
2	Radio Transmitter T-57/TRC-6	12-1/4 x 18 x 17	45
2	Receiver-Converter CV-10/TRC-6	12-1/2 x 13 x 12-1/2	20
2	Rectifier Power Unit PP-71/TRC-6	19 x 13-1/2 x 20	112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio relay team. Installed in higher headquarters.

INSTALLATION: Ground, fixed or fixed field, transportable.

APPROXIMATE RANGE (IN MILES): Single link 25 to 40. Average system(four radio links) up to 200.

CAN COMMUNICATE WITH: Identical or equivalent equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4,350 — 4,800 in four bands.
Band A: 4,800 Band C: 4,500
Band B: 4,650 Band D: 4,350.

TYPE MODULATION: Pulse-position-modulated, time division.

TYPE OF SIGNAL: Voice, d-c telegraph and teletypewriter.

POWER OUTPUT: 0.2 w (average).

POWER REQUIREMENTS: 115-v, 50/60 cyc , 1,312-w (minimum), 3,400-w (maximum),single-phase ac. Commercial power source or Power Unit PE-197, or equal.

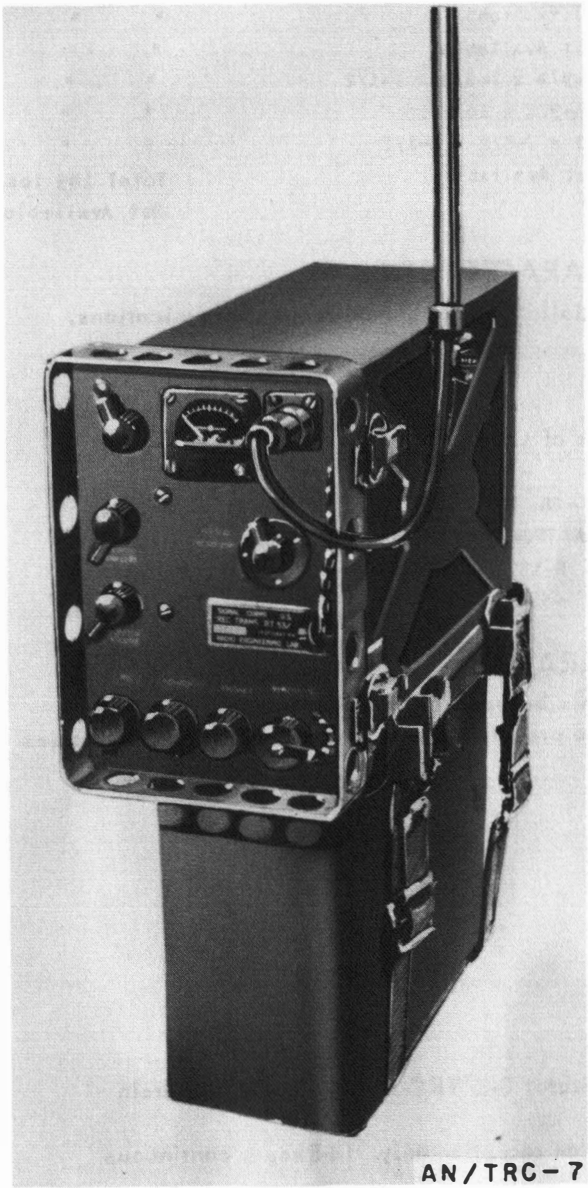
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-6 packed for domestic shipment: total weight 4,684 pounds.

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

RADIO SET

INSTRUCTION LITERATURE: TO 16-30TRC7-B
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 19 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver-Transmitter RT-53B/TRC-7	5-1/2 x 13-1/2 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	Battary 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, -18, -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).

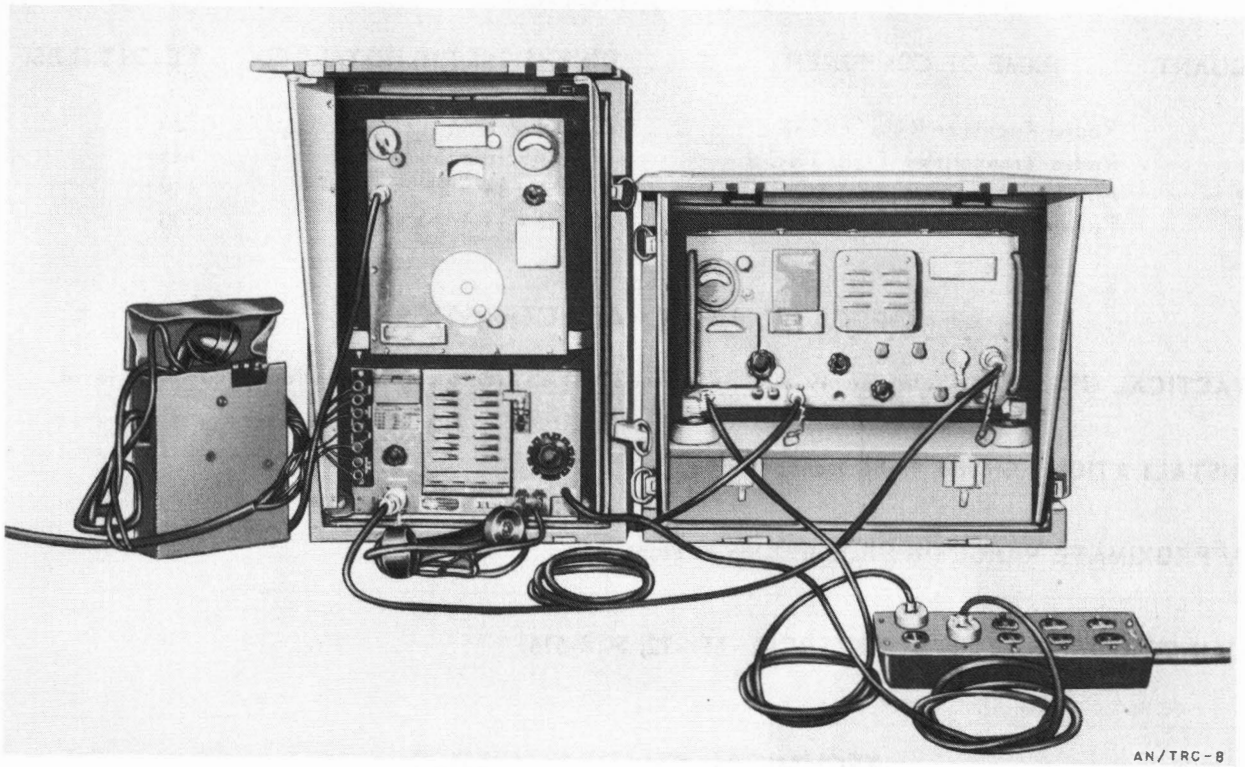
PHYSICAL CHARACTERISTICS

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.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-8

RADIO SET



Radio Set AN/TRC-8 is a transportable, v-h-f, f-m, single-channel radio receiving and transmitting equipment used for point-to-point or radio relay applications at division or higher headquarters.

This equipment consists of a radio transmitter, a radio receiver, an antenna, and power accessories but does not include spare operating components. It is intended for use on an intermittent or pre-scheduled basis. It is designed for communication by voice signals and, in conjunction with additional equipment, for radioteletype applications.

For continuous operation, spare operating components are added (constituting Radio Terminal Set AN/TRC-11). For radio relay use, the same primary operating components and the necessary spares (constituting Radio Relay Set AN/TRC-12) are operated back-to-back at intermediate points of a system.

Operates from power supplied by its field power unit or an equivalent source.

AN/TRC-8

RADIO SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
1	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
2	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
1	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio relay at division or higher level and radio communication at company level.

INSTALLATION: Ground, field, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/TRC-8, -11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 — 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

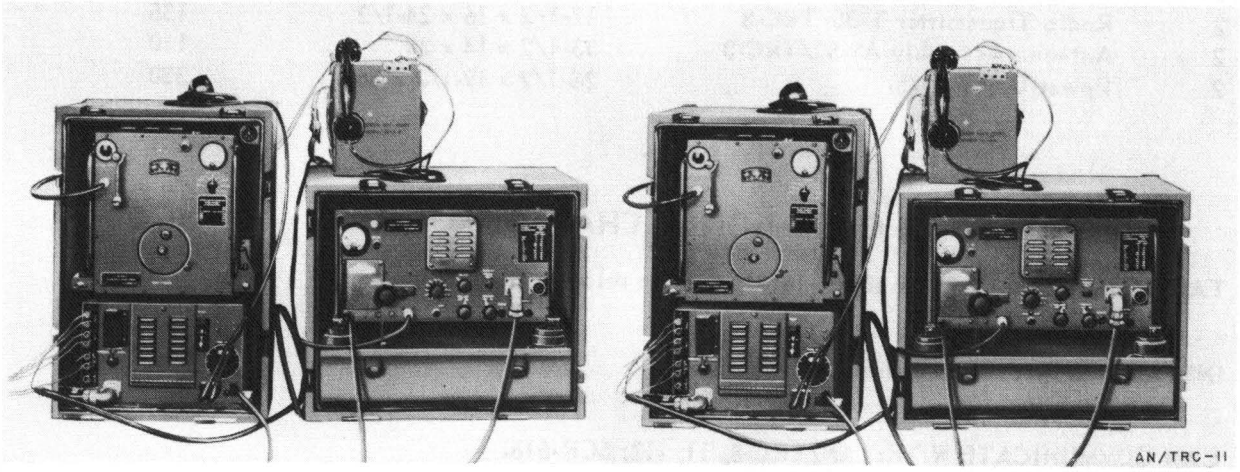
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-8 packed for domestic shipment: total weight 1,250 pounds, total volume 48 cu ft, 1.2 ship tons. Shipped in 9 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TRC-11

RADIO TERMINAL SET



Radio Terminal Set AN/TRC-11 is a transportable, f-m (voice), v-h-f, transmitting and receiving equipment used for single-channel, point-to-point communication or as the terminal of a radio relay system serving division and higher headquarters.

This equipment consists essentially of two receivers and two transmitters (one of each being a spare), antenna components, and power equipment. It is designed for continuous operation. It can be used in single-channel applications on a half-duplex basis or, with additional equipment, for full-duplex radioteletype communication as the terminal of a radio link in a wire or cable system.

It is designed primarily to operate continuously as the terminal of a radio relay system in which the opposite or remote terminal equipment consists of Radio Set AN/TRC-8, or another AN/TRC-11, and in which Radio Relay Set AN/TRC-12 is used at intermediate points of the system as may be required to extend the distance range between terminals.

It requires 115/230 v ac to operate and can be powered by its power unit component or an equivalent source.

AN/TRC-11

RADIO TERMINAL SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
2	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
2	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
2	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division signal level for radio relay or field radio use.

INSTALLATION: Ground, field, transportable.

CAN COMMUNICATE WITH: AN/TRC-8, 11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 — 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter (with additional equipment).

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

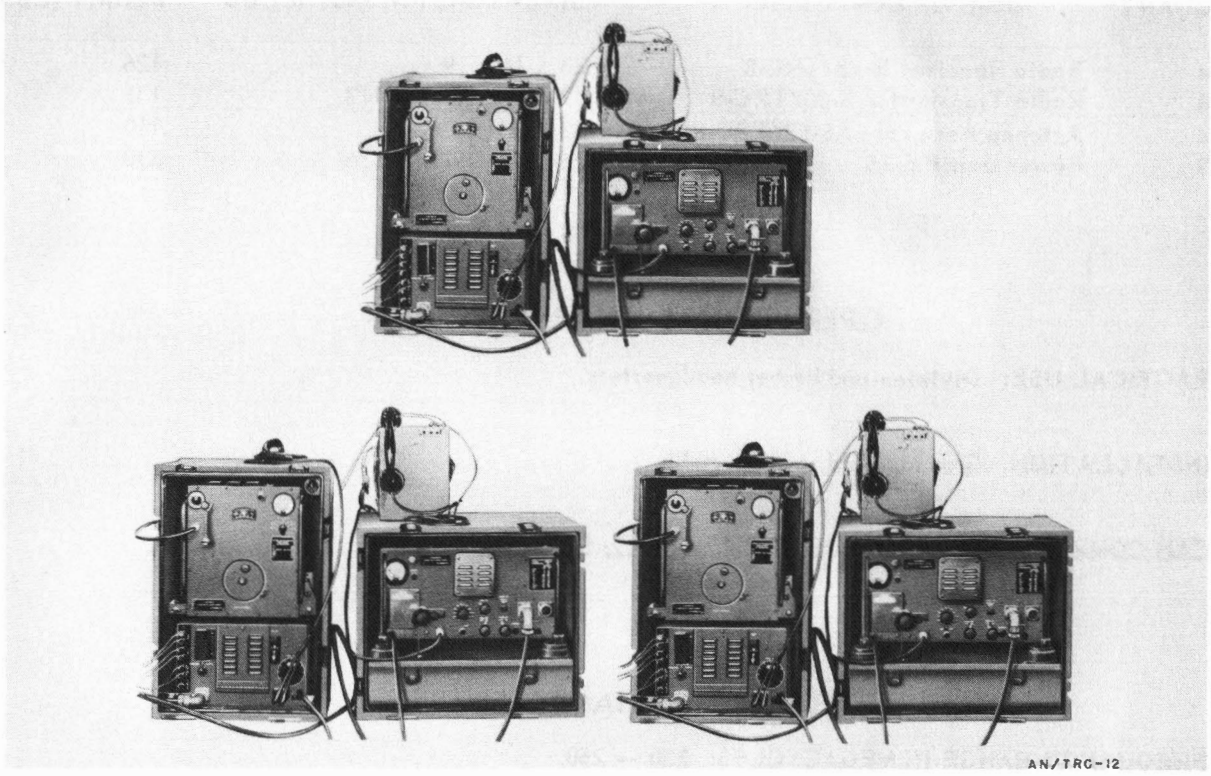
PHYSICAL CHARACTERISTICS

Radio Terminal Set AN/TRC-11 packed for domestic shipment: total weight 2,300 pounds, total volume 76 cu ft, 1.9 ship tons. Shipped in 13 packages.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Air Force
DATE OF THIS SHEET: 8 Jan 52

AN/TRC-12

RADIO RELAY SET



Radio Relay Set AN/TRC-12 is a transportable, f-m (voice), v-h-f transmitting and receiving equipment used for single-channel, point-to-point communication or as a repeater station at intermediate points of a radio relay system serving division and higher headquarters.

This equipment consists essentially of four radio transmitters and four radio receivers (one of each being a spare), antenna components, and power equipment. It is designed to be used primarily on a continuous basis for half-duplex or full-duplex communication in a system terminated by Radio Set AN/TRC-8 or Radio Terminal Set AN/TRC-11 or as a single-channel half-duplex voice communication facility.

It is powered by its power supply and requires 115/230 v ac.

AN/TRC-12

RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11-618
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Air Force
DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Radio Receiver R-48/TRC-8	23 x 16 x 19	126
4	Radio Transmitter T-30/TRC-8	17-1/2 x 16 x 24-1/2	135
4	Antenna Assembly AS-52/TRC-8	33-1/2 x 14 x 24	110
3	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, field, transportable.

CAN COMMUNICATE WITH: AN/TRC-8, -11, -12; SCR-616.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 230 – 250.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, teletypewriter.

POWER OUTPUT: Transmitter, 5 w.

POWER REQUIREMENTS: Receiver: 120 w, 115/230 v, 50/60 cyc ac.
Transmitter: 350 w, 115/230 v, 50/60 cyc ac.
Commercial power source or Power Unit PE-75, or equal.

PHYSICAL CHARACTERISTICS

Radio Relay Set AN/TRC-12 packed for domestic shipment: total weight 3,150 pounds, total volume 101 cu ft, 2.53 ship tons. Shipped in 18 packages.

STATUS: Std

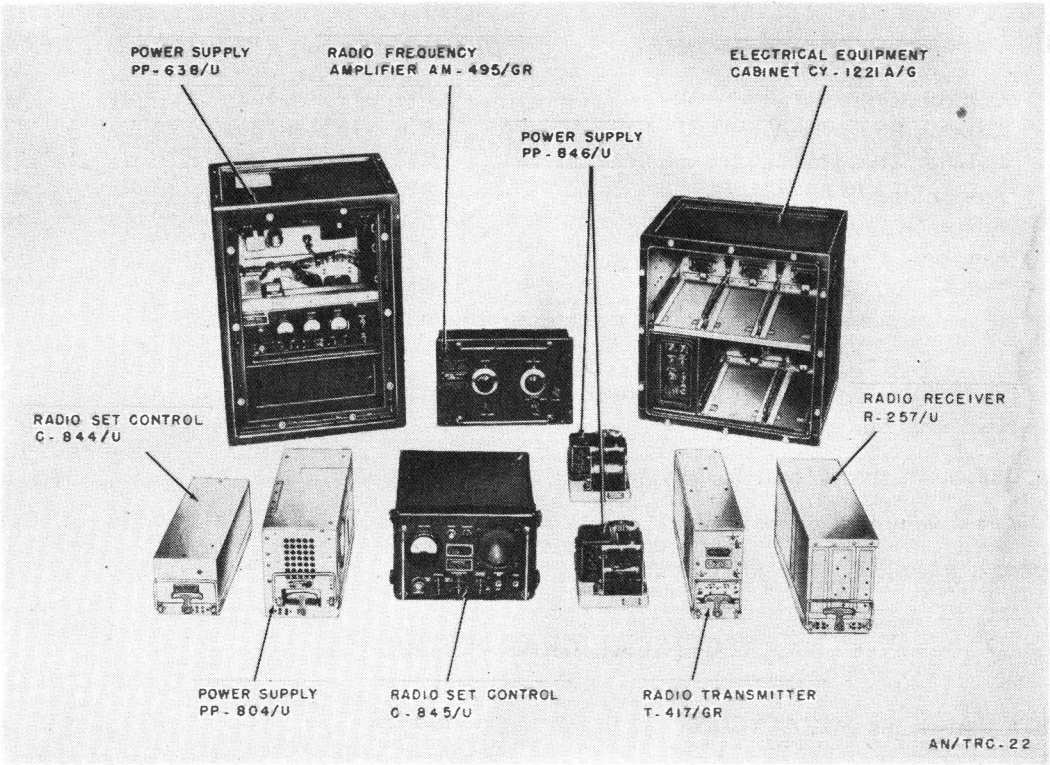
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TRC-22

RADIO SET



Radio Set AN/TRC-22 is an fm (voice) vhf, crystal-controlled receiving and transmitting equipment, used by Military Police guard, and security organizations.

This equipment consists of a radio transmitter, power amplifier, receiver, and auxiliary components.

It is normally operated on a simplex basis but can be arranged for duplex operation by the addition of another receiver and an extra antenna. It can also provide automatic retransmission service between two stations too distant from each other for direct communication.

Remote control with intercommunication between the local and distant operating locations is provided by means of the radio set controls supplied.

AN/TRC-22

RADIO SET

INSTRUCTION LITERATURE: TM 11-691

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Radio Set C-844/U	8¾ x 14¾ x 5⅞	6.5
1	Control, Radio Set C-845/U	8⅞₁₆ x 13¾ x 13½	17.5
1	Cabinet, Electrical Equipment CY-1221/G	21¼ x 16⅞ x 20½	58
1	Power Supply PP-804/U	8⅝ x 7 x 14½	40
1	Power Supply PP-846/U	5⅛ x 6¼ x 7₁₁₁₆	10.5
1	Receiver, Radio R-257/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T-417/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: MP, guard, and security troops.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: 10 mi; line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 45 to 250 w.

POWER REQUIREMENTS:

PP-638/U: 660 w, 115/230 v, 60 cy ac.
PP-804/U: 230 va, 115/230 v, 50/65 cy ac.
PP-846/U: 46 va, 115/230 v, 50/65 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		419	15.4		
DOMESTIC PACK:		461	27	.7	4
EXPORT PACK:		618	30.7	.8	3

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

AN/TRC–24, –35, –36

RADIO SET, RADIO TERMINAL SET, RADIO RELAY SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/TRC–24, Radio Terminal Set AN/TRC–35, and Radio Relay Set AN/TRC–36 are multichannel, fm (voice) transmitting and receiving equipments used to provide 12 channels of telephone communication in the uhf band. They are intended to be installed as a substitute for conventional wire and cable when installation of such facilities is impracticable.

The AN/TRC–24 consists of radio transmitting and receiving equipment and associated components; it can be used in point-to-point communication. The AN/TRC–35 is composed of the same primary operating components, with sufficient spares to enable uninterrupted operation as a terminal of a radio-relay system. Each AN/TRC–36 is made up of the required quantity of the same receiving and transmitting components as the AN/TRC–24 and AN/TRC–35 to permit continuous operation as a repeater station at intermediate points of the system.

Radio-relay telephone systems using this equipment can be operated in systems using carrier-telephone terminal and relay equipment, such as Telephone Terminal AN/TCC–7, attended Telephone Repeater AN/TCC–8, and unattended Telephone Repeater AN/TCC–11.

AN/TRC–24, –35, –36

RADIO SET, RADIO TERMINAL SET, RADIO RELAY SET

INSTRUCTION LITERATURE: TM 11–687

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TRC–24:		
1	Radio Set Group OA–483/TRC		
	For AN/TRC–35:		
2	Radio Set Group OA–483/TRC		
	For AN/TRC–36:		
3	Radio Set Group OA–483/TRC		

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight (30 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 400.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 to 120 w.

POWER REQUIREMENTS: 1 kw (approx), 115 v, 50/60 cy ac; (access. trans permits use of 95 to 130 v and 190 to 260 v).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		1,091	52.1		
DOMESTIC PACK:		2,561	140	3.5	18
EXPORT PACK:		2,561	140	3.5	18

AN/TRC–28

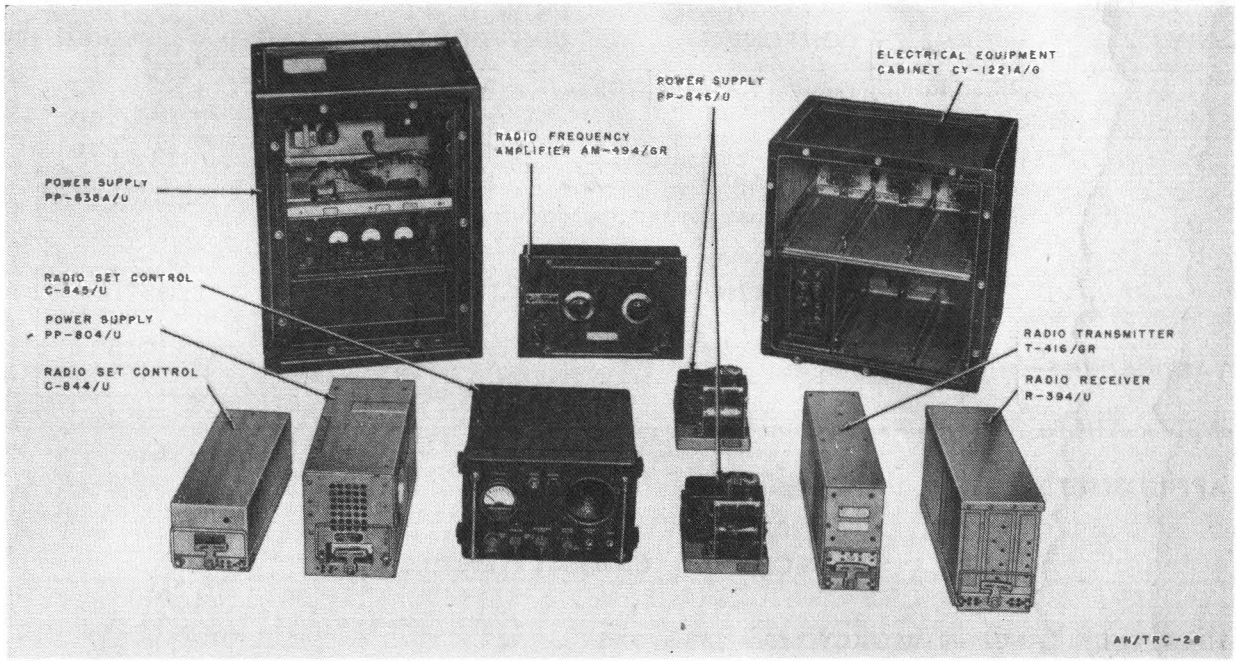
RADIO SET

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956



Radio Set AN/TRC–28 is vhf, fm voice communication equipment designed for fixed station operation, with remote control facilities up to 10 miles.

Operation is primarily simplex; duplex operation is possible with two frequency assignments.

This equipment may also be used as an automatic relay station (retransmission) to extend the distance between terminal stations; in this service, local start-stop must be used. Wire communication between station site and operating site is provided.

AN/TRC-28

RADIO SET

INSTRUCTION LITERATURE: TM 11-252

USING SERVICE: USA

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Radio Frequency AM-494/GR	9¾ x 9½ x 15	13½
1	Antenna AT-438/GR	6½ x 31 x 5½	10
1	Receiver, Radio R-394/U	8½ x 14½ x 5¾	19
1	Transmitter, Radio T-416/GR	8½ x 14½ x 4½	9

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 45 w (w/o ampl); 250 w (w/ampl).

POWER REQUIREMENTS: 230 va, 115 or 230 v, 50/65 cy ac (from Power Supply PP-804/U).

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		423	15		
DOMESTIC PACK:		448	27.5	.7	5
EXPORT PACK:		621	30	.75	4

STATUS: Std

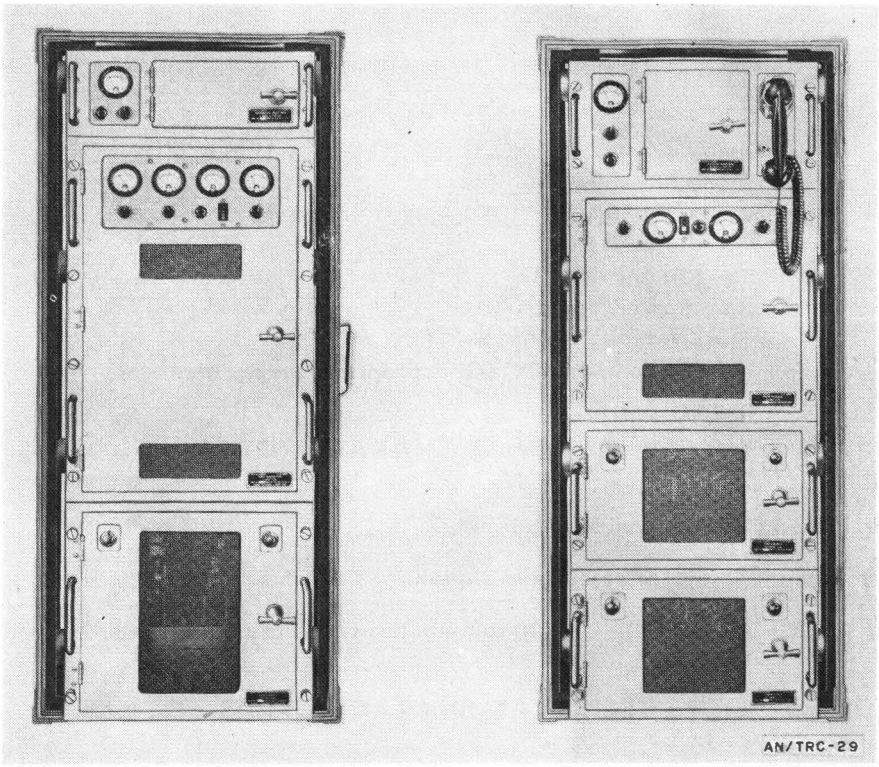
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/TRC–29, –38 thru –41

RADIO SET; RADIO TERMINAL SET; REPEATER SET, RADIO



Radio Set AN/TRC-29 is a two-way, multichannel fm, microwave receiving and transmitting equipment used in radio-relay systems. Although normally used in a rear area radio-relay system, it is built to satisfy full field service handling requirements. It is contained in equipment transit cases and can be transported by suitable military vehicles, or it can be mounted in standard relay racks.

This equipment consists of receivers, transmitters, and associated components for handling multichannel telephone, facsimile, telegraph, radar data, or television signals. It can be arranged in a radio-relay system as a terminal or as repeater stations with additional equipment.

This set is designed to operate continuously for long periods of time. It will provide communication trunk service over as many as 20 tandem hops to form circuits up to 600 miles in length.

Two Radio Sets AN/TRC–29 and one Multiplexer Set AN/TCC–13, designated as Radio Terminal Set AN/TRC–38, will handle 23 voice channels as a terminal station. Radio Repeater Set AN/TRC–39 is composed of three Radio Sets AN/TRC–29; Radio Repeater Set AN/TRC–40, of three Radio Sets AN/TRC–29 and one Pulse Form Restorer Group AN/TRA–10; and Radio Repeater Set AN/TRC–41, of three Radio Sets AN/TRC–29 and one Multiplexer Group AN/TCA–1.

AN/TRC–29, –38 thru –41

RADIO SET; RADIO TERMINAL SET; REPEATER SET, RADIO

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 29 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/TRC–29:		
	Power Supply PP–689/G	21 x 19⅜ x 21¼	
	Power Supply PP–690/G	21⅝ x 19⅜ x 12¼	
	Power Supply PP–764/G	21 x 19⅜ x 17½	
	Receiver, Radio R–418/G	21⅝ x 19⅜ x 19¼	
	Transmitter, Radio T–303/G	21 x 19⅜ x 17½	
	Transformer, Power, Fixed Autotransformer TF–146/G	27⅜ x 19⅛ x 19⅝	245

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant or tactical radio relay.

INSTALLATION: Ground, transportable; fixed station.

APPROXIMATE RANGE (IN MILES): 30 (20 tandem hops/sys, in 600-mi sys).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,700 to 2,400 (27 preset chan: 1,715 to 2,385 mc).

TYPE MODULATION: Fm (F1, F3, F4, F5, F9).

TYPE OF SIGNAL: Fsk, voice, facsimile, TV, composite.

POWER OUTPUT: 4 to 10 w.

POWER REQUIREMENTS: 2,300 w, 115/230 v, 50/60 cy ac.

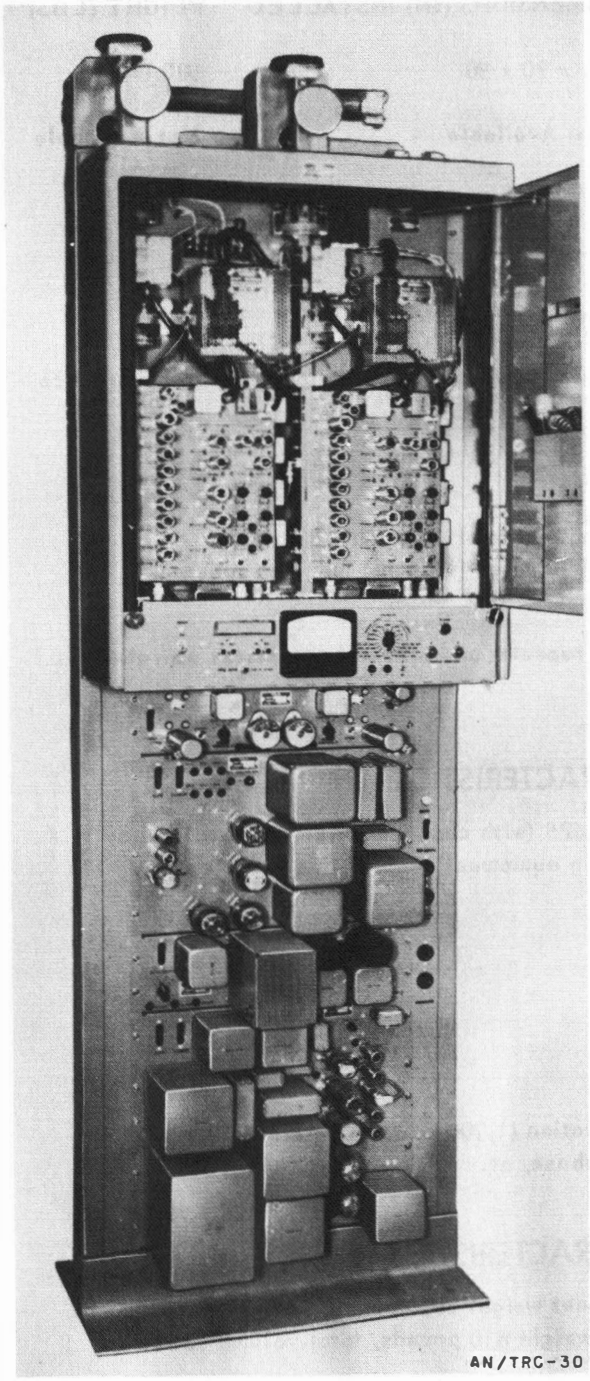
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
AN/TRC–29	60 x 64 x 26½	1,051	49.8		
DOMESTIC PACK:					
EXPORT PACK:		3,682	226.6	10.3	13

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 7 Jun 52

AN/TRC-30

RADIO SET



AN/TRC-30

Radio Set AN/TRC-30 is a microwave, f-m radio set used in two-way, (duplex) point-to-point radio relay systems.

This Radio Set consists of a radio transmitter, four feet parabola antenna, a reflector, and wave guide kit.

A complete system consists of two terminal sets, each with a receiver and transmitter, and a number of repeater sets, spaced 20 to 40 miles apart in tandem, sufficient to span the distance between the terminals.

When used with its associated multiplexing equipment (such as Philco CMT-4) the system is capable of expansion up to 24 telephone channels. Each channel may be further expanded to as many as 12 additional channels for telegraph, teletype, telemetering, signaling, and supervisory control circuits.

High-speed facsimile transmission is also possible by using two adjacent telephone channels as one.

With the use of smaller multiplexing units, one, four, or eight voice channels may be inserted, or dropped off, at any repeater station as may be required.

Power requirements are: 700 w of 115-v, 60-cyc, single phase, ac, per terminal, or repeater station, less heaters; with heaters power consumption is 1,200 w.

AN/TRC-30

RADIO SET

INSTRUCTION LITERATURE: Philco Books & Philco Training Manual CLR-6
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Philco CLR-6 Repeater/Terminal (in rack)	28 x 90 x 90	500 (each)
1	Philco Multiplexing Equipment (CMT-4)	Not Available	Not Available
1	Voice Termination Equipment (Used with but not part of.)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued (at any organizational level), as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Repeater spacing: Line of sight (20-40 miles)
Total range: 1,000 miles (or more) terminal spacing.

CAN COMMUNICATE WITH: Identical, or equivalent, repeater and terminal equipment operating in the same system.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 7,425 (with channel division determined by multiplexing equipment).

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Voice, cw, radioteletype.

POWER OUTPUT: 1 w.

POWER REQUIREMENTS: Per terminal or repeater station (1,200 w with heaters; 700 w without heaters) 115 v, 60 cyc, 1 phase, ac.

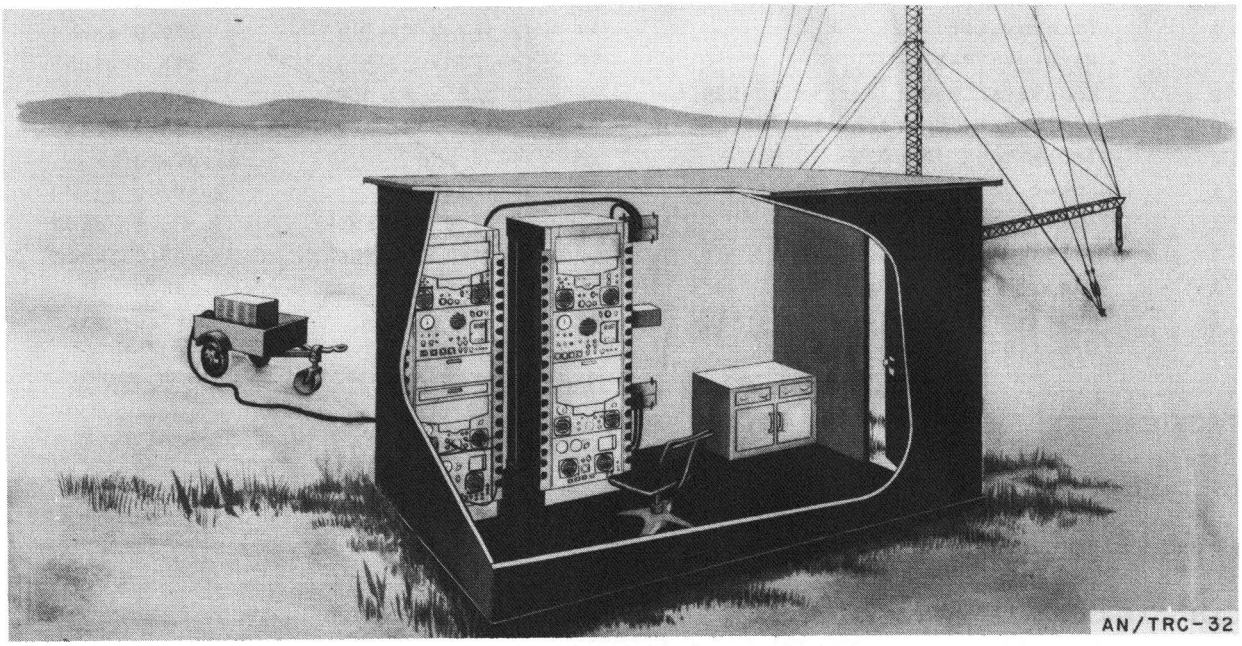
PHYSICAL CHARACTERISTICS

Radio Set AN/TRC-30 measures 28 x 90 x 90 inches, net weight 500 pounds, volume 131.25 cu ft. Packed for either domestic or export shipment: total weight 810 pounds, total volume 135 cu ft, 3.38 ship tons.
(Two units required for minimum terminal-to-terminal installation).

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

AN/TRC-32

RADIO SET



Radio Set AN/TRC-32 is a fixed, ground, or mobile u-h-f communication set for dual operation in the frequency range 225.0 to 399.9 mc. This radio set is a u-h-f vehicular installation designed to communicate primarily with aircraft equipped with Radio Sets AN/ARC-27, AN/ARC-33, AN/ARC-34, or similar equipments, installed in aircraft, to give complete coverage of all line-of-sight u-h-f ranges used in aircraft operations. The equipment supplied comprises two transmitters, two receivers and two units of all necessary items for dual operation.

Radio Transmitter T-217/GR operates on any 10 preset channels between 225.0 and 399.9 mc; Radio Receiver R-278/GR operates on any 10 preset channels between 225.0 and 399.9 mc, plus any two crystal-controlled guard frequencies in the 238.0 to 248.0 mc frequency range.

This equipment matches 53-ohm coaxial cable, such as RG-8/U. Two Antennas AT-197/GR and one Antenna AS-505/GR are supplied.

All equipment, with the necessary operating accessories, is normally transported in 2-1/2-ton truck (Modified K-53) and a 1/2-ton trailer for a power unit.

Remote control operation is possible for a maximum distance of 10 miles over a single field wire pair (for channel selection, push-to-talk and monitoring).

AN/TRC-32

RADIO SET

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Air Force
DATE OF THIS SHEET : 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter T-217/GR	19 x 12-1/4 x 22-3/8	150.0 each
2	Receiver R-278/GR	19 x 12-1/4 x 22-3/8	144.0 each
2	Modulator Power Supply MD-129/GR	19 x 12-1/4 x 22-3/8	180.0 each
2	Radio Set Control C-565/GR	19 x 12-1/4 x 11-1/2	90.0 each
1	Truck K-53 (Modified)	130 x 96 x 256	11,575.0
1	Power Unit	73 x 72 x 144	2,600.0
2	Antenna AT-197/GR	(Transported in Truck)	6.5 each
1	Antenna AS-505/GR	(Transported in Truck)	60.0 each
1	Mast AB-158/GR	(Transported in Truck)	650.0
2	Receiver-Transmitter Control Group OA-193/GR	23 x 13-1/2 x 21	105.0 each

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally used for air-to-ground traffic control at advanced air bases.

INSTALLATION: Ground, mobile, or fixed.

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

CAN COMMUNICATE WITH: AN/ARC-12, -19, -27, -30, -33, -34; AN/GRC-16, -27, -29, -30, -32; AN/GRR-7; AN/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URR-9, -12, -13; AN/URT-10; MAR; MAY; R-278/GR; RDR; RDZ; SCR-616; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Dual operation is provided on a total of 1,750 channels with 100 kc separation in the frequency range 225.0 to 399.9 mc. Receivers also operate on any guard frequency between 238 to 248 mc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, mcw.

POWER OUTPUT: Transmitter: 100 w (each).
Receiver: 3 w (each) (maximum).

POWER REQUIREMENTS: 115 / 230 v, 50/60 cyc, 1 phase, ac commercial power or Power Unit (Hobert Bros. Mfg. #5JB) 4.5 kw (approximately).

PHYSICAL CHARACTERISTICS

Radio Set AN/GRC-32 installed in truck weighs 16,750 pounds net, volume 2,270 cu ft, 56.8 ship tons. Packed for domestic or export shipment: total weight 16,750 pounds, total volume 2,270 cu ft, 56.8 ship tons. Shipped in 2 packages.

STATUS: S/Std

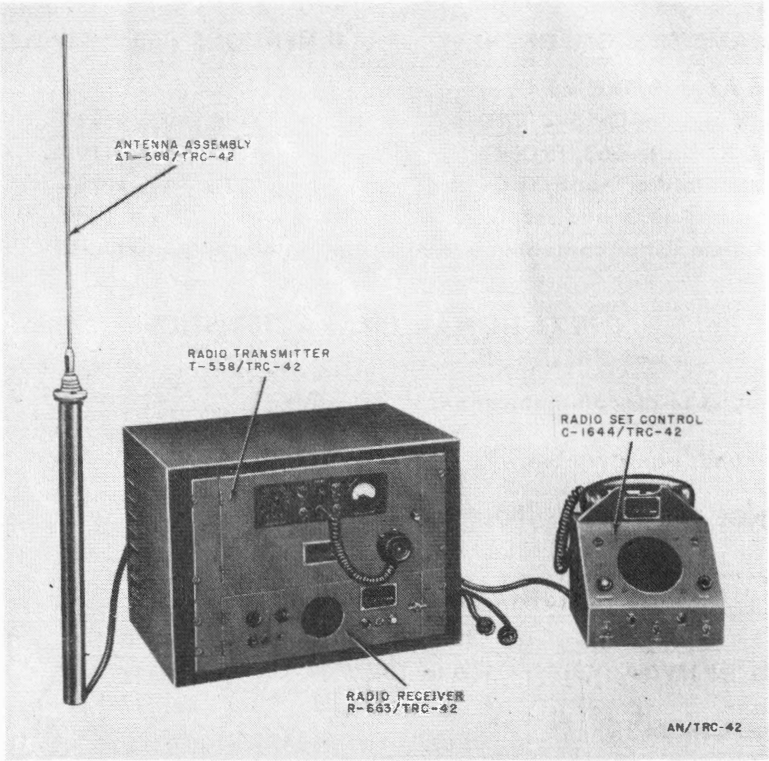
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRC-42

RADIO SET



Radio Set AN/TRC-42 is a transportable vhf single-channel, two-way radio equipment used for ground-to-air communication.

This equipment consists of a radio receiver and a transmitter housed in a single cabinet, and includes a radio set control with handset and accessory items.

It may be operated in the cabinet supplied, or mounted on a standard 19-inch rack.

The radio set control enables operation of the radio equipment from a remote point.

AN/TRC–42

RADIO SET

INSTRUCTION LITERATURE: TM 11–221

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AT–588/TRC–42		
1	Control, Radio Set C–1644/TRC–42	11¾ x 9⅝ x 11	
1	Receiver, Radio R–663/TRC–42	5¼ x 15½ x 19	30
1	Transmitter, Radio T–558/TRC–42	8¾ x 14½ x 19	47
1	Cabinet (transmitter and receiver)	16 x 22¾ x 14¾	

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Ground-to-air communication.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): 100.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 116 to 132.

TYPE MODULATION: Am (A3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 10 w.

POWER REQUIREMENTS: 350 w (max), 115 or 230 v, 50/60 cy, 1 ph ac.

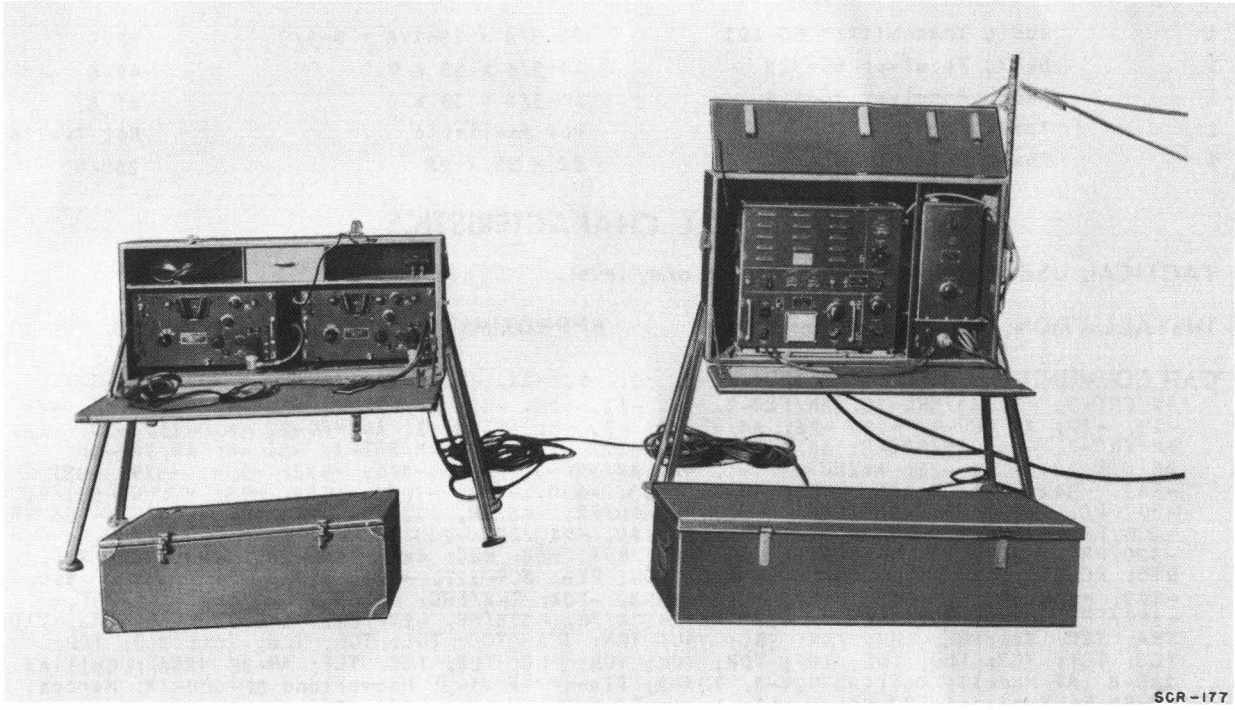
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		77			
DOMESTIC PACK:		140	8.16		2
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jan 52

AN/TRC- TYPE

SERVICE TYPE NUMBER: SCR-177
RADIO SET



Radio Set SCR-177 is a transportable, a-m (voice and cw) radio station providing communication in the low- and medium-frequency ranges for ground-to-air, point-to-point, and similar applications at division and higher headquarters, and at air fields.

This equipment consists of general-purpose Radio Transmitter BC-191, related transmitter-tuning units, two radio receivers, and associated components. It is packed in carrying cases and can be installed under shelter or in the open, and has been operated in aircraft.

This set uses appropriate types of antenna systems and has provision for automatic antenna change-over in the transmitter.

It is powered by its gasoline-engine-driven field power unit component plus a 6-v storage battery.

AN/TRC-TYPE

SCR-177 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-232
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-3/4 x 23-1/8 x 9-3/8	55.0
1	Radio Receiver BC-312	10-3/4 x 18 x 9	49.5
1	Radio Receiver BC-314	10-3/4 x 18 x 9	47.5
1	Tuning Unit	Not Available	Not Available
1	Power Unit PE-49	22 x 35 x 22	260.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal company, battery, army level.

INSTALLATION: Ground, transportable. **APPROXIMATE RANGE (IN MILES):** 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/FRT-4, -5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -453, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK;TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCG; TCH; TCK; TCO; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 0.4 - 0.8 and 1.5 - 4.5.
Receiving : 0.15 - 1.5 and 1.5 - 18.0.

TYPE MODULATION: AM.

TYPE OF SIGNAL: Voice, and cw.

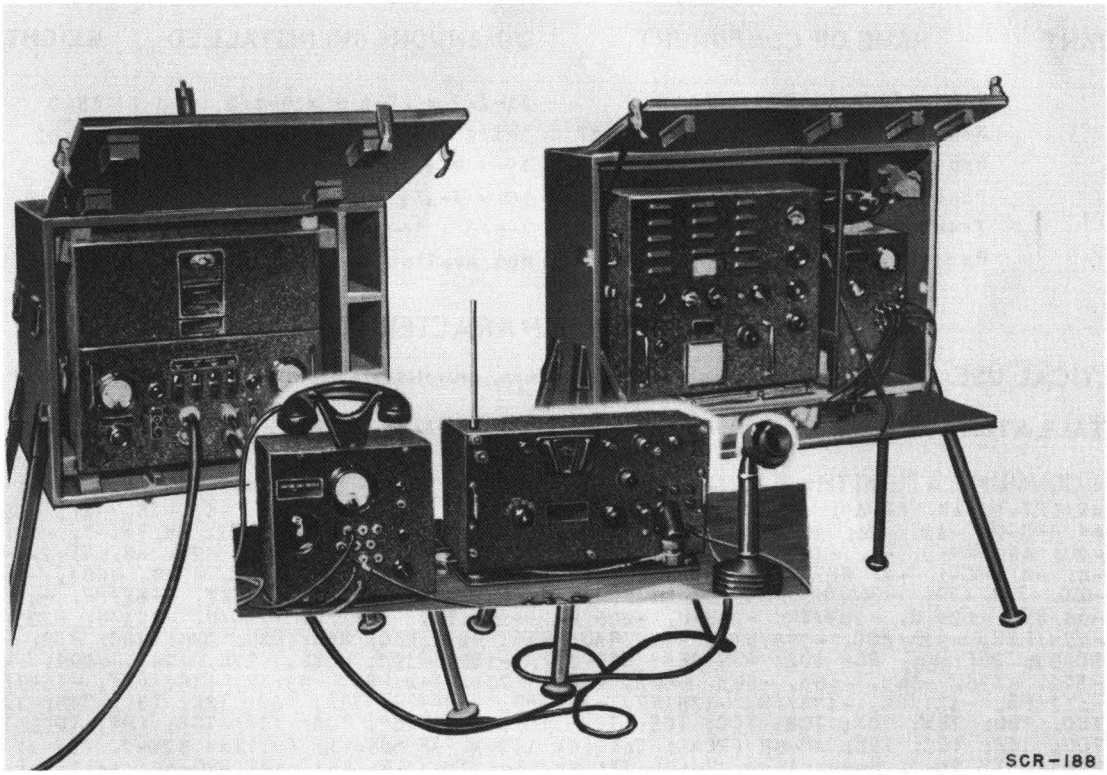
POWER OUTPUT: 75 w - cw.
25 w - voice.

POWER REQUIREMENTS: From 12-v battery and PE-49 (1,000-v at 350 ma and 14.6-v at 25).

PHYSICAL CHARACTERISTICS

Radio Set SCR-177 weighs 1,000 pounds net. Packed for export shipment: total weight 1,265 pounds, total volume 40 cu ft, 1 ship ton. Shipped in 5 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	AN/TRC-TYPE SERVICE TYPE NUMBER: SCR-188 RADIO SET



Radio Set SCR-188 is a transportable, field, a-m (voice and cw) transmitting and receiving equipment used for air-ground, or point-to-point communication in the low-and medium-frequency band at division and higher headquarters.

This equipment consists essentially of general-purpose Radio Transmitter BC-191 which is also a major component of such equipment as Radio Sets SCR-177 and SCR-193. It is provided with tuning units for the selection of operating frequencies, and general-purpose Radio Receiver BC-342, a field power unit, remote control, and related items.

It can be used as a complete self-contained field tactical radio station and can be controlled from distances up to 5 miles away over a field telephone pair, and up to 7-1/2 miles over facilities of higher quality.

Operates from 115 or 230-v ac.

AN/TRC-TYPE

SCR-188 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-233
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-191	21-1/2 x 23-1/8 x 9-1/2	55.0
1	Remote Control Equipment RC-47	3-1/2 x 3-1/2 x 2-1/4	0.42
1	Radio Receiver BC-342	10 x 9 x 18	61.5
1	Power Unit PE-75	36 x 9-1/2 x 26-1/2	290.0
6	Transmitter Tuning Units (each)	7-5/8 x 16-3/4 x 8-3/4	72.0
1	Rectifier RA-34	Not Available	240.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At division and higher headquarters, antiaircraft battalion, engineers, 11-500 teams.

INSTALLATION: Ground, transportable. **APPROXIMATE RANGE (IN MILES):** 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -314, -339, -342, -344, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT, R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH RDE; RDM REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -159/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCO; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 1.5 - 12.5.
Receiver : 1.5 - 18.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw.

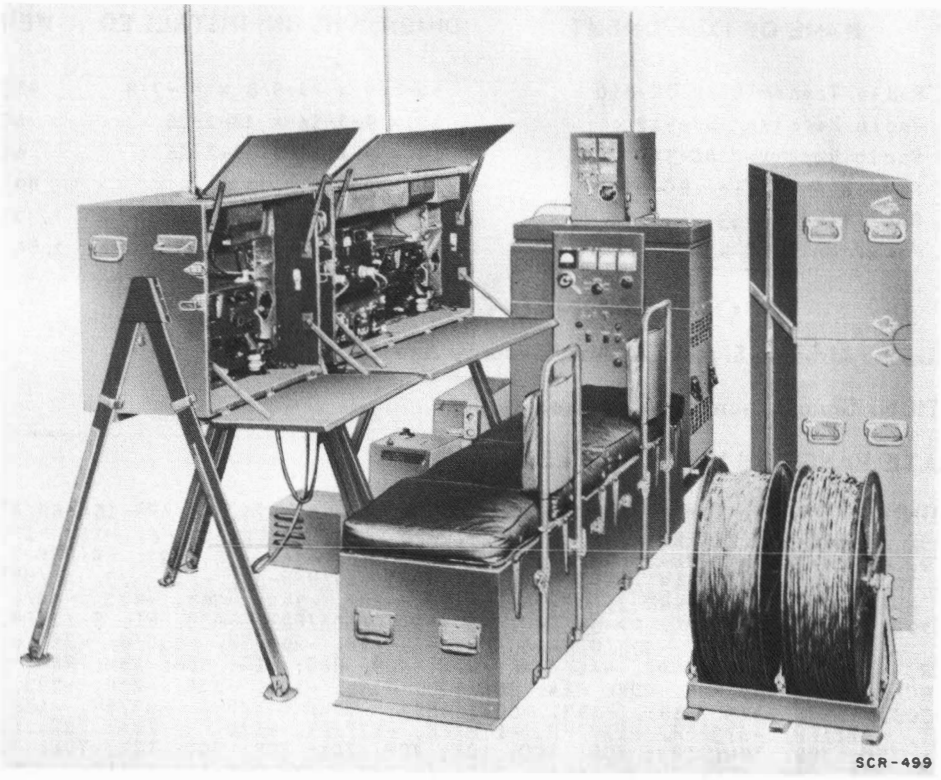
POWER OUTPUT: 75 w.

POWER REQUIREMENTS: 115/230 v, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-188 weighs 1,385 pounds net. Packed for export shipment: total weight 2,018 pounds, total volume 100 cu ft, 2.5 ship tons.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/TRC-TYPE** SERVICE TYPE NUMBER: SCR-499 RADIO SET



Radio Set SCR-499 is the air transportable version of Radio Set SCR-399 and is a medium power, field radio station for a-m (voice, tone, and cw) communication to intermediate and long distances in semi-permanent or fixed station applications at division or higher headquarters.

This equipment consists of radio receiving and transmitting components plus associated power, and control accessories and is designed for installation in a sheltered or semipermanent location.

By means of standard remote control equipment this radio set can be operated from a distance of about two miles over a field telephone pair.

It can be arranged to operate in the 1-mc range by the addition of Frequency Conversion Kit MC-509.

It uses a long wire or doublet antenna and includes a 5kw field power unit.

AN/TRC-TYPE

SCR-499 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-281
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-610	32-5/8 x 21-3/8 x 39-7/8	452.0
1	Radio Receiver BC-312	10 x 9-1/16 x 19-1/16	58.0
1	Radio Receiver BC-342	10 x 9-1/16 x 19-1/16	61.5
1	Speech Amplifier BC-614	16 x 9-1/4 x 11	Not Available
1	Rectifier RA-63	13-1/2 x 9-1/2 x 7-1/2	29.25
1	Power Unit PE-95	75-1/2 x 28-1/2 x 39-1/2	1,545.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airborne Signal Co; Army Security Agency.

INSTALLATION: Ground, transportable fixed station.

APPROXIMATE RANGE (IN MILES): 100 - 250.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3,-4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRR-3, -8, -12, -13, AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT, R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR, RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDN; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBQ; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDQ; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitting: 2 - 18 (in 3 bands)
Receiving: 1.5 - 18 (in 6 bands).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, or cw.

POWER OUTPUT: Cw: 400 w.
Voice: 300 w.

POWER REQUIREMENTS: Power Unit PE-95 and 12-v storage battery, or 2,500 w (minimum), 115-v, 60 cyc, ac commercial power.

PHYSICAL CHARACTERISTICS

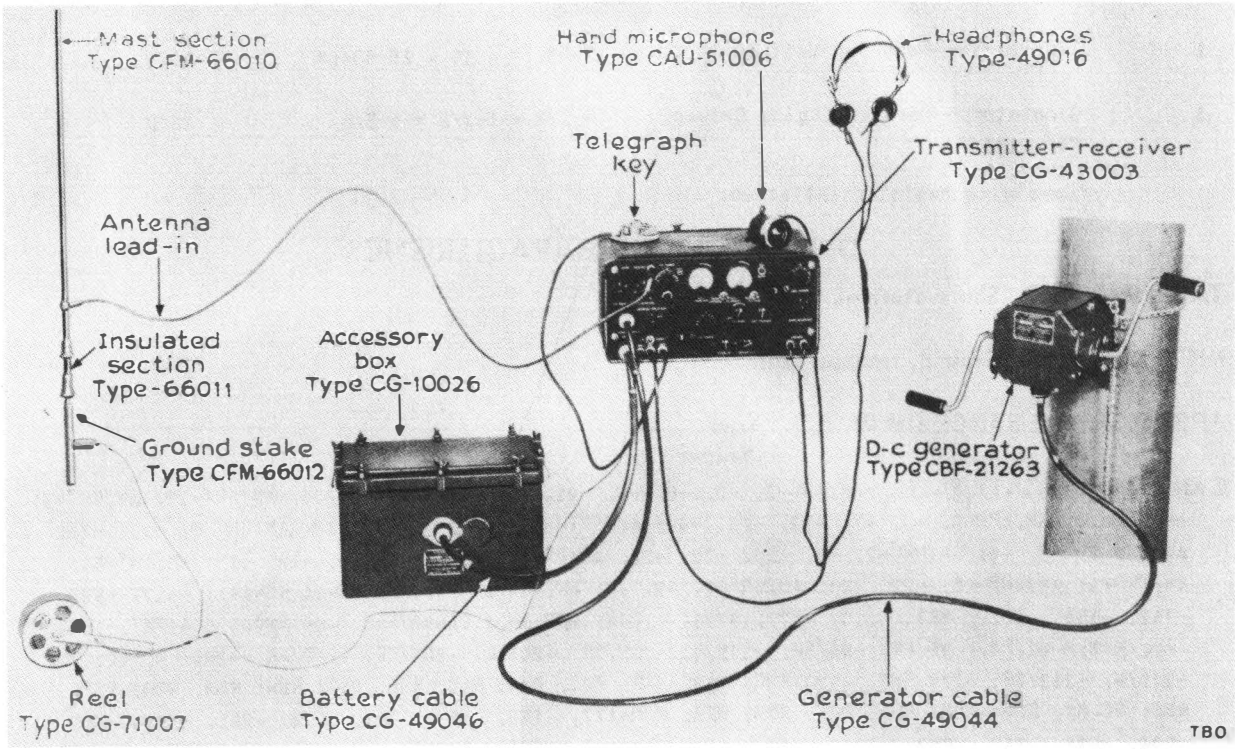
Radio Set SCR-499 weighs 3,000 pounds net. Packed for domestic shipment: total weight 6,595 pounds. Packed for export shipment: total weight 10,025 pounds, total volume 895 cu ft, 22.4 ship tons.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

AN/TRC-TYPE

SERVICE TYPE NUMBER: TBO

RADIO TRANSMITTING AND RECEIVING EQUIPMENT



Radio Transmitting and Receiving Equipment TBO is a compact, lightweight, transportable, h-f equipment for general purpose communication between shore stations, and between shore stations and surface craft, by a-m (cw, voice) signals.

This set is composed of a transmitter and receiver combined in a single cabinet, a hand generator, and an accessory (battery) box.

The transmitter has a continuously variable master oscillator and two crystal channels, the receiver uses a continuously variable oscillator for frequency control.

Either a vertical rod, or a single-wire T-type antenna can be used.

Auxiliary power supplies for the transmitter (dependent on various types of installations) are Navy Models EF Gasoline-Engine-Driven Generator Equipment, EG AC Motor Generator Equipment, EH DC Motor Generator Equipment, and CG-21265 Dynamotor Equipment.

AN/TRC-TYPE

TBO :SERVICE TYPE NUMBER
RADIO TRANSMITTING AND RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: GEI-854-1B
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 23 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CG-43003	7-53/64 x 10 x 15-53/64	29.2
1	Generator - Hand or Engine Driven CBF-21263*	9-1/2 x 6-1/2 x 6-3/8	22.0

*Used with basic installation.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Cw: 30.
Voice: 15.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -60B/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCG; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type WW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2.0 - 3.5.
Receiver: 2.0 - 8.0.

TYPE MODULATION: Am. **TYPE OF SIGNAL:** Cw, voice.

POWER OUTPUT: Transmitter: Cw, 9 w; voice, 3 w.

POWER REQUIREMENTS:

Transmitter: 500 and 12.6 v, dc supplied by the hand generator. 3 v, supplied by two
Receiver: NT-19010 batteries; 90 and 135 v, supplied by three NT-19005 batteries; 6 and 15 v, supplied by two NT-19011 batteries.

PHYSICAL CHARACTERISTICS

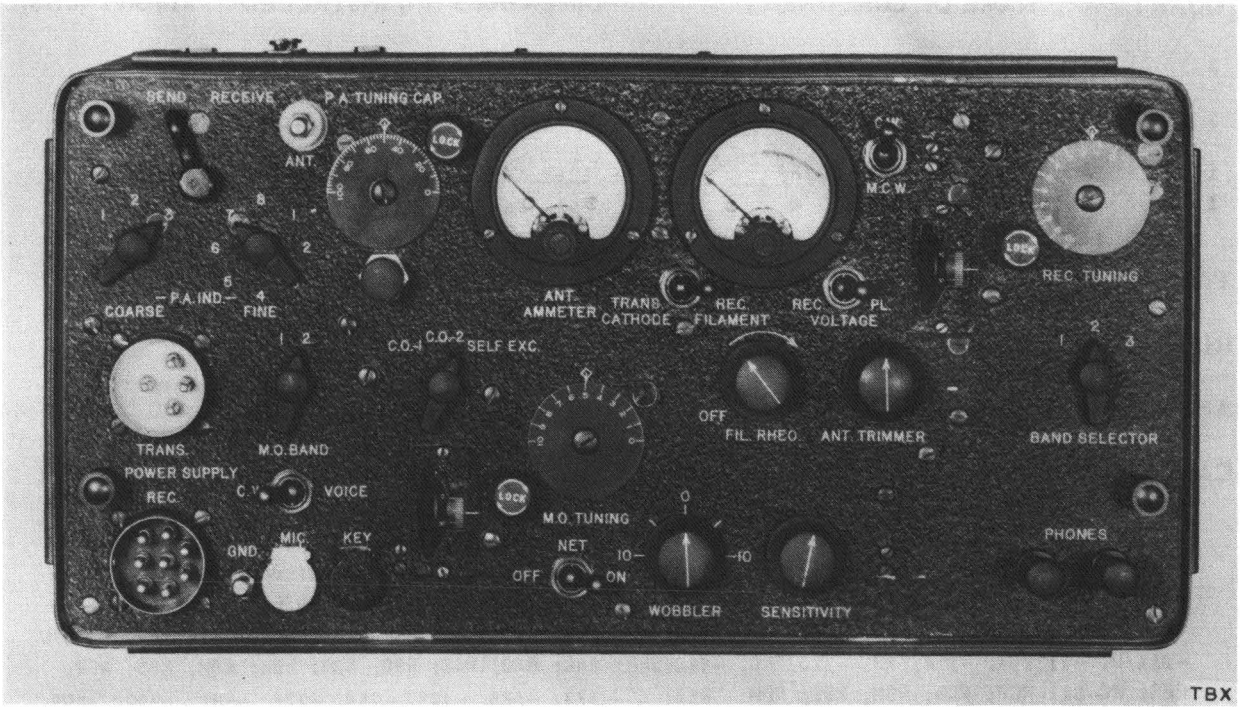
Radio Transmitting and Receiving Equipment TBO weighs 196 pounds net.
Packed for domestic shipment: total weight 196 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/TRC-TYPE

SERVICE TYPE NO: TBX, TBX-1 through 8, and TBX-4a

PORTABLE RADIO TRANS & REC EQUIP



Portable Radio Transmitting and Receiving Equipments TBX, TBX-1 through -8, and TBX-4a are compact, lightweight, transportable h-f equipment for general purpose a-m (cw, mcw) communication between shore stations, and between shore stations and surface craft. Either a vertical rod or single-wire T-type antenna can be used.

The basic set is composed of a transmitter and receiver combined in a single cabinet, a hand generator, and an accessory (battery) box.

The transmitter provides a continuously variable master oscillator and two crystal channels, the receiver has a continuously variable oscillator for frequency control.

Auxiliary power supplies for the transmitter (dependent on the type of installation) are Navy Models EF Gasoline Engine Driven Generator Equipment, EG AC Motor Generator Equipment, EH DC Motor Generator Equipment and EJ Dynamotor Equipment.

Auxiliary power supplies for the receiver are Navy Models EL Auxiliary Rectifier Power Equipment, EM, EN, EO, and EP Auxiliary Dynamotor Equipment.

AN/TRC-TYPE

TBX, TBX-1 through 8, and TBX-4a :SERVICE TYPE NO.
PORTABLE RADIO TRANS & REC EQUIP

INSTRUCTION LITERATURE: GEI-16829
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Receiver Unit CG-43005	8-1/2 x 16-1/2 x 10	32.1
1	Generator (Hand or Engine Driven) CG-21263A	14-1/8 x 19-1/2 x 6-11/32	27.2
1	Accessory Box CG-10026A	10 x 16-1/2 x 7-53/64	34.1
1	Antenna Assembly	Not Available	11.2

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations, shipboard.

INSTALLATION: Ground, shipborne.

APPROXIMATE RANGE (IN MILES): Cw: 30.
Voice: 15.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRR-3, -4, -7, -12, -28, -32; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRR-3, -8, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; AN/VRR-2; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC, -60A/FRT, -608/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBG; RBH; RBM; RBO; RBP; RBS; RC-52; RCF; RCQ; RCH; RDE; RDM; REA; SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -607, -694, -704; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; AR-88 (RCA); Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Transmitter: 2.0 - 4.525.
Receiver: 2.0 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: Cw: 9 w.
Voice: 3 w.

POWER REQUIREMENTS: Transmitter: 500, 12, and 6 v, dc supplied by hand generator; 3 v,
Receiver: supplied by two NT-19010 batteries; 90 and 135 v, supplied by three NT-19005 batteries; 6 and 15 v, supplied by two NT-19011 batteries.

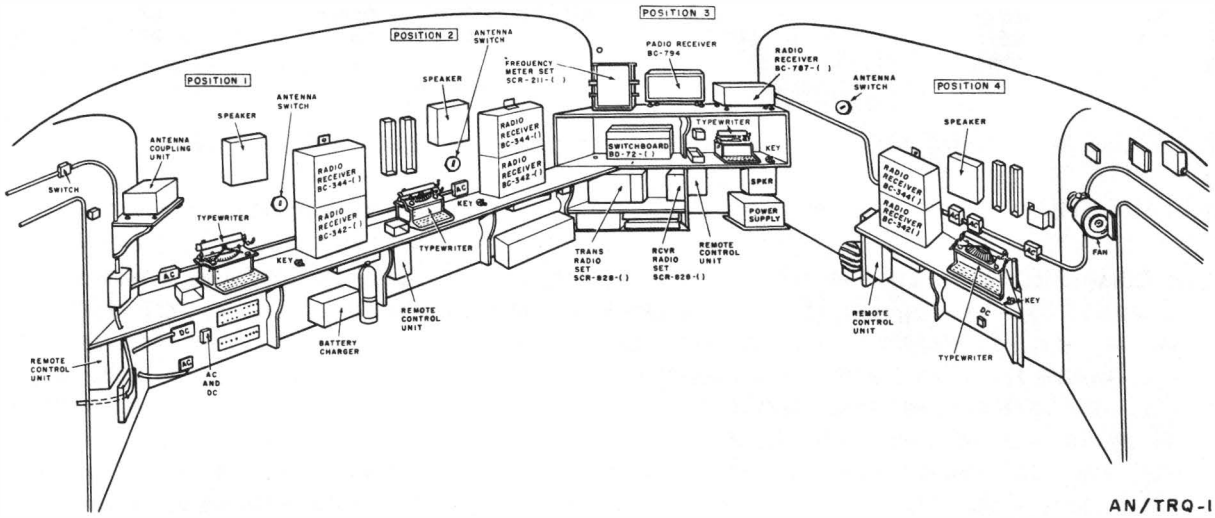
PHYSICAL CHARACTERISTICS

Information on Portable Radio Transmitting and Receiving Equipment TBX, TBX-1 through 8, and TBX-4a not available.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

AN/TRQ-1

RADIO CONTROL CENTRAL



AN/TRQ-1

Radio Control Central AN/TRQ-1 is a transportable control station used for monitoring intercept, and mobile communication applications in the m-f, h-f and v-h-f bands at corps and higher headquarters.

This equipment consists of radio components, telephone switching equipment, test items and accessories installed in a field type shelter which can be transported on a 2-1/2-ton 6 x 6, cargo truck. It includes necessary types of antenna equipment.

This set has four operating positions. At positions 1, 2, and 4, coverage of frequencies in the 0.15- to 18-mc range is maintained plus provision for wire communication with, and remote control of, radio transmitters located at distances up to 1 mile from the control central. Position 3, in addition, conducts communication by means of f-m radio and a 12-line switchboard, with similar control centrals.

The equipment derives its power from a trailer-drawn power unit and includes a battery charger.

AN/TRQ-1

RADIO CONTROL CENTRAL

INSTRUCTION LITERATURE: TM 11-2619
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver BC-344	10 x 9-1/16 x 18-1/16	61.5
3	Radio Receiver BC-342	10 x 9-1/16 x 18-1/16	61.5
1	Radio Receiver BC-794	10-1/2 x 15-3/8 x 19	55
1	Radio Receiver BC-787	9-5/16 x 21-1/4 x 14-1/2	78
1	Radio Receiver BC-923	11-1/2 x 12-3/4 x 6-3/4	42
1	Radio Transmitter BC-924	11-1/2 x 10-1/2 x 18	49
1	Power Unit PE-95		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE (IN MILES): FM (Transmitting and Receiving) - Line of sight. AM (Receiving only) - Long.

CAN COMMUNICATE WITH: AN/ARC-1, -2, -3, -5, -8, -9, -18, -21, -25, -28, -36; AN/ARR-15; AN/ART-2, -3, -13, -14; AN/CRC-2, -3; AN/CRT-3, -5; AN/CRW-7; AN/FRC-6, -7, -9, -10; AN/FRR-3, -4, -7, -12, -28; AN/FRT-4, -6, -15, -17, -18, -19; AN/GRC-3, -4, -5, -6, -7, -8, -9, -13, -26, -30; AN/GRR-2, -3, -5; AN/GRT-2; AN/MRC-2, -5, -6, -16, -20, -22; AN/PRC-7, -8, -9, -10, -17, -19, -20; AN/TRC-7; AN/TRQ-1; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/SRT-1, -3, -4; AN/URC-4; AN/URR-10, -12, -21, -22, -23; AN/URT-2, -3, -4, -7, -10; AN/VRC-1, -2, -4, -5, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRR-2, -3, -4; AN/VRT-1; BC-191, -287, -312, -314, -329, -339, -342, -344, -348, -365, -401, -447, -453, -610, -639, -640, -729, -779, -794, -1004; MAN; MAW; MBF; MBS; MN; MQ; OA-58/FRC; OA-59/FRC; OA-60/FRT; R-62/PR, -80/PR, -96/SR, -129/U, -137/GR, -203/SR, -205/U, -206/PQ, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBK; RBL; RBM; RBO; RBP; RBQ; RBS; RC-52, -130, -256, -257; RCF; RCG; RCH; RCK; RCO; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274-N, -281, -293, -294, -298, -399, -499, -506, -508, -509, -510, -522, -528, -536, -542, -543, -573, -574, -575, -585, -593, -607, -608, -609, -610, -614, -619, -624, -628, -641, -643, -644, -678, -694, -704, -809, -828; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBS; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCG; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDG; TDH; TDK; TDN; TDO; TDQ; TDT; TEB; TEC; TEF; AR-88 (RCA); ARC Type 12; Collins 18S-4 (AF Model); Collins 32V-2, 75A-2; Fisher TS25-3; Hammarlund SP-600-JX; Marconi TH-41-B; National HRO-50; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: Positions 1, 2, and 4: 0.15 - 18.0. Position 3: 1.25 - 143.0; 27.0 - 38.9 (fm).

TYPE MODULATION: Positions 1, 2, and 4: Am. Position 3: Am and fm.

TYPE OF SIGNAL: Voice, tone, and cw.

POWER OUTPUT: Radio Transmitter BC-924: 30 to 35 w.

POWER REQUIREMENTS: Power Unit PE-95 (-G or-H); 10 kw, 115 v, 60 cyc ac; 12-v storage battery, 10 Batteries BA-30, and 6 Batteries BA-2.

PHYSICAL CHARACTERISTICS

Information on Radio Control Central AN/TRQ-1 not available.

STATUS: T/Std

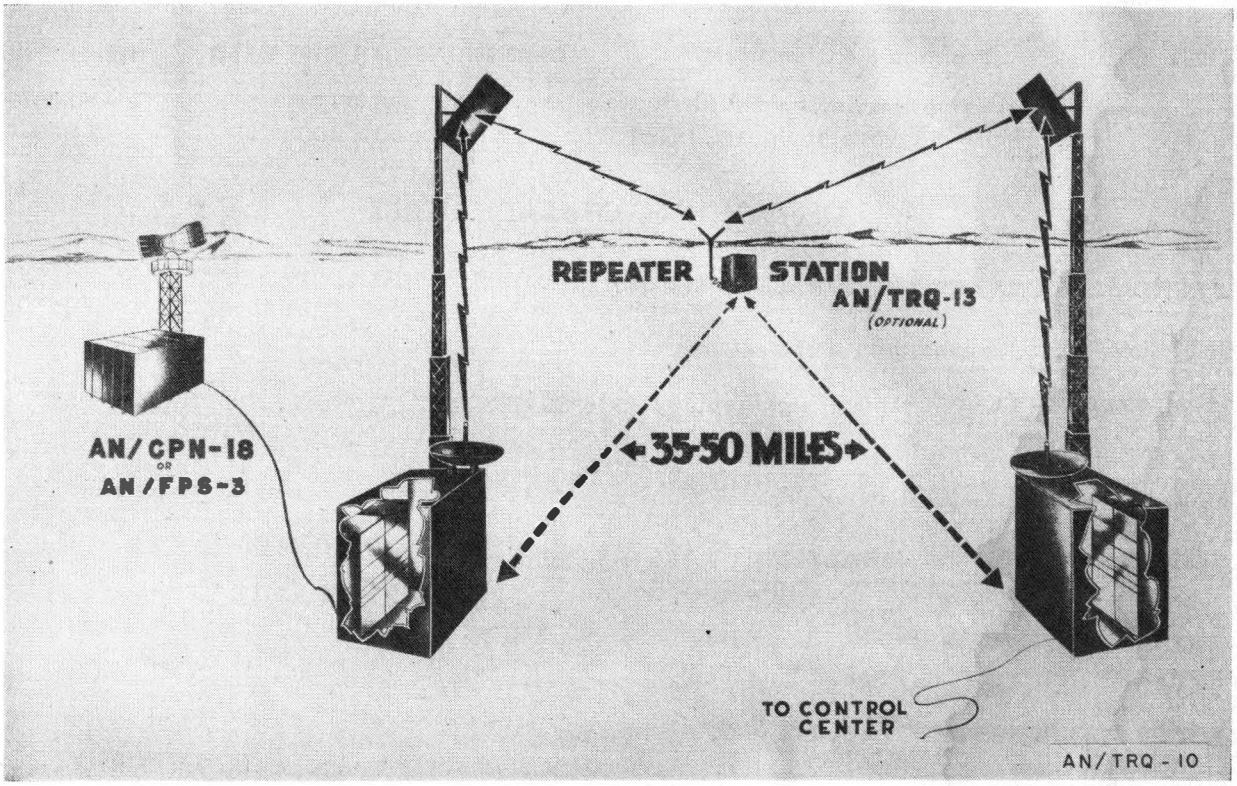
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–10

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–10 provides radio communication facilities for transmitting search radar data from such surveillance equipment as Radar Sets AN/CPN–18, AN/CPS–5, and AN/FPS–3, and from Radio Set AN/TPS–1, and for receiving such data at a remote control center.

This equipment consists of a radio transmitting set, at the radar site, to transmit radar search data and a radio receiving set, at the control center, to receive this data.

Approximately 2.5 kw is required to power each function. Towers and reflectors may be added if required.

The range of this equipment may be increased by using one or more Radio Repeater Sets AN/TRQ–13.

AN/TRQ-10

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving Set, Radio AN/TRR-9	80 x 80 x 100	1,800
1	Transmitting Set, Radio AN/TRT-4	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of four chan).

POWER REQUIREMENTS: 5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

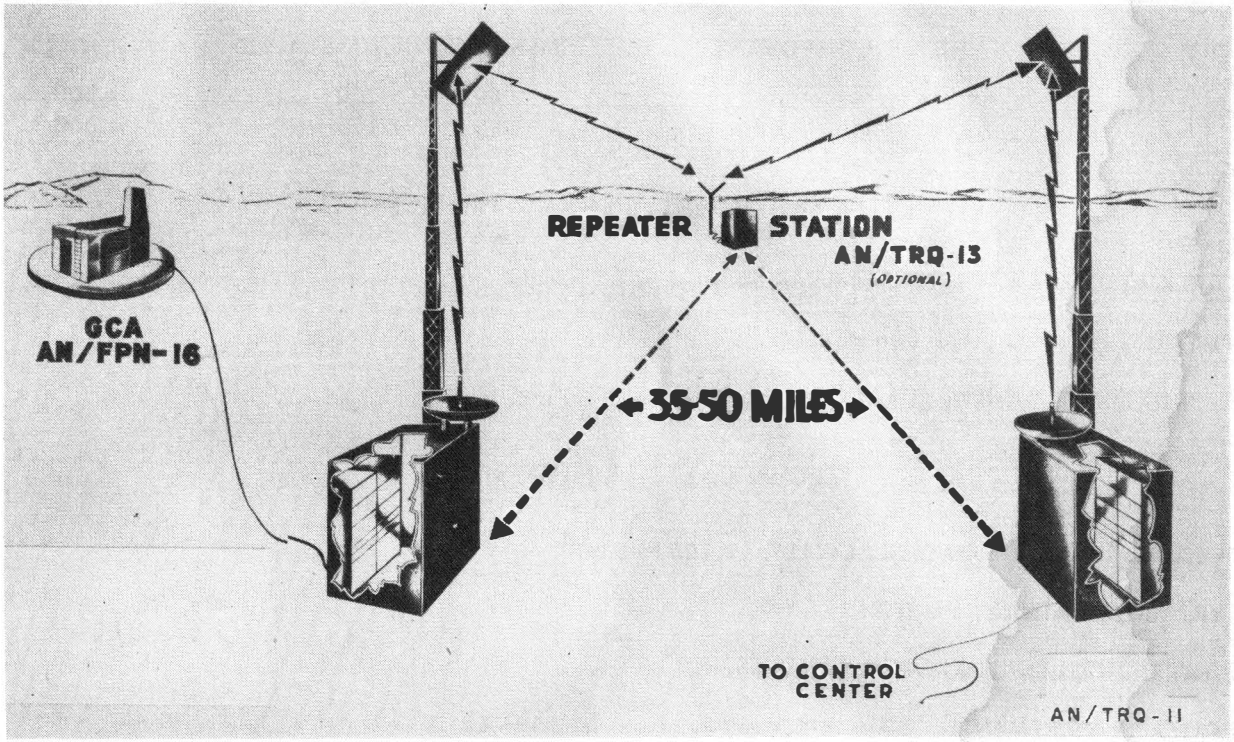
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–11

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–11 provides facilities for transmitting precision radar data via radio from a radar set and receiving such data at a remote control center. It is used to transmit precision GCA radar data from such equipment as Radar Set AN/FPN–16.

This equipment consists essentially of a radio transmitting set in Electrical Equipment Shelter S–118/TR at the radar site, to transmit the radar data, and a radio receiving set in another Electrical Equipment Shelter S–118/TR near the control center to receive this data.

Approximately 2.5 kw is required to power each function.

Towers and reflectors normally are not supplied with this equipment but may be added if required.

AN/TRQ-11

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving set, radio	80 x 80 x 100	1,800
1	Transmitting set, radio	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of four chan).

POWER REQUIREMENTS: 5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

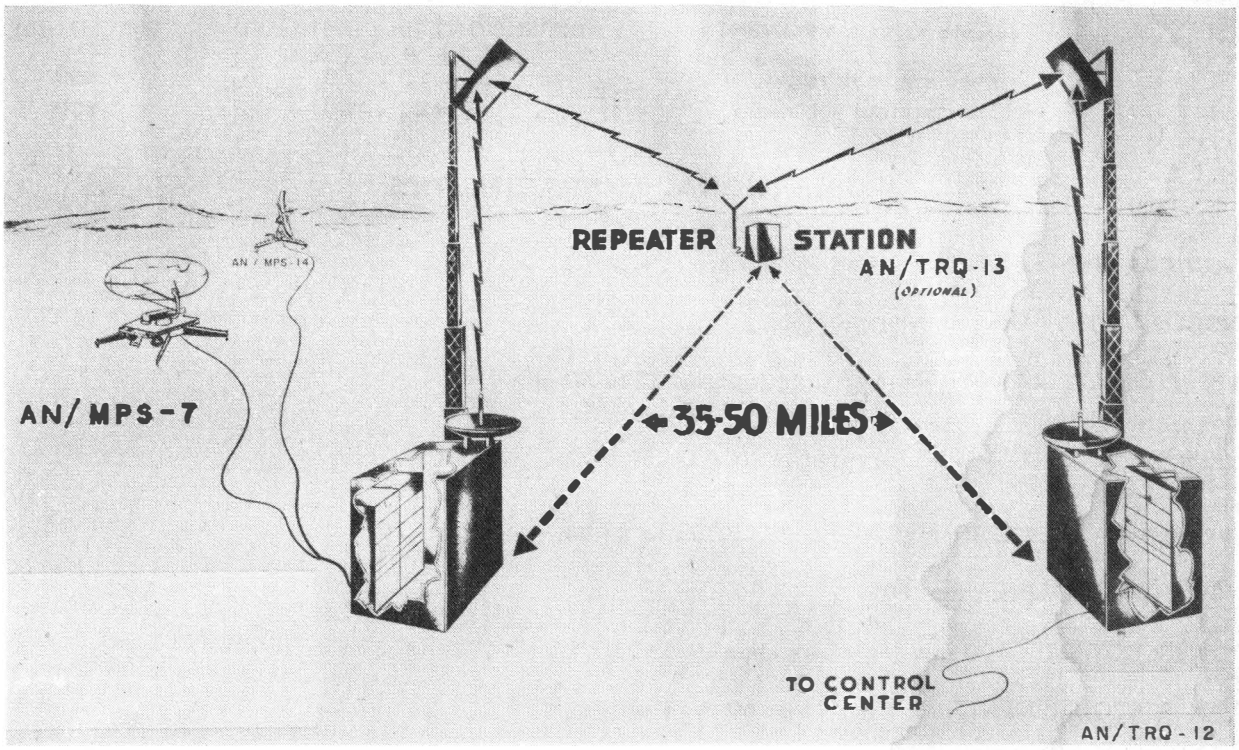
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ-12

RADAR DATA TRANSFER SYSTEM



Radar Data Transfer System AN/TRQ–12 provides radio facilities for transmitting radar and height finder data respectively from such equipment as Radar Sets AN/FPS–3 and AN/FPS–6 to a control center.

This equipment consists of a radio transmitting set in Electrical Equipment Shelter S–118/TR at the radar site to transmit radar search and height finder data via radio, and a radio receiving set in another Electrical Equipment Shelter S–118/TR near the control center to receive this data.

Approximately 3 kw is required to power each function. Towers and reflectors normally are not supplied but may be added if required.

AN/TRQ-12

RADAR DATA TRANSFER SYSTEM

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RAOC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Receiving set, radio	80 x 80 x 100	1,800
1	Transmitting set, radio	80 x 80 x 100	1,800

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight (approx 35 to 50 mi).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 100 mw (ea of six chan).

POWER REQUIREMENTS: 6 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,600	720	18	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

AN/TRQ–13

RADIO REPEATER SET

Radio Repeater Set AN/TRQ–13 provides facilities for increasing the range of Radar Data Transfer System AN/TRQ–10 so that radar data may be fed to a control center located up to approximately 500 miles from the radar site. The total distance of such a system depends on the number of radio repeater sets used.

This equipment is used to overcome distance or terrain obstacles.

Up to 15 repeater sets may be used to extend the range to a maximum of approximately 500 miles.

Towers and reflectors normally are not supplied but must be added if required.

AN/TRQ-13

RADIO REPEATER SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Antenna Group AN/GRA-29		250
1	Receiver Group OA-997/TRR-9	75 x 22 x 15	300
1	Transmitter Group OA-998/TRT-4	75 x 22 x 15	300
1	Radio Repeater Group OA-1111/TRQ-13	75 x 22 x 15	300
1	Shelter, Electrical Equipment S-118/TR	80 x 80 x 100	1,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: AACS, TAC, and special projects.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 7,125 to 8,000.

TYPE MODULATION: Fm (F9).

POWER OUTPUT: 1 mw (ea of eight chan).

POWER REQUIREMENTS: 2.5 kw, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	80 x 80 x 100	2,000	360	9	
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/TRR-2, TRT-1

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/TRR-2 is the receiver used with Radio Set AN/TRT-1 (the transmitter) to form a system for the remote detonation of land and water mines.

A complete mine detonation system consists of one transmitter and any number of receivers. Mines can be detonated singly or in groups by selective detonation. The receiver is designed so that it causes the detonator to operate only upon reception of a signal at a predetermined radio frequency, modulated by a predetermined audio frequency, and pulsed according to a predetermined code. There are available 21,600 different combinations of such radio frequency, audio frequency, and pulse coding.

The receiver, designed for under water operation, is battery operated; the transmitter requires a 12- or 24-volt dynamotor power supply and can be installed on the ground or in vehicles, aircraft, or watercraft.

AN/TRR–2, TRT–1

RADIO SET

INSTRUCTION LITERATURE: TM 11–269

USING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Transmitter T–87/TRT–1	23 x 24½ x 14	99
1	Radio receiver	20½ h x 9 dia	4

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special.

INSTALLATION: Ground; transportable (aircraft or watercraft).

APPROXIMATE RANGE (IN MILES): 8 (land); 12 to 20 (water); 40 (air).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 28 to 40.

TYPE MODULATION: Am (A2, A9).

TYPE OF SIGNAL: Tone, pulsed.

POWER OUTPUT: 40 to 50 (dependent on freq).

POWER REQUIREMENTS:

Receiver: Battery operated (8 BA–2, ea 22.5 v dc; 1 BA–34, 6 v dc; 2 BA–35, ea 1.5 v dc).

Transmitter: 456 w, 12 or 24 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: AN/TRT–1:	28½ x 24½ x 14	119	5.36		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Std

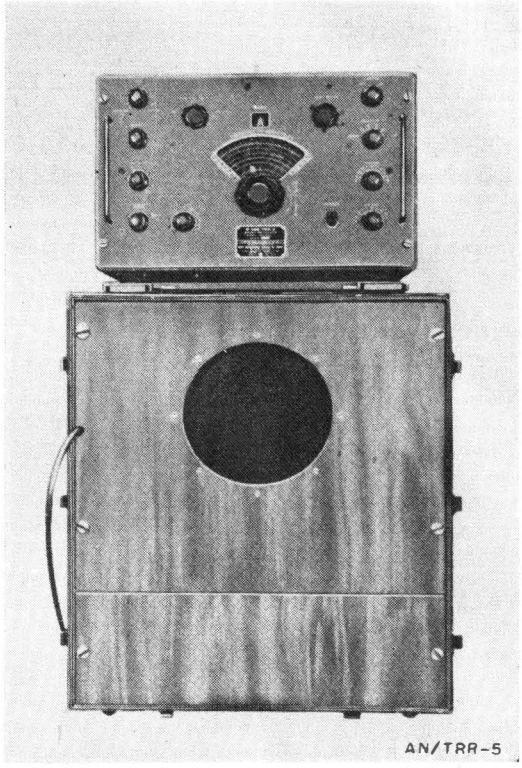
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

AN/TRR-5

RADIO RECEIVING SET



Radio Receiving Set AN/TRR-5 is a transportable, general purpose communication and entertainment receiver ruggedly constructed for use under adverse weather conditions at shore stations. It has tone, selectivity, cw oscillator, automatic gain, and standby controls.

AN/TRR-5

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 91454

USING SERVICE: USN

DATE OF THIS SHEET: 10 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Case CY-851/TRR-5	27¼ x 25 x 22½	65.4
1	Dynamic Loudspeaker LS-171/U	4 11/16 x 10 3/16 dia	3
1	Radio Receiver R-366/TRR-5	14 x 19¾ x 19⅜	83

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: General purpose communication.

INSTALLATION: Transportable.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 30 in five bands.

TYPE MODULATION: Am (A1, A2, A3).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT:

POWER REQUIREMENTS: 112 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	27¼ x 25 x 22½	65.4			
DOMESTIC PACK:		248	11.8		1
EXPORT PACK:					

STATUS: Std

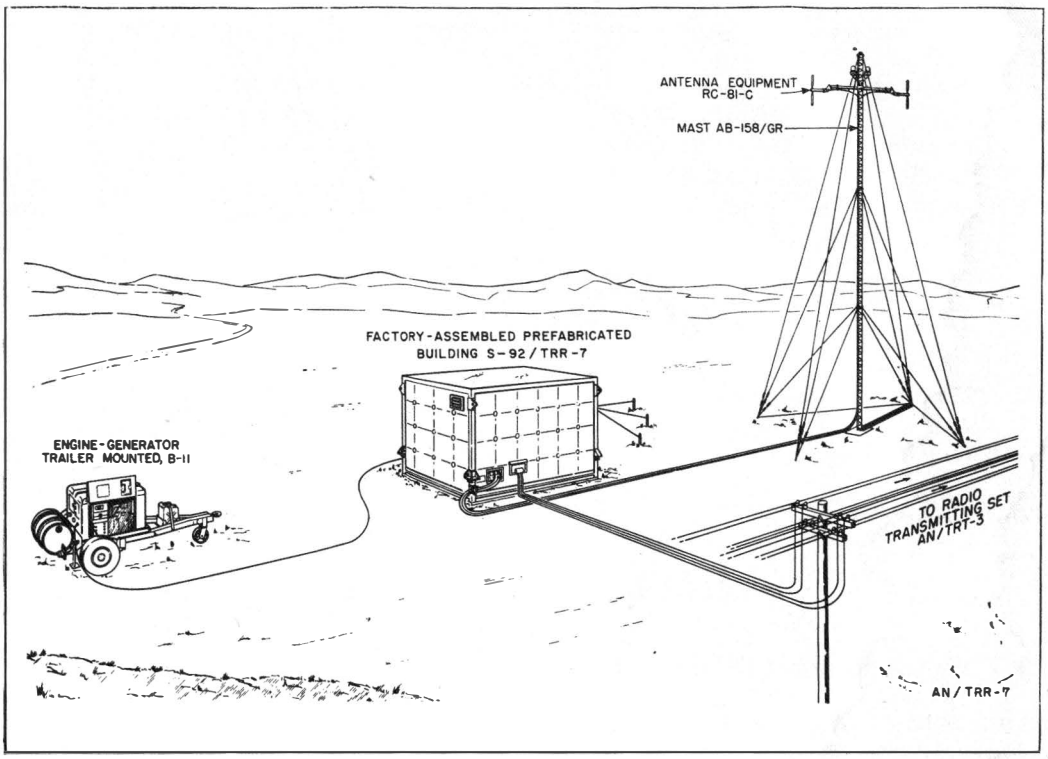
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/TRR-7

RECEIVING SET, RADIO



Radio Receiving Set AN/TRR-7 is a complete mobile radio receiving station that is used for air-to-ground communications. It can also provide two-way ground-to-air communication when used with Radio Transmitting Set AN/TRT-3 (a complete mobile radio transmitting station that can be operated by remote control from the radio receiving site).

This equipment includes two radio receivers housed in a prefabricated building.

A trailer-mounted engine generator is provided to furnish power required when suitable commercial power is not available.

AN/TRR-7

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TO 31R2-2TRR7-( )

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Engine Generator, Trailer Mounted B-11	125 x 63 x 65	2,450
1	Receiver Group OA-582/TRR-7	19 x 12⅞ x 11	394
1	Receiver Group OA-583/TRR-7	19 x 12⅞ x 11	268
2	Antenna Equipment RC-81-C		6.75
1	Building, Prefabricated, Factory-Assembled S-92/TRR-7	140¾ x 84 x 77	3,300

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Air-to-ground communication.

INSTALLATION: Mobile.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156.

TYPE MODULATION: Am (A1, A3).

TYPE OF SIGNAL: Cw, voice.

POWER OUTPUT: 1.2 w.

POWER REQUIREMENTS: 6.3 v, 3.5 amp ac; 115 v, 1 ph ac (for lighting and ventilating sys blower motors); 210 v, 60 ma dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	140¾ x 84 x 77¾				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 2 Jan 52	**AN/TRR-TYPE** SERVICE TYPE NUMBER: BC-787 RADIO RECEIVER

Radio Receiver BC-787 is a 3-band, a-m and f-m, voice and c-w equipment operating in the v-h-f range. It can be used in fixed plant point-to-point communication, for intercept or monitoring purposes, and for special applications in vehicles as a mobile equipment.

This equipment consists of a commercial (Hallicrafter S-36) table model, communication-type radio receiver, and a shock mount. It can be installed on a standard radio relay rack and arranged for stand-by operation at a distance by means of remote control equipment. It is the principal operating component of Radio Set SCR-607 and similar equipment.

Operates from 115/230 v ac, from dry batteries, or from a vehicular storage battery through appropriate power-modifying equipment.

AN/TRR-TYPE

BC-787 :SERVICE TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-867

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Mounting FT-377-A	4-7/8 x 21-1/4 x 14-1/2	12
1	Radio Receiver BC-787	9-5/16 x 21-1/4 x 14-1/2	78

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Radio security detachments, Air Force flight test detachments.

INSTALLATION: Fixed station or mobile.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -18, -28, -36; AN/CRC-2, -3; AN/FRC-6, -7, -9; AN/GRC-3, -4, -5, -6, -7, -8, -30; AN/MRC-5, -16, -22; AN/PRC-6, -8, -9, -10, -16, -17, -20; AN/TRC-1, -3, -4, -7, -8, -11, -12; AN/TRQ-1; AN/URC-4; AN/URT-7, -10; AN/VRC-1, -2, -3, -5, -7, -8, -9, -10, -13, -14, -15, -16, -17, -18, -20, -21, -22; AN/VRQ-1, -2, -3; AN/VRT-1; BC-640; MAN; MAW; MBF; MBS; MN; RC-257; SCR-177, -293, -298, -300, -508, -509, -510, -522, -528, -542, -573, -575, -608, -609, -610, -619, -624, -628, -641, -643, -808, -828; TBS; TBY; TDG; TDQ; TDT; Collins, 32V-2; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 27.8 - 143, in 3 bands.
Band 1: 27.8 — 47.0
Band 2: 46 — 82
Band 3: 82 — 143

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice cw.

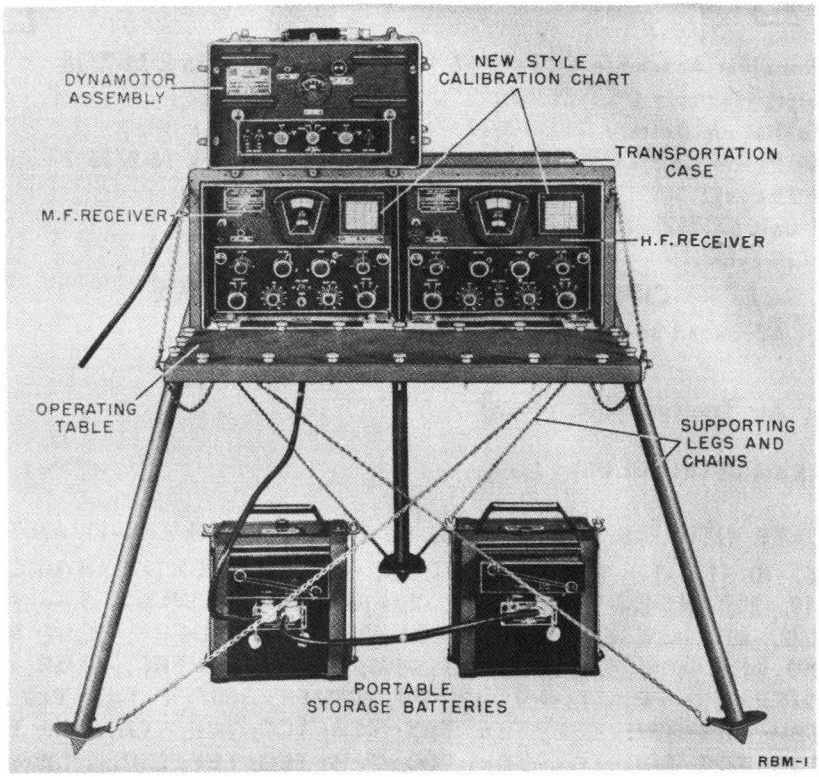
POWER OUTPUT: 3 w.

POWER REQUIREMENTS: 110 w, 115/230 v, 50/60 cyc ac; or A battery, 6 v at(4.5 amp)B battery, 270 v at 145 ma.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-787 weighs 90 pounds net, volume 2.53 cu ft.

STATUS: Limited Standard	**AN/TRR-TYPE**
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: RBM-1, -2, -3
USING SERVICE: Navy	PORTABLE RADIO RECEIVING EQUIPMENT
DATE OF THIS SHEET: 4 Apr 52	



Portable Radio Receiving Equipments RBM-1, -2, and -3 are primarily intended for general purpose field service. They consist of two receivers which may be operated separately or together, permitting simultaneous reception on the m-f and h-f range.

RBM-2 and RBM-3 include rectifier power supply units capable of operating from 25 cyc ac. RBM (series) is often used with a model TBW (series) radio transmitting equipment which includes a battery-charging unit.

These equipments are self-contained and can operate either from a source of a-c power or from a storage battery. Acid for the batteries is included; however, a means of charging the batteries must be provided.

Receiving antennas and headsets are required but not supplied.

AN/TRR-TYPE

RBM-1, -2, -3 :SERVICE TYPE NUMBER

PORTABLE RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,385
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CCT-46078	12-7/16 x 29-1/16 x 19-7/16	95.0
1	Dynamotor Assembly CCT-21387	10-7/16 x 16 x 12	30.0
2	Portable Storage Battery CES-19017	12-1/2 x 11-3/4 x 8-3/4	41.0
1	Rectifier Power Unit CCT-20086, -20085 (25 cyc)	9-11/16 x 7-7/8 x 14-3/16	31.0
1	Control Unit CCT-23278, -23277 (25 cyc)	8-13/16 x 7 x 8	8.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Air Transportable, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25,-26; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.2 - 20.0, in 8 bands:
M-f receiver: 0.2 — 0.36, 0.36 — 0.65, 0.65 — 1.14, 1.14 — 2.0.
H-f receiver: 2.0 — 3.6, 3.6 — 6.5, 6.5 — 11.4, 11.4 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

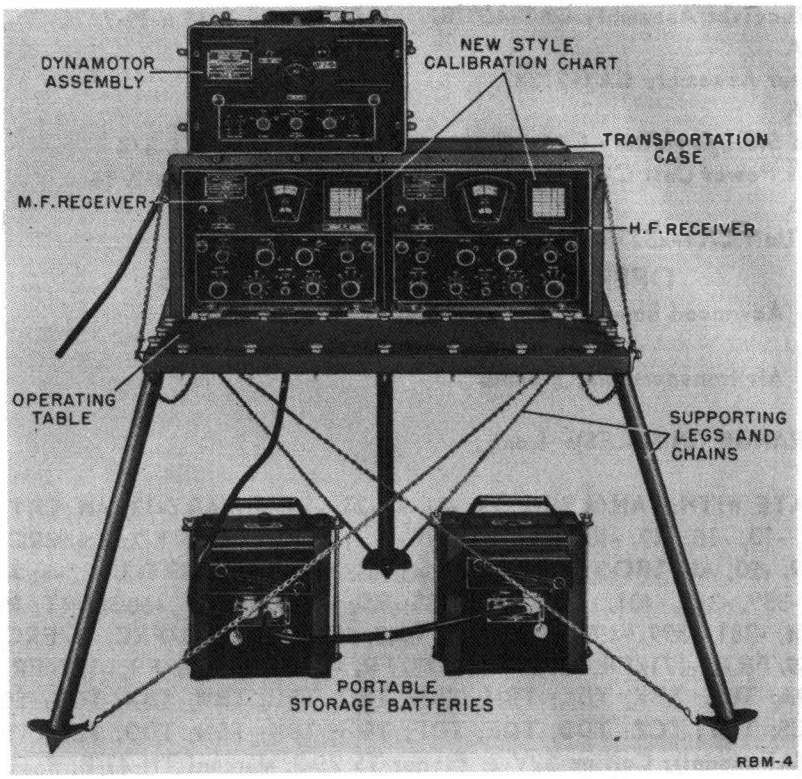
POWER OUTPUT: 50 mw into 600-ohm load.

POWER REQUIREMENTS: A-c operation: 80 w, 115 v, 25 — 60 cyc, 1 phase.
Battery operation: 122 w, 12 v.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RBM-1, -2, or -3 measures 52 x 45 x 47 inches, net weight 272 pounds, volume 64 cu ft. Packed for domestic shipment: total weight 590 pounds, total volume 32.55 cu ft, 1.6 ship tons. Shipped in 2 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/TRR-TYPE** SERVICE TYPE NUMBER: RBM-4, -5 PORTABLE RADIO RECEIVING EQUIPMENT



Portable Radio Receiving Equipments RBM-4 and RBM-5 are intended primarily for general purpose field service. They consist of two receivers which may be operated separately or together, permitting simultaneous reception in the m-f and h-f ranges.

This equipment is self-contained and can operate on a-c power or a storage battery. Acid for the batteries is included; however, a means of charging the batteries must be provided.

This equipment is often used together with a Portable Radio Transmitting Equipment TBW series, which includes a battery charging unit.

Receiving antennas and headsets are required but not supplied.

AN/TRR-TYPE

RBM-4, -5 :SERVICE TYPE NUMBER

PORTABLE RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,385
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver Assembly CAY-46078, -46078-A	12-7/16 x 29-1/16 x 19-7/16	95
1	Dynamotor Assembly CAY-21387, -21387-A	10-7/16 x 16 x 12	30
2	Portable Storage Battery CES-19017	12-1/2 x 11-3/4 x 8-3/4	41
1	Rectifier Power Unit CAY-20086, -20086-A	9-11/16 x 7-7/8 x 14-3/16	31
1	Control Unit CAY-23278, -23278-A	8-13/16 x 7 x 8	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Advanced bases, shore stations.

INSTALLATION: Air transportable, ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3, -5; AN/FRC-10; AN/FRT-5, -6, -10, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/GRT-2; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRT-1, -4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -329, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -60B/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -5/FRC, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TAB; TAJ; TAQ; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCY; TCZ; TDD; TDE; TDF; TDH; TDK; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); Collins 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.20 - 20.0, in 8 bands.
M-f receiver: 0.20 — 0.36, 0.36 — 0.65, 0.65 — 1.14, 1.14 — 2.0.
H-f receiver: 2.0 — 3.6, 3.6 — 6.5, 6.5 — 11.4, 11.4 — 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw, voice.

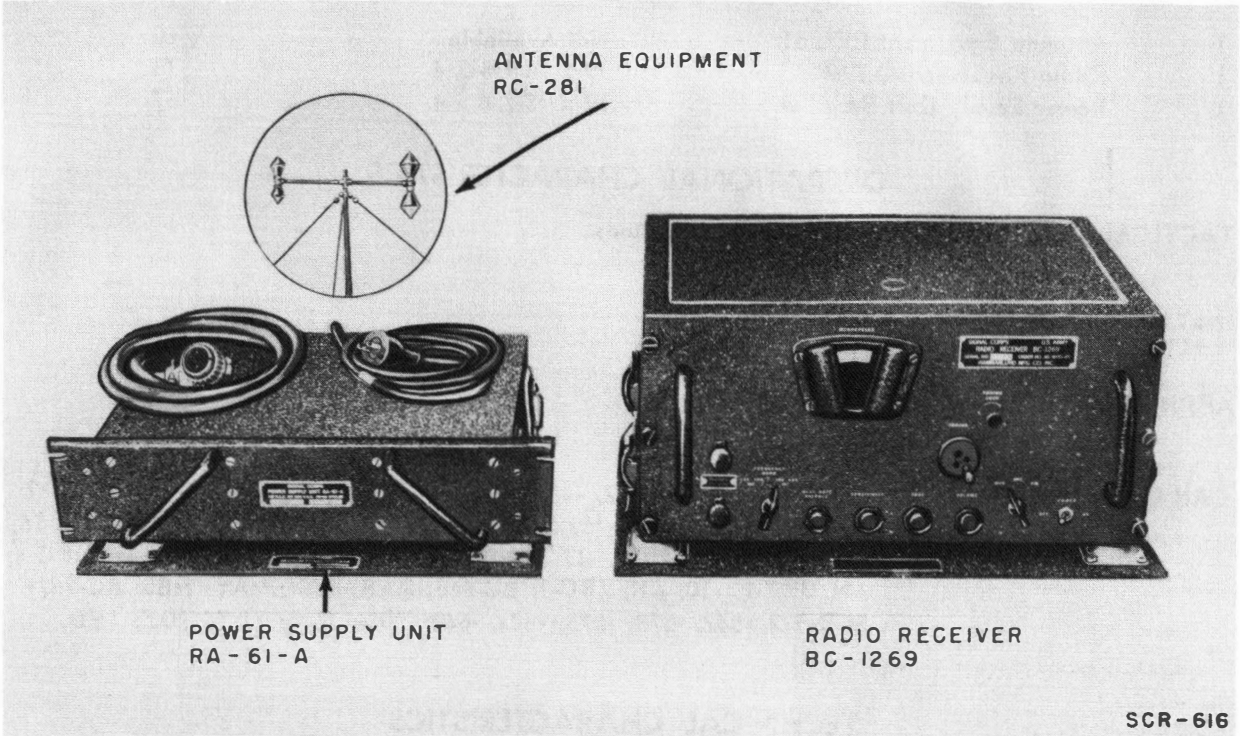
POWER OUTPUT: 50 mw into 600-ohm load.

POWER REQUIREMENTS: Battery operation: 122 w, 12 v.
A-c operation: 80 w, 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Portable Radio Receiving Equipment RBM-4 or RBM-5 measures 52 x 45 x 47 inches, net weight 242 pounds, volume 64 cu ft, 1.6 ship tons. Packed for domestic shipment: total weight 590 pounds, total volume 32.55 cu ft, 0.81 ship ton. Shipped in 2 packages. (This equipment mounts on 4 relatively high legs which are removed when the equipment is packed for shipment.)

STATUS: Standard	AN/TRR-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	SERVICE TYPE NUMBER: SCR-616 RADIO SET
USING SERVICE: Army	
DATE OF THIS SHEET: 20 Dec 51	



Radio Set SCR-616 is a compact, transportable, a-m and f-m (voice, tone, and cw) radio receiving equipment for intercept, monitoring, or communication applications in the v-h-f and u-h-f ranges.

This equipment consists of a shock-mounted radio receiver and associated power supply unit and includes a rotatable antenna array consisting of two center-fed biconical elements and accessories.

Can be operated from 110-v or 230-v a-c power or, by substituting Power Supply Unit PE-223 for the Power Supply Unit RA-61-A component, from a 12-v storage battery.

AN/TRR-TYPE

SCR-616 :SERVICE TYPE NUMBER

RADIO SET

INSTRUCTION LITERATURE: TM 11-260

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 20 Dec 51

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Antenna Equipment RC-281	Not Available	60
1	Radio Receiver BC-1269	19 x 16 x 8-3/4	73
1	Power Supply Unit RA-61-A	19 x 13-7/8 x 4	67

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to signal service battalions.

INSTALLATION: Ground, transportable.

APPROXIMATE RANGE (IN MILES): Line of sight.

CAN COMMUNICATE WITH: AN/ARC-1, -3, -5, -12, -18, -19, -27, -28, -30, -33, -34, -36; AN/CRC-2; AN/FRC-7; AN/GRC-16, -27, -29, -30, -32; AN/GRT-3; AN/MRC-12, 16, -20, -22; AN/PRC-14, -17, -20; AN/TRC-7, -8, -11, -12, -32; AN/URC-4; AN/URT-7, -10; AN/VRC-1; BC-640; MAR; MAW; MAY; MBS; RC-257; SCR-522, -542, -573, -575, -624, -643; TDG; TDQ; TDT; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 145 - 600, in 2 bands.
Band 1: 145 — 300.
Band 2: 300 — 600.

TYPE MODULATION: Am, fm.

TYPE OF SIGNAL: Voice, tone, cw.

POWER OUTPUT: 2.0 w high; 0.2 w low.

POWER REQUIREMENTS: 0.85 amp at 115 v (0.45 amp at 230 v), 50/60 cyc ac or 12 v dc (storage battery).

PHYSICAL CHARACTERISTICS

Radio Set SCR-616 weighs 197 pounds net, volume 3.96 cu ft. Packed for domestic or export shipment: total weight 250 pounds, total volume 16.05 cu ft. Shipped in 3 packages.

STATUS: Std

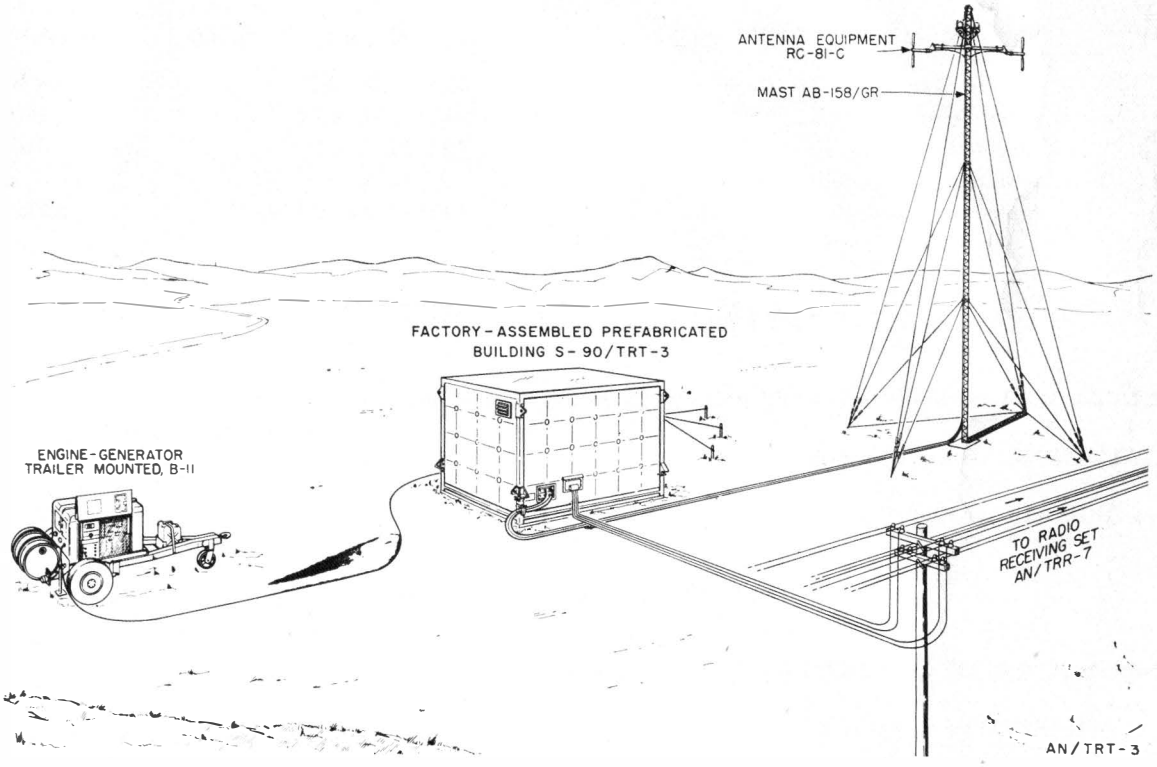
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/TRT-3

TRANSMITTING SET, RADIO



Radio Transmitting Set AN/TRT–3 is a complete mobile radio transmitting station fully equipped for local or remote radiotelephone and radiotelegraph operation in ground-to-air communication applications. Its two radio transmitters can be operated simultaneously on any two desired channels. When operated in conjunction with Radio Receiving Set AN/TRR–7 (a complete mobile radio receiving station), two-way communication with aircraft and remote radiotelephone and radiotelegraph operation is possible.

This equipment consists of two transmitters housed in a prefabricated building. An engine generator set supplies the equipment in the building with ac power. Monitoring equipment provides facilities for local and remote radiotelegraph and remote radiotelephone operation of the transmitters, and also makes possible two-way telephone communication with as many as five mobile radio stations.

AN/TRT-3

TRANSMITTING SET, RADIO

INSTRUCTION LITERATURE: TO 31R2-2TRT3-[illegible]

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Engine-Generator, Trailer Mounted B-11	125 x 63 x 65	2,450
2	Radio Transmitter BC-640-D	21¼ x 20 x 72	601
1	Monitoring Equipment RC-80-A	72 x 20½ x 3	163
2	Antenna Equipment RC-81-C		6.75
1	Building, Prefabricated, Factory-Assembled S-90/TRT-3	140¾ x 84 x 77¾	3,300

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Ground-to-air and point-to-point communication.

INSTALLATION: Ground, mobile.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Tone, voice.

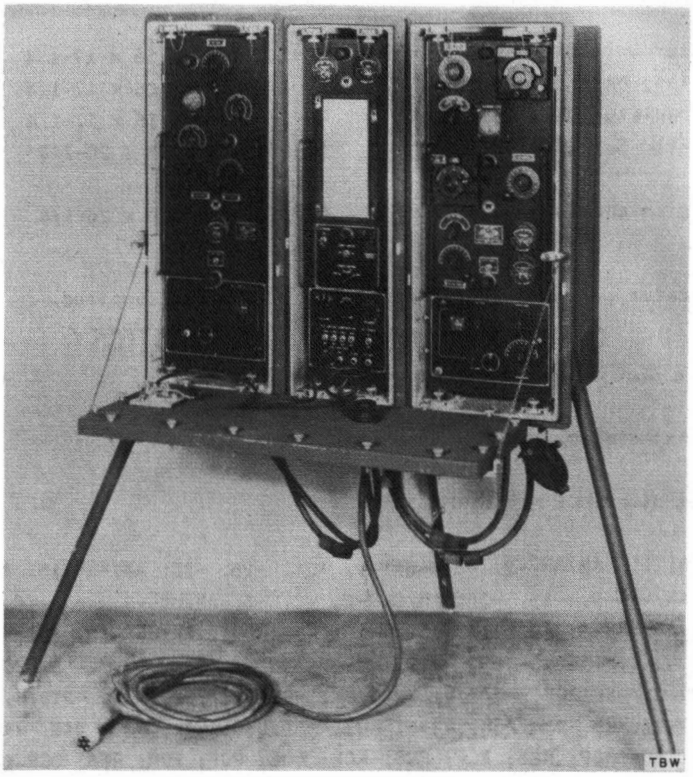
POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 4.5 kw, 115/230 v, 50/60 cy, 1 ph ac (The B-11 is capable of supplying pwr if coml pwr is not available.)

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	140¾ x 84 x 77¾				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/TRT-TYPE** SERVICE TYPE NUMBER: TBW, TBW-1 PORTABLE RADIO TRANSMITTING EQUIPMENT



Portable Radio Transmitting Equipments TBW and TBW-1 are general purpose equipments used primarily (in conjunction with suitable radio receiving units such as Portable Radio Receiving Equipment RBM (series), in establishing complete radio communication facilities at an advanced base.

These units are so designed that an entire system, including antennas, may be erected in less than one hour by a crew of six.

The antenna system consists of a two-wire l-f antenna; a single-wire h-f antenna, a two-wire counterpoise, and related masts, and guys.

The equipment is available with either a 115/230-v, 25-cyc motor generator set; a 115/230-v, 60-cyc motor generator set; or a gasoline engine generator set.

AN/TRT-TYPE

TBW, TBW-1 :SERVICE TYPE NUMBER

PORTABLE RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,246
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	IF Transmitter Unit CAY-52119	33-1/4 x 13-7/16 x 17-1/4	56.5
1	HF Transmitting Unit CAY-52120	33-1/4 x 13-7/16 x 17-1/4	86.5
1	Rectifier Modulator Unit CAY-20084	33-1/4 x 10-7/16 x 17-1/4	69.5
*	Motor Generator Set CDO-21648, -21652	14-1/2 x 32-1/2 x 20-7/8	296.0
*	Gasoline Engine and Generator Set CDO-73004	17-3/8 x 21-1/4 x 26-1/4	168.0

*Motor Generator set or gasoline engine generator set supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations or advanced bases.

INSTALLATION: Transportable, ground.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBG; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 1.0 and 3.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw and mcw: 100 w.
Voice: 25 w.

POWER REQUIREMENTS: 2.19 kw, 115/230 v ($\pm$ 10%) 25 cyc, 1 phase, ac; or
2.19 kw, 115/230 v ($\pm$ 10%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

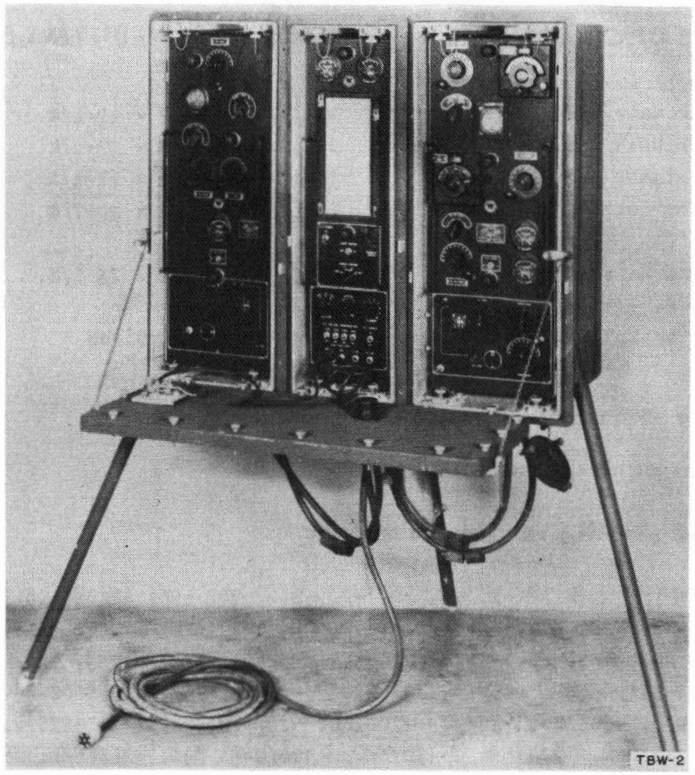
Portable Radio Transmitting Equipments TBW, TBW-1 measure 33-1/4 x 37-5/16 x 17-1/4 inches, net weight 595.5 pounds. Packed for domestic shipment: total weight 1,545 pounds, total volume 86.11 cu ft, 21.5 ship tons. Shipped in 8 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 2 May 52

AN/TRT-TYPE

SERVICE TYPE NUMBER: TBW-2 through -5

PORTABLE RADIO TRANSMITTING EQUIPMENT



Portable Radio Transmitting Equipments TBW-2 through -5 are transportable general purpose radio transmitting equipments used as complete advanced-base radio communication stations, when used in conjunction with suitable receiving equipment such as Portable Radio Receiving Equipment RBM (series).

These units are so designed that an entire system, including antennas, may be erected in less than one hour by a crew of six.

The antenna system consists of a two-wire l-f antenna, a single-wire h-f antenna, a two-wire counterpoise, and related masts, and guys.

The equipment is available with either a 115/230-v, 25-cyc motor generator set, a 115/230-v, 60-cyc motor generator set, or a gasoline engine generator set.

TBW-2 is available also with a 230-v d-c motor generator set.

AN/TRT-TYPE

TBW-2 through -5 :SERVICE TYPE NUMBER
PORTABLE RADIO TRANSMITTING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,247
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	IF Transmitter Unit CAY-52238	33-1/4 x 13-5/8 x 17-1/4	76.5
1	HF Transmitter Unit CAY-52239	33-1/4 x 13-5/8 x 17-1/4	84.0
1	Rectifier Modulator Unit CAY-20084	33-1/4 x 13-5/8 x 17-1/4	71.0
*	Motor Generator Set CDO-21652, -21648, -21737	14-1/2 x 32-1/2 x 20-7/8	296.0
*	Gasoline Engine Generator Set CDO-73004, -73004-A, -73004-B	17-3/8 x 21-1/4 x 26-1/4	168.0

*Motor Generator set or gasoline engine generator set supplied.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations or advanced bases.

INSTALLATION: Transportable, ground.

APPROXIMATE RANGE (IN MILES): Short to medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -12, -28, -32; AN/GRC-9, -13, -26; AN/GRR-2, -3, -5; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRC-3; AN/SRR-3, -8, -11, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; BC-312, -314, -342, -344, -348, -453, -779, -794, -1004; MBS; MQ; OA-58/FRC, -59/FRC; R-62/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -208/FR, -209/FR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBC; RBQ; RBH; RBL; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDF; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCO; TCP; TCS; ARC Type 12; Collins 18S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.35 - 1.0 and 3.0 - 18.1.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Cw and mcw: 100 w.
Voice: 25 w.

POWER REQUIREMENTS: TBW-2 through -5: 2.19 kw, 115/230 v, 25 cyc, ac.
TBW-2 through -5: 2.19 kw, 115/230 v, 60 cyc, ac.
TBW-2 only: 2.19 kw, 230 v dc.

PHYSICAL CHARACTERISTICS

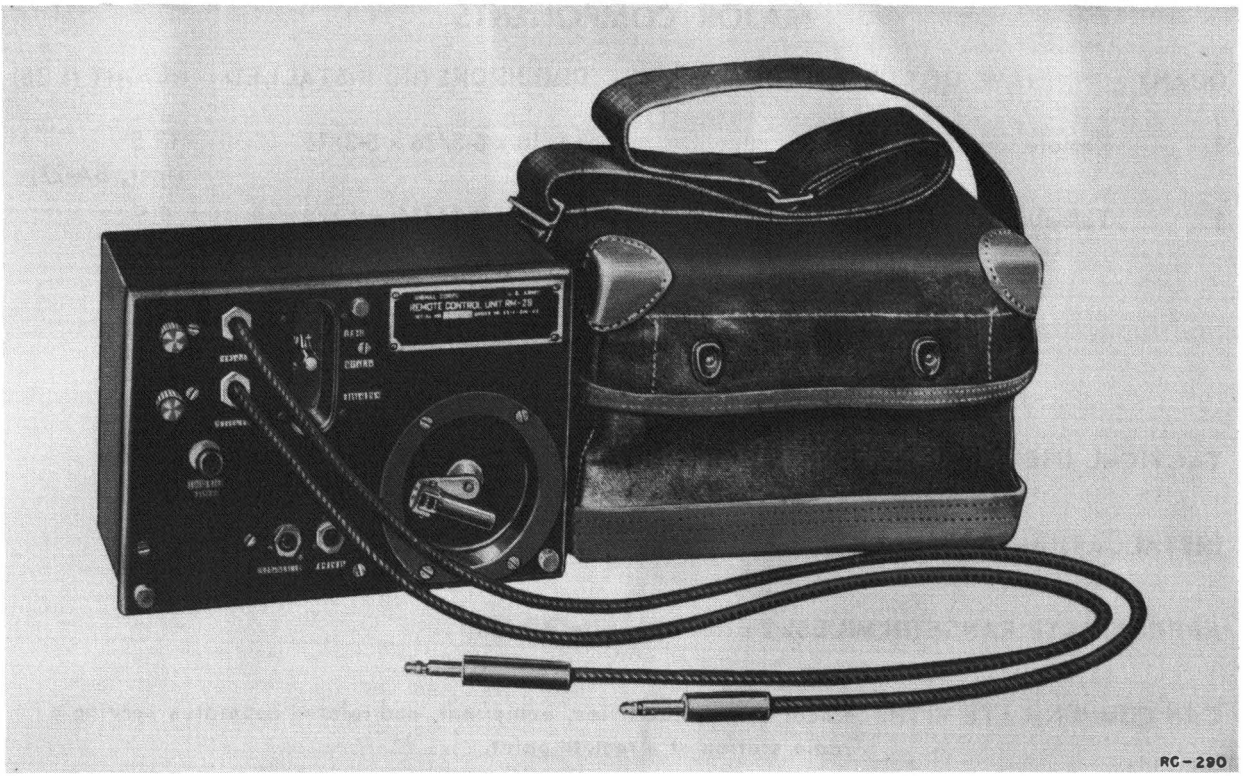
Portable Radio Transmitting Equipments TBW-2 through -5 measure 33-1/4 x 37-7/8 x 17-1/4 inches, net weight 578 pounds. Packed for domestic shipment: total weight 1,392 pounds, total volume 87,26 cu ft, 2.18 ship tons. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 8 Jan 52

AN/TTA-TYPE

SERVICE TYPE NUMBER: RC-290

REMOTE CONTROL EQUIPMENT



Remote Control Equipment RC-290 is an assemblage of items enabling the erection of a local battery telephone facility between a displaced operating and control position and the actual operating site of field radio equipment. It is used in conjunction with radio communication equipment organic to battalion level units.

This equipment consists essentially of a steel case inclosed Telephone EE-8 used at the radio set and a standard field Telephone EE-8 used at the remote control point. The connecting facility is usually a conventional field telephone pair.

The modes of operation available are telephone communication between the remote point and the radio operator, the control of radio equipment from the remote Telephone EE-8, voice circuit monitoring by the radio operator at the radio equipment, and operation of the radio set with monitoring at either the remote station or the radio set.

It is powered by dry batteries and uses the hand generator integral in the remote control unit or in a Telephone EE-8 for ringing.

AN/TTA-TYPE	INSTRUCTION LITERATURE: TM 11-308
RC-290 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REMOTE CONTROL EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 8 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Remote Control Unit RM-29	9-5/16 x 6-5/16 x 5-3/16	13.5 (incl. BA-27)
1	Telephone EE-8	9-9/16 x 7-11/16 x 3-1/2	9.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Infantry, battalion and regimental level; division signal companies.

INSTALLATION: Ground; transportable.

APPROXIMATE RANGE (IN MILES): 2 miles over Wire WD-1/TT.

CAN COMMUNICATE WITH: Local battery facilities, equipment, and related apparatus serving a radio station at a remote point.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice.

TYPE COMMUNICATION CIRCUITS: Conventional field telephone.

CONTROLS: Selection of operational positions: RADIO, THROUGH, TELEPHONE.

POWER REQUIREMENTS: Battery BA-27.

PHYSICAL CHARACTERISTICS

Information on Remote Control Equipment RC-290 not available.

STATUS: S/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TTC-7

CENTRAL OFFICE, TELEPHONE, MANUAL

NO PHOTOGRAPH AVAILABLE

Manual Telephone Central Office AN/TTC-7 is a complete, transportable, three-position, multiple, field telephone exchange designed for rapid installation. It can handle local or common battery lines.

This equipment consists essentially of three two-panel, manual switchboards equipped for 200 lines and 25 trunks, and includes power and accessory components.

Each switchboard position is equipped with 15 cord circuits, for the handling of 45 simultaneous calls (by three positions); the face equipment of each is wired to accommodate 500 lines and 80 trunks. For each additional 200 lines, three more switchboard positions are required.

To handle more than 400 lines, multiplying on a four-panel basis is recommended; on such a basis the exchange can be expanded to accommodate 1,000 lines and 160 trunks.

AN/TTC-7

CENTRAL OFFICE, TELEPHONE, MANUAL

INSTRUCTION LITERATURE: TM 11-2146

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Switchboard, Telephone Manual SB-249/TTC	72 x 26 3/16 x 26 1/2	850
1	Telephone Circuit, Line Relay TA-223/TTC	26 5/8 x 31 5/16 x 17	230
1	Telephone Circuit, Line Relay TA-224/TTC	26 5/8 x 31 5/16 x 17	275
1	Main Distributing Frame, Telephone TA-257/TTC	26 5/8 x 31 5/16 x 17	150

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3 (min).

NUMBER AND TYPE OF CIRCUITS:

Manually Operated Equipment:

Number of Cord Circuits: 45.

Number of Line Circuits: 200.

Number of Trunk Circuits: 20.

RINGING: 20 cy at 90 v.

POWER REQUIREMENTS: 110 v ac; 48 v dc.

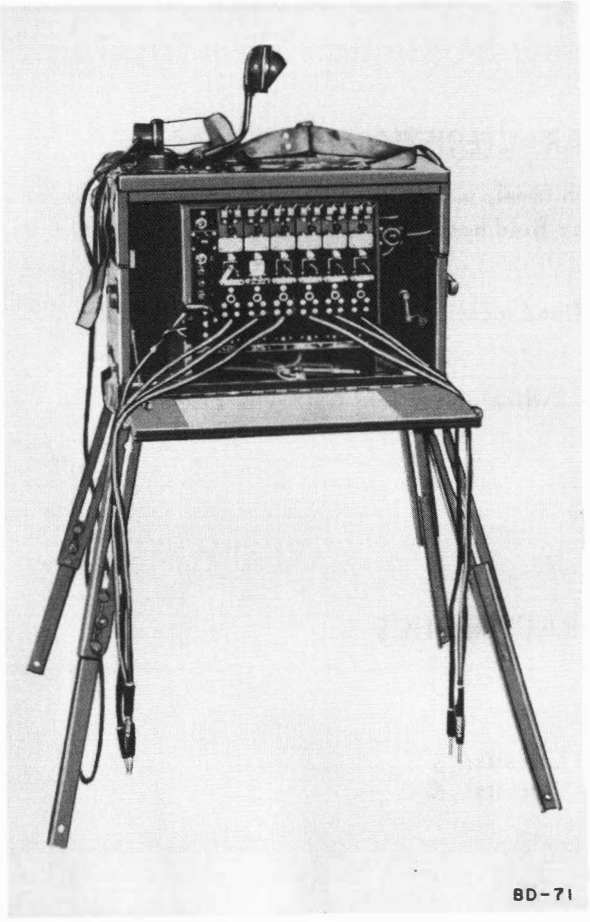
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
(3) SB-249/TTC	72 x 79 x 26 1/2	2,550	120		
DOMESTIC PACK:					
EXPORT PACK:		6,117	413	10.3	30

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 29 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: BD-71
SWITCHBOARD


BD-71

Switchboard BD-71 is a portable, monocord, magneto telephone switchboard used for terminating and switching tactical field wire circuits at regimental and higher headquarters.

This equipment consists of all required apparatus, housed in a carrying case having adjustable legs, permitting a variety of installation arrangements. Repeating coils are permanently installed on two lines.

Two Switchboards BD-71 may be connected in parallel to accommodate additional lines.

The estimated range over nonloaded Wire W-110-B is from 14 to 22 miles.

Uses 6 flashlight type Batteries BA-30.

AN/TTC-TYPE

BD-71 :SERVICE TYPE NUMBER
SWITCHBOARD

INSTRUCTION LITERATURE: TM 11-330
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-71 (bare unit)	Not Available	48
6	Switchboard Units EE-2	" "	Not Available
1	Chest Set H-18/GT, Headset HS-30, (operator's telephone set)	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At companies, battery, and battalion level, in infantry and armored division, support organization corps, and army field hospitals.

INSTALLATION: Ground, transportable, operates in fixed location.

CAN COMMUNICATE WITH: Used for terminating and switching tactical field wire circuits.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

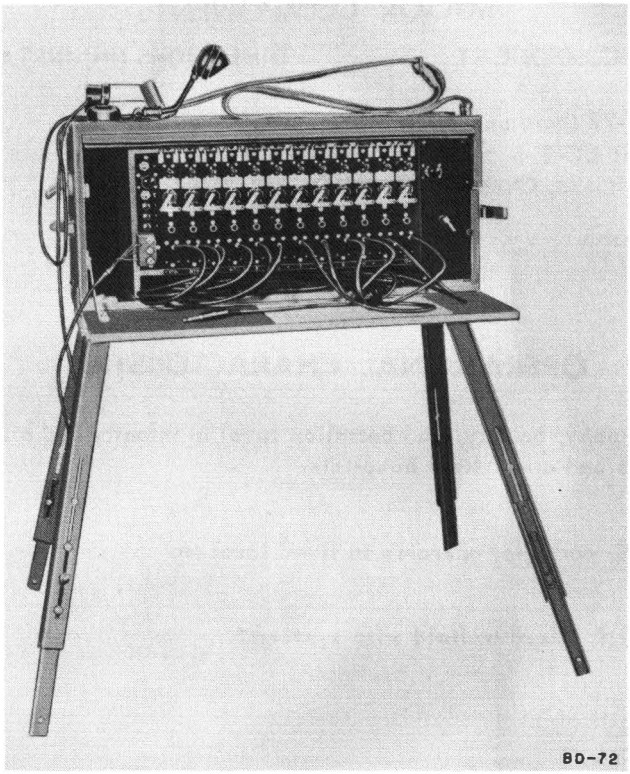
NUMBER AND TYPE OF CIRCUITS: Number of Cord Circuits: 6
Number of Line Circuits: 6.

POWER REQUIREMENTS: 6 each Battery BA-30.

PHYSICAL CHARACTERISTICS

Switchboard BD-71 weighs 48 pounds net, volume 1.5 cu ft. Packed for export shipment: total weight 84 pounds, total volume 4.6 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	AN/TTC TYPE SERVICE TYPE NUMBER: BD-72 SWITCHBOARD



Switchboard BD-72 is a portable, monocord, magneto, manual, telephone switchboard used primarily in field wire systems serving company, battery, and battalion level in armored and infantry divisions.

This equipment consists of a switchboard fitted with all apparatus required, and arranged for transportation in the field in a carrying case. Has adjustable legs permitting different installation arrangements.

Repeating coils are permenently installed on four lines. Estimated range over Wire W-110-B (non-loaded) is from 14 to 22 miles. Two Switchboards BD-72 may be used together when necessary to provide additional line capacity, by trunking between them.

Operates from six flashlight-type Batteries BA-30.

AN/TTC TYPE	INSTRUCTION LITERATURE: TM 11-330
BD-72 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
SWITCHBOARD	USING SERVICE : Army
	DATE OF THIS SHEET : 29 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-72 (bare unit)	Not Available	72
12	Switchboard Unit EE-2	" "	Not Available
1	(each) Headset HS-30, Chest Set H-18/GT.	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: At company, battery, and battalion level in infantry and armored divisions; support organizations in corps and army; field hospitals.

INSTALLATION: Ground; portable; operates in fixed location.

CAN COMMUNICATE WITH: Used in field wire systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of Cord Circuits: 12.
Number of Line Circuits: 12.

POWER REQUIREMENTS: Six Batteries BA-30.

PHYSICAL CHARACTERISTICS

Switchboard BD-72 weighs 72 pounds net, volume 2 cu ft. Packed for export shipment: total weight 137 pounds, total volume 5 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: EE-89

TELEPHONE REPEATER

Telephone Repeater EE-89 is a portable, two-wire repeater equipment which is installed at intermediate points of a tactical field wire system (at junctions of sections having similar characteristics) to extend the normal transmission range of facilities serving division and higher headquarters.

Equipment consists of amplifier equipment and related control apparatus contained in a wooden field case fitted with carrying straps. The case has space for the necessary batteries.

May be used at the exact center of a loaded section but not at junctions of loaded and nonloaded sections. Two can be used in tandem in the same circuit.

Telephone EE-8 can be bridged across this equipment.

AN/TTC-TYPE

EE-89 : SERVICE TYPE NUMBER

TELEPHONE REPEATER

INSTRUCTION LITERATURE: TM 11-2006
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground; transportable; operates in fixed locations under shelter or in the open.

CAN COMMUNICATE WITH: Equipment and apparatus of field wire systems, operating in the same connecting facility.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF FACILITIES: Two-wire; same pair used for transmission in both directions. Provides for simplex telegraph and 20-cyc ringing over lines using one or more of these repeaters.

POWER REQUIREMENTS: Self-contained Battery BA-40.

PHYSICAL CHARACTERISTICS

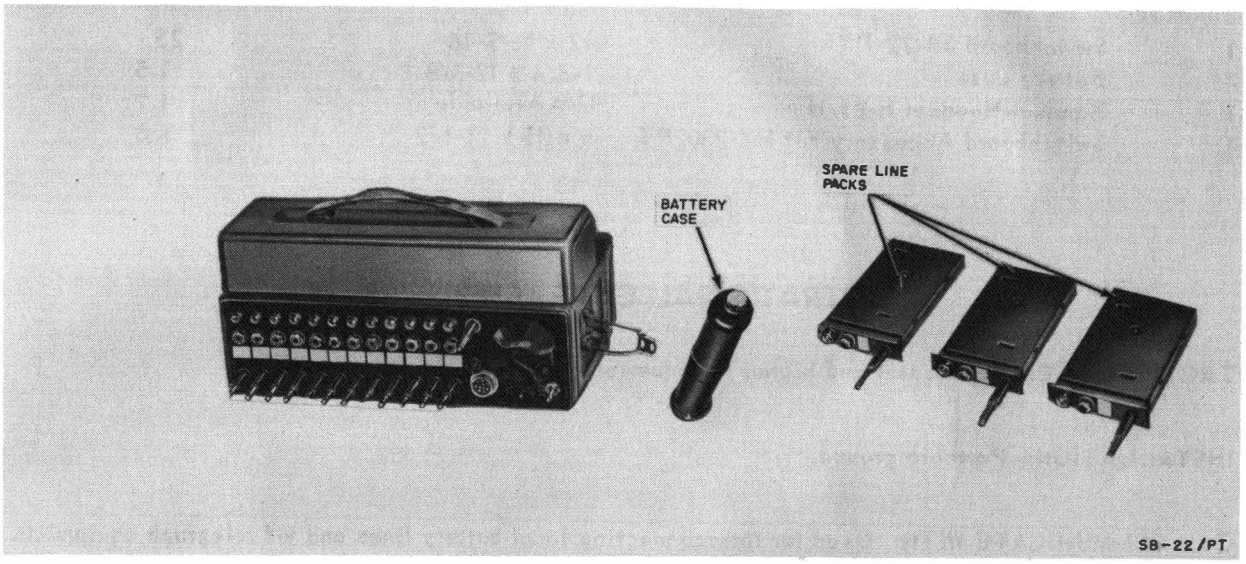
Telephone Repeater EE-89 measures 8-1/2 x 9 x 7 inches, net weight 6.5 pounds, volume 0.03 cu ft. Packed for domestic shipment: total weight 8 pounds, total volume 0.05 cu ft. Packed for export shipment: total weight 20 pounds, total volume 1 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 10 Jun 52

AN/TTC-TYPE

AN/COMP TYPE NUMBER: SB-22/PT

SWITCHBOARD, TELEPHONE, MANUAL



Switchboard, Telephone, Manual SB-22/PT is a small, portable, 12-line, monocord switchboard for interconnecting local-battery lines and v-f telegraph equipment serving regimental and higher headquarters.

This equipment consists essentially of a case capable of accepting individually contained plug-in line packs and operator's pack, enabling rapid replacement of defective circuits. Line packs are designated Telephone Circuit, Line Jack TA-222/PT. The operator's pack is designated Telephone Circuit, Operator TA-221/PT and occupies the space at the right-hand end of the case, and includes a hand-generator for ringing. The equipment includes a battery case, operator's telephone set, and related accessories.

Two of these switchboards can be used together to handle 29 lines; in this application the operator's set is removed from one case and replaced by five line packs, and the two switchboards are then connected in series.

It operates from four flashlight-type Batteries BA-30.

AN/TTC-TYPE	INSTRUCTION LITERATURE: TM 11-2202
	CLASSIFICATION OF EQUIPMENT: Unclassified
SB-22/PT :AN/COMP TYPE NUMBER	USING SERVICE : Army
SWITCHBOARD, TELEPHONE, MANUAL	DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard SB-22/PT	12 x 16-5/16	25
1	Battery case	1-3/4 x 12-5/8	1.5
1	Handset-Headset H-81/U	Not Available	1.2
1	Switchboard Accessory Kit MX-230/PT	5 x 15 x 11-1/2	3.8

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Portable ground.

CAN COMMUNICATE WITH: Used for interconnecting local-battery lines and v-f telegraph equipment.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 1.
Number of line circuits: 12.
Number of trunk circuits: None.

POWER REQUIREMENTS: Four Batteries BA-30.

PHYSICAL CHARACTERISTICS

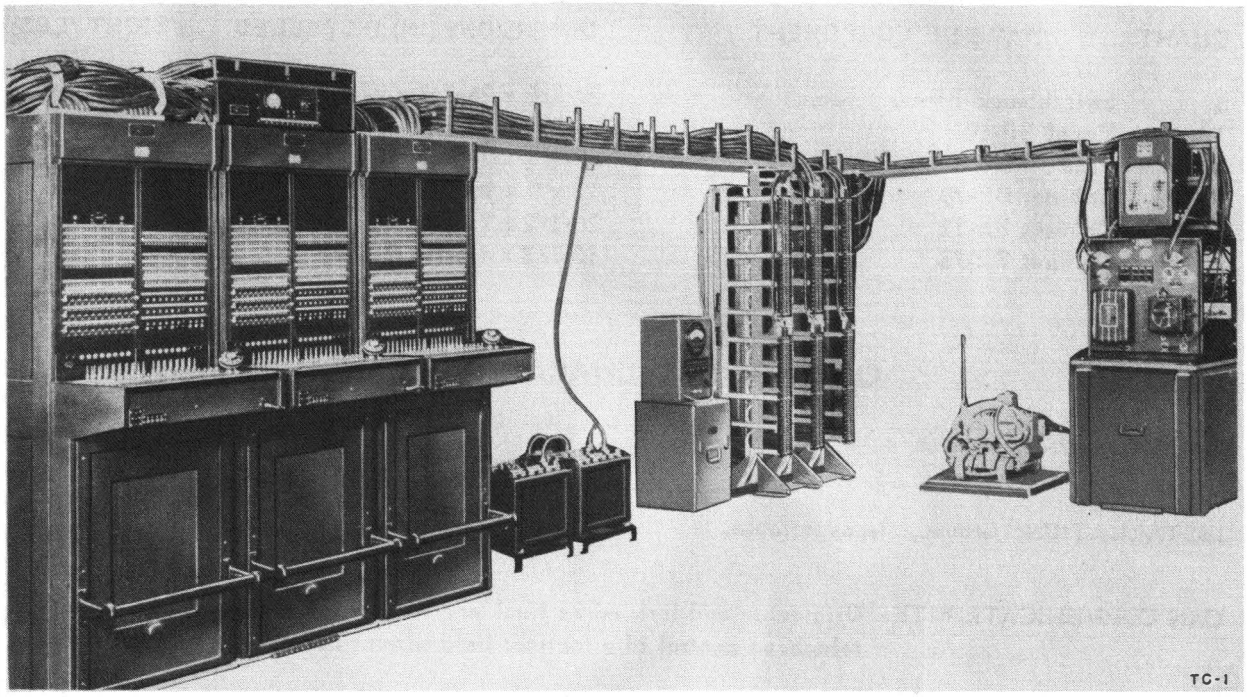
Switchboard, Telephone, Manual SB-22/PT measures 12 x 12 x 16-5/16 inches, volume 1.5 cu ft. Packed for export shipment: total weight 58 pounds, total volume 3.29 cu ft. Shipped in 1 package.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-1

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-1 is a complete, transportable, manual, telephone exchange which serves both local- and common-battery lines. It can handle local, and originate and terminate trunk and tie-line traffic and is used as a telephone central of a tactical field wire or cable system at army level.

This equipment consists essentially of a 3-position switch-racks, power equipment, and associated accessories.

Each switchboard section is a single-position, two-panel, manually operated unit arranged to serve magneto and common battery lines, and common battery manual and dial trunks.

Power is supplied by four Battery BB-46, one Panel BD-90, which includes ringing equipment, a rectifier, and a gasoline engine-driven field power unit.

Traffic-handling capacity of this central office may be increased as required by alternating the corresponding position of two TC-1 equipments in the same line-up.

AN/TTC-TYPE

TC-1 :SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-335

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Switchboard BD-80	37-7/8 x 26-3/8 x 77-9/16	739
1	Panel BD-90	35-1/2 x 25 x 26-1/4	230
3	Frame FM-19	17-1/4 x 23 x 80	180
1	Cabinet BE-70	12 x 9 x 18	32
1	Cabinet BE-72	26-1/2 x 7 x 9-3/16	61
1	Cabinet BE-75	13-1/3 x 4-5/8 x 9-3/4	25

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army.

INSTALLATION: Ground; transportable.

CAN COMMUNICATE WITH: Originates and terminates trunk and tie-line traffic and is used as a telephone central of a tactical field wire or cable system.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3.

NUMBER AND TYPE OF CIRCUITS:

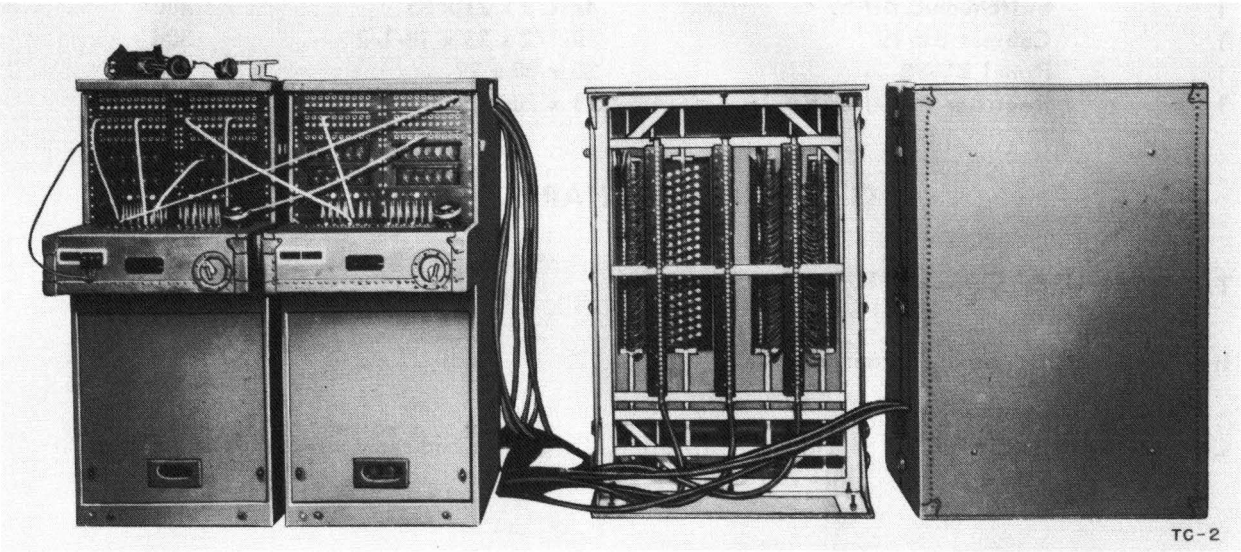
Number of cord circuits: 45 universal; 3 dial.
Number of line circuits: 90 local battery, 180 common battery.
Number of trunk circuits: 12 two-way to dial or manual office.

POWER REQUIREMENTS: Power Unit PE-75: 2.5 kva, 115 v, 60 cyc ac.
Rectifier RA-36: 12 amp; 0 to 65 v.
Battery BB-46: 90 amp-hr; 40 to 56 v .

PHYSICAL CHARACTERISTICS

Telephone Central Office Set TC-1 weighs 7,900 pounds net. Packed for export shipment: total weight 10,596 pounds, total volume 543 cu ft, 13.6 ship tons.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 23 Jan 52	**AN/TTC-TYPE** SERVICE TYPE NUMBER: TC-2 TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-2 is a complete, transportable, telephone exchange designed to handle local traffic, and originating and terminating trunk and tie-line calls in field wire systems serving corps and higher headquarters.

This equipment consists essentially of a single-position local- and common-battery nonmultiple, 2-panel, manual switchboard, main distributing frame, power panel, rectifier, power unit, and associated accessories.

Two Switchboard BD-89 (the principle component of this equipment) can be connected and operated by one operator.

It is battery-operated.

AN/ TTC-TYPE

TC-2 : SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-340

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-89	47-1/2 x 21 x 35	400
1	Cabinet BE-79	40-1/2 x 23 x 18-1/2	300
1	Panel BD-98	30 x 30 x 29	110
1	Rectifier RA-91 or RA-36	21 x 20 x 11-3/4	130

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Ground: transportable.

CAN COMMUNICATE WITH: Handles local traffic. Originates and terminates trunk and tie-line calls in field wire systems.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

	Models BD-89-A through E	Model BD-89-G
Number of cord circuits:	13 universal; 1 dial.	
Number of line circuits:	20 L B; 37 C B.	40.
Number of trunk circuits:	2 C B; 1 dial.	4.

POWER REQUIREMENTS: Power Unit PE-75-( ): 2,500 w, 115 v, 60 cyc ac.
Rectifier RA-91 or RA-36: 2 to 12 amp, 6 to 48 v.
Storage Battery BB-46: 90 amp-hr, 40 to 56 v.

PHYSICAL CHARACTERISTICS

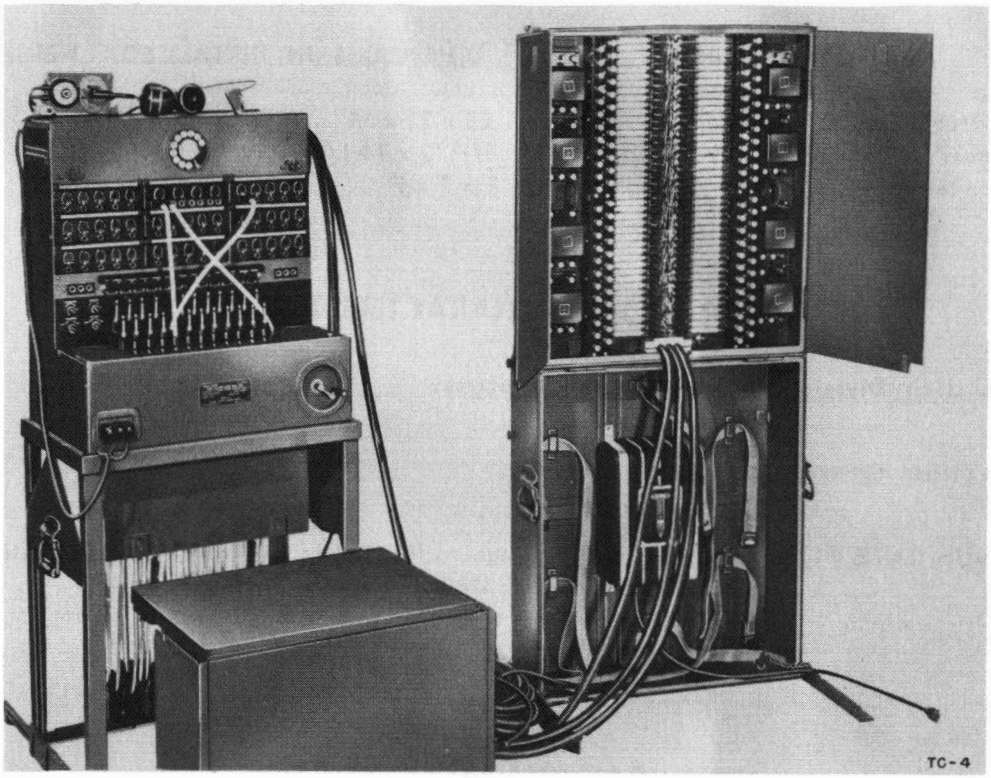
Telephone Central Office Set TC-2 weighs 2,900 pounds net. Packed for export shipment: total weight 3,412 pounds, total volume 146 cu ft, 3.6 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-4

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-4 is a complete, transportable, field telephone exchange for handling magneto line traffic, and for originating and terminating common battery trunk line and ring-down tie line traffic at division level.

This equipment consists of a single-position, manual, nonmultiple switchboard, a power converter, and associated accessories. Currently, this equipment includes Headset HS-30, Chest Set H-18/GT, and Microphone T-45 rather than the head and chest set illustrated. It can be installed in a cargo truck for mobile telephone central applications.

Two Switchboards BD-96 (the principle component of this equipment) can be connected and operated by a single operator.

This central office set is dry battery operated.

AN/TTC-TYPE	INSTRUCTION LITERATURE: TM 11-332
TC-4 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELEPHONE CENTRAL OFFICE SET	USING SERVICE : Army
	DATE OF THIS SHEET: 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-96	25 x 22 x 15	200
1	Panel BD-97	27-1/2 x 24-1/2 x 11	150
1	Converter M-222	8 x 7 x 7	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and equivalent headquarters.

INSTALLATION: Ground; transportable or mobile.

CAN COMMUNICATE WITH: Used for handling magneto line traffic, originates and terminates common battery trunk line and ring-down tie line traffic.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 12 universal; 1 dial.
Number of line circuits: 40 local battery.
Number of trunk circuits: 4 common battery, manual, or dial.

POWER REQUIREMENTS: Six Batteries BA-30 to furnish current for transmitter of operator's set and for night alarm buzzer.
Two Batteries BA-23 to furnish power to Converter M-222.

PHYSICAL CHARACTERISTICS

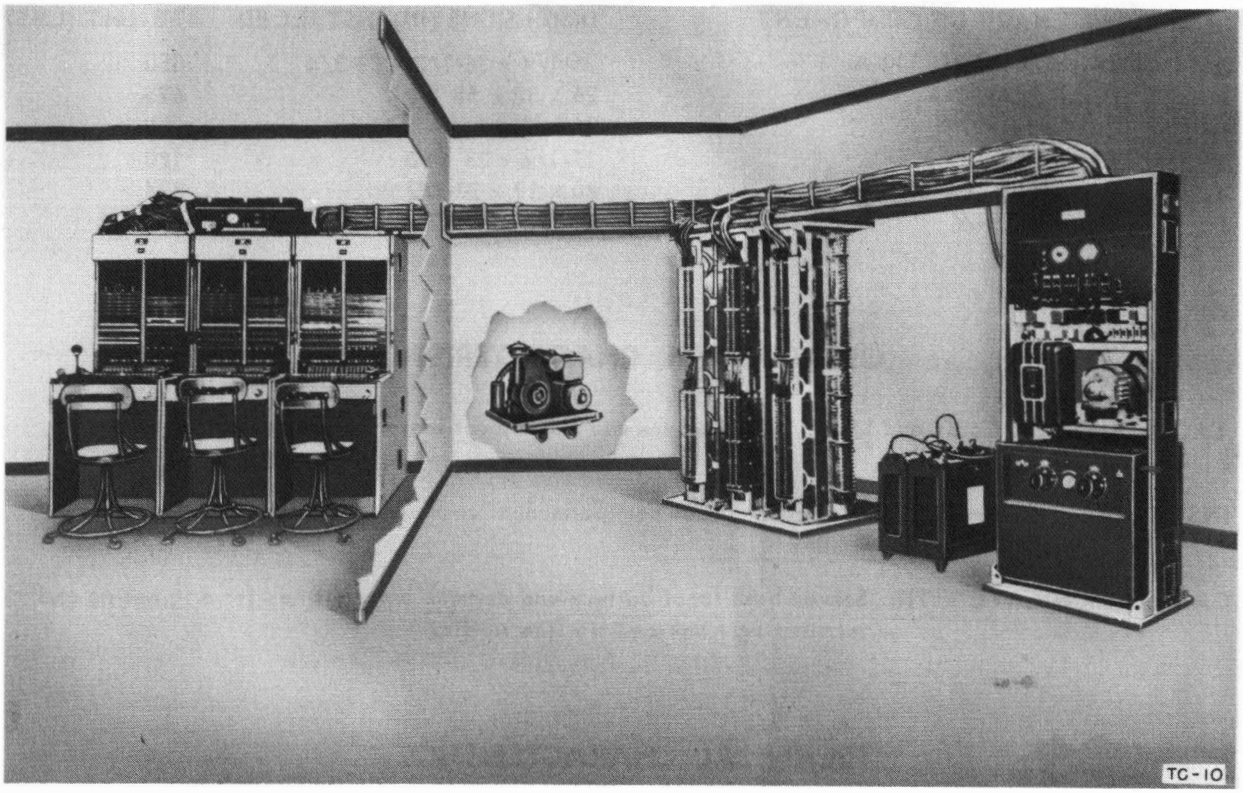
Telephone Central Office Set TC-4 weighs 590 pounds net. Packed for export shipment: total weight 650 pounds, total volume 21 cu ft, 0.5 ship ton.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Jan 52

AN/TTC- TYPE

SERVICE TYPE NUMBER: TC-10

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-10 is a complete, transportable, 270-line manual telephone exchange. It serves both local battery and common battery lines, and is arranged for handling, originating, and terminating trunk and tie line traffic.

It is used for establishing tactical communications from forward areas to rear echelons.

This equipment can be connected into any existing telephone system, either manual or automatic. A maximum of 45 conversations can be handled simultaneously. Local battery line circuits can also be used for toll lines or two-way ring-down trunks. Trunks can be extended to manual or automatic exchanges.

AN/TTC-TYPE

TC-10 :SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-338

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET : 9 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Switchboard BD-110-A	26-1/4 x 36-1/2 x 63-3/4	850
1	Panel BD-132-A	26 x 18 x 58	625
1	Cabinet BE-72	26-1/2 x 7 x 9-3/16	61
3	Frame FM-19	17-1/4 x 23 x 80	180
2	Power Unit PE-75	40 x 19 x 27-1/2	324
4	Battery BB-46	15-1/2 x 6-1/2 x 14-9/16	119

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters and fixed plant installations.

INSTALLATION: Ground; fixed; permanent or semipermanent communications centers.

CAN COMMUNICATE WITH: Serves both local battery and common battery lines for originating and terminating trunk and tie line traffic.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 3.

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 45 universal; 3 dial.
Number of line circuits: 270 (180 common battery, 90 local battery).
Number of trunk circuits: 12 two-way.

POWER REQUIREMENTS: 1,000 w, 110/120 v, ac, 50/60 cyc, single phase, or two Power Unit PE-75 (120 v, ac, 60 cyc, in combination with Panel BD-132-A.

PHYSICAL CHARACTERISTICS

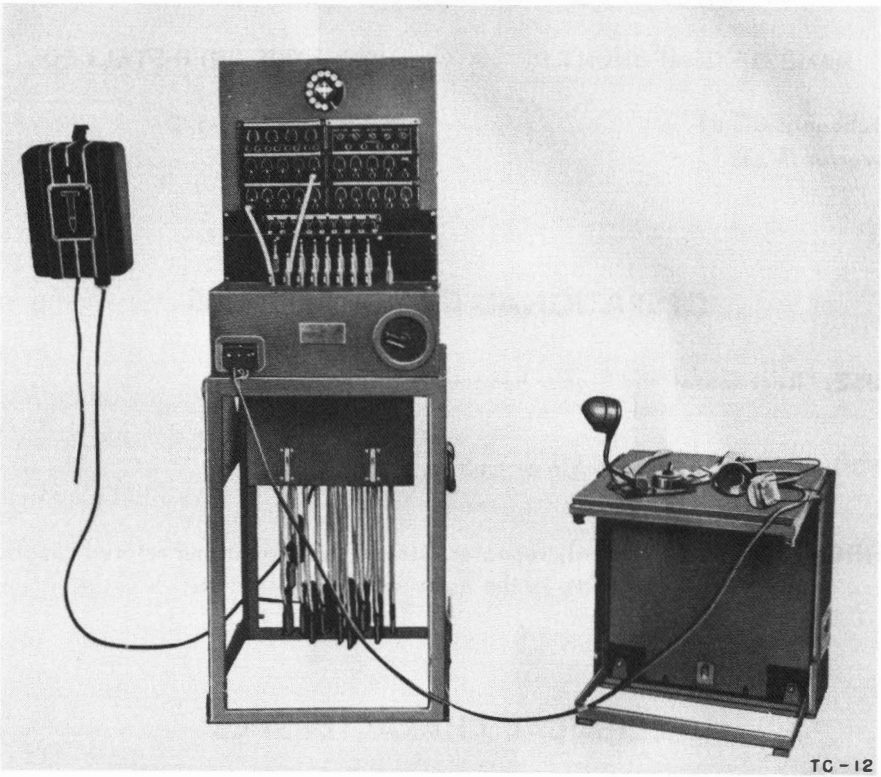
Telephone Central Office Set TC-10 weighs 7,300 pounds net. Packed for export shipment: total weight 10,593 pounds, total volume 543 cu ft, 13.6 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 23 Jan 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-12

TELEPHONE CENTRAL OFFICE SET



Telephone Central Office Set TC-12 is a complete, transportable or mobile, tactical telephone exchange for handling, originating, and terminating trunk and tie line traffic and is used in field wire and cable systems serving regimental and higher headquarters.

This equipment consists essentially of a single-position, nonmultiple, manually operated telephone switchboard and related components. Currently this equipment includes Headset HS-30, Chest Set H-18/GT, and Microphone T-45 rather than the head and chest set illustrated.

It can be used for handling magneto line calls and for originating and terminating manual common battery, automatic (dial), and ring-down tie line traffic.

Two Switchboards BD-91 of this equipment (equivalent to two Telephone Central Office Sets TC-12) can be connected and operated by one operator.

This central office is dry battery operated.

AN/TTC-TYPE

TC-12 : SERVICE TYPE NUMBER

TELEPHONE CENTRAL OFFICE SET

INSTRUCTION LITERATURE: TM 11-336

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 23 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Switchboard BD-91	25-1/2 x 19 x 17-1/2	215
1	Converter M-222	8 x 7 x 7	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Regimental and higher headquarters.

INSTALLATION: Ground; transportable or mobile.

CAN COMMUNICATE WITH: Terminal, repeater, station equipment and related apparatus operating in the same facility or system.

TECHNICAL CHARACTERISTICS

NUMBER OF SWITCHBOARD POSITIONS: 1

NUMBER AND TYPE OF CIRCUITS:

Number of cord circuits: 8 universal; 1 dial.
Number of line circuits: 20 local battery.
Number of trunk circuits: 4 common battery, manual, and dial.

POWER REQUIREMENTS: Six Batteries BA-30 to furnish transmitter current for operator's telephone set and night alarm buzzer.
Two Batteries BA-23 to furnish power to Converter M-222.

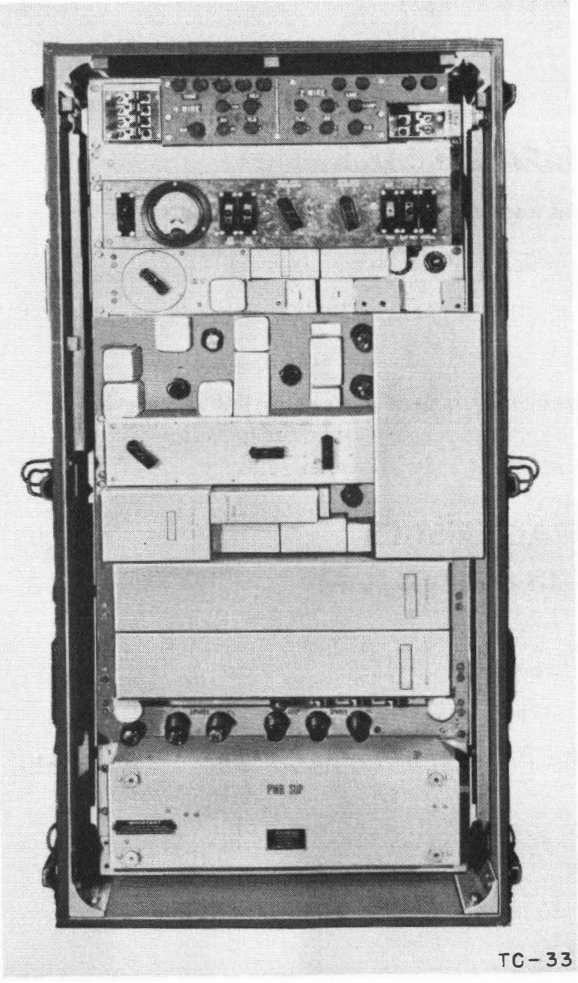
PHYSICAL CHARACTERISTICS

Telephone Central Office Set TC-12 weighs 234 pounds net, volume 5.27 cu ft. Packed for domestic shipment: total weight 415 pounds, total volume 16.27 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 14 Feb 52

AN/TTC-TYPE

SERVICE TYPE NUMBER: TC-33
CONVERTER SET



TC-33

Converter Set TC-33 is a transportable, voice-frequency, group-modulator equipment used for adapting four-wire transmission to two-wire facilities, which is used at division and equivalent headquarters, in field telephone facilities.

This equipment consists of panel-mounted apparatus contained in a steel cabinet and is normally installed adjacent to a telephone terminal or a repeater.

It is designed for use with a four-channel v-f carrier telephone system and can provide equivalent four-wire operation over an open wire pair.

It may be used to monitor at adjacent telephone terminals, and one of its composite circuits may be used as a signal and alarm circuit.

Equipment is used in conjunction with a repeater set and is powered by 115/230-v ac but has provision for transfer from ac to storage battery operation.

AN/TTC-TYPE

TC-33 :SERVICE TYPE NUMBER

CONVERTER SET

INSTRUCTION LITERATURE: TM 11-2008
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 14 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Converter CF-4	24 x 17 x 49	300
2	Battery BB-55 (each)	13 x 7 x 9-3/8	110
1	Case CS-111 (Battery)	Not Available	Not Available
1	Chest BC-5	28-7/8 x 18-1/8 x 12	" "
2	Ground Rod MX-148/G	Not Available	" "
	Wire W-2 (2 lbs)	" "	2
	Wire W-143 (250 lbs)	" "	250

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, communications zone, and zone of interior.

INSTALLATION: Ground transportable.

MAXIMUM SYSTEM LENGTH: 400 to 800 miles.

CAN COMMUNICATE WITH: Repeater and related system equipment composing the connecting facility.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Spiral-four and open wire.

FACILITIES AFFORDED: Four-wire convertible to two-wire.

FREQUENCY: 200 to 11,600 cps in one direction, and 20,850 to 32,250 cps in the other direction.

TYPE OF MODULATION: Am.

TYPE RINGING: Vf.

POWER REQUIREMENTS: 30 w, 115 / 230 v, 50/60 cyc, ac, or 12-v storage battery.

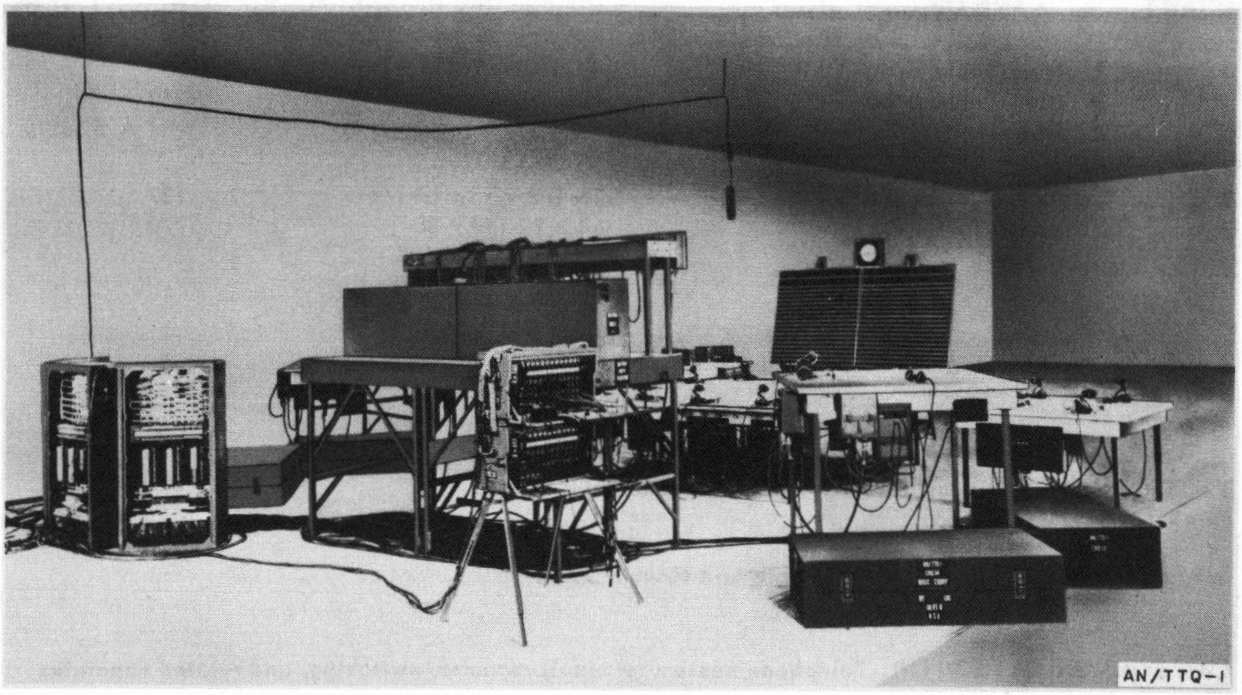
PHYSICAL CHARACTERISTICS

Converter Set TC-33 weighs 570 pounds net, volume 22 cu ft. Packed for export shipment: total weight 830 pounds, total volume 44 cu ft, 1.1 ship tons.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 6 Feb 52

AN/TTQ-1

OPERATIONS CENTER



Operations Center AN/TTQ-1 is a transportable filter and operations room which may be installed as a fixed or mobile control point in an air warning system. It is used at army or higher headquarters.

This operations center can be installed in permanent or semipermanent locations for filter, fighter control, and similar purposes.

It can be mounted in two 2-1/2-ton, 6 x 6 trucks and two 1-ton trailers to form a mobile or roving control center.

Provides facilities for receiving and plotting data on filter and operations boards, recording direction finding data on intercept boards, and resolving and relaying such data over communication lines.

Can be powered by the 6.3-kva power unit component or by an equivalent source.

AN/TTQ-1

OPERATIONS CENTER

INSTRUCTION LITERATURE: TM 11-438
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 6 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
4	Plotting Table FN-3/TTQ	47-3/4 x 47-3/4 x 28	255
4	Plotting Table FN-2/TTQ	46 x 12 x 28	255
2	Relay Unit RE-8/TTQ-1	19-3/4 x 8-1/2 x 5-1/2	Not Available
2	Relay Unit RE-24/TTQ	48 x 24 x 12	" "
2	Switchboard BD-72	28-1/2 x 15 x 10-1/4	137
2	Power Unit PE-197	44 x 22-1/4 x 30	770

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Support of army or higher headquarters.

INSTALLATION: Ground, fixed station or mobile.

CAN COMMUNICATE WITH: Telephone system terminal, repeater, switching, and related apparatus, and through these facilities to radio communication equipment operating in a fighter control system.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Conventional wire or radio.

POWER REQUIREMENTS: Power Unit PE-197 (6.3 kva, 120 v, 60 cyc).
40-amp-hr storage battery.

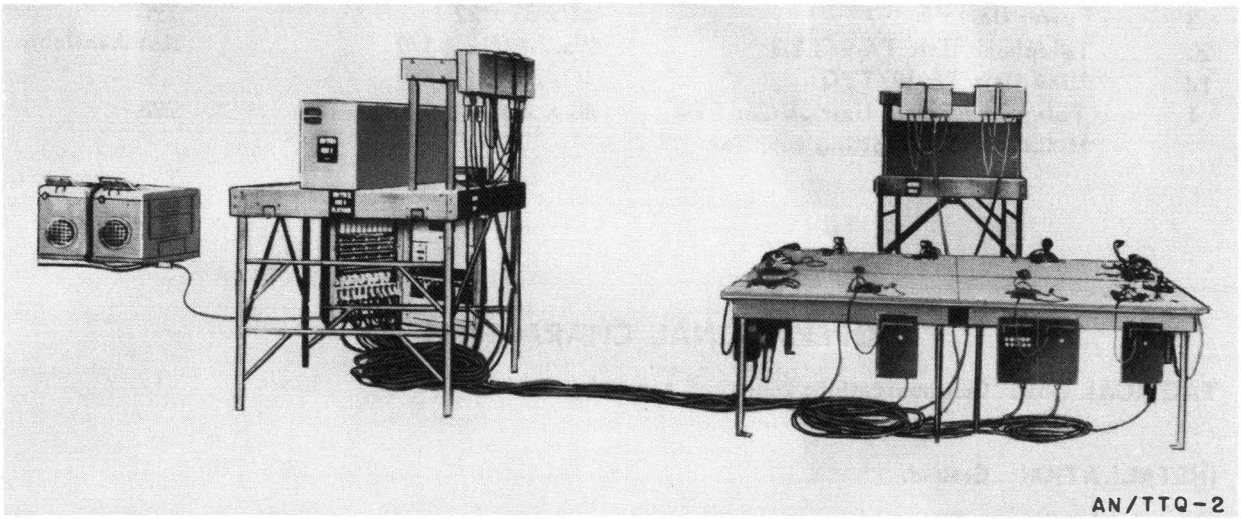
PHYSICAL CHARACTERISTICS

Operations Center AN/TTQ-1 packed for export shipment: total weight 6,500 pounds, total volume 260 cu ft, 6.5 ship tons. Shipped in 24 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 16 Jan 52

AN/TTQ-2

OPERATIONS CENTER



AN/TTQ-2

Operations Center AN/TTQ-2 is a complete, transportable assemblage of items which can be rapidly erected to serve as an antiaircraft operations room, an aircraft warning center or similar control center. It is designed to be used as the headquarters of an antiaircraft control system in the communications zone of a theater of operations and in the zone of interior.

This equipment consists essentially of telephone, line switching, lighting, and plotting equipment and includes items of furniture, a power supply, control components, and supplies.

Communication between this center and other military units or installations is maintained by radio and telephone facilities. Internal operational and administrative communication is conducted by means of an intercommunication system. Switchboard BD-95 is used to connect to incoming wire facilities and to switch internal telephones serving the center.

Power can be supplied by conventional or commercial sources of 115 v ac or by the power unit component.

AN/TTQ-2

OPERATIONS CENTER

INSTRUCTION LITERATURE: TM 11-448
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 16 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Relay Unit RE-24/TTQ-1	48 x 24 x 12	220
2	Power Unit PE-197	44 x 31 x 22	790
20	Telephone Unit TA-9/TTQ	9 x 7-5/8 x 4-1/2	Not Available
14	Line Unit TA-10/TTQ	4-1/2 x 5/8 x 9	" "
1	Telephone Power Unit SB-26/TTQ	48 x 24 x 12	298
	Miscellaneous plotting supplies		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zones and zone of interior.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Telephone system terminal, switching, repeater, and station apparatus, and through these facilities to remotely located radio communication equipment forming a fighter control system.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Conventional wire and radio circuits.

CONTROLS: Eight radio channel control circuits.

POWER REQUIREMENTS: Commercial 115-v, 60-cyc source or from Power Unit PE-197.

PHYSICAL CHARACTERISTICS

Operations Center AN/TTQ-2 measures 240 x 264 x 108 inches. Packed for export shipment: total weight 7,836 pounds, total volume 318.5 cu ft, 8 ship tons. Shipped in 18 packages.

STATUS: Std

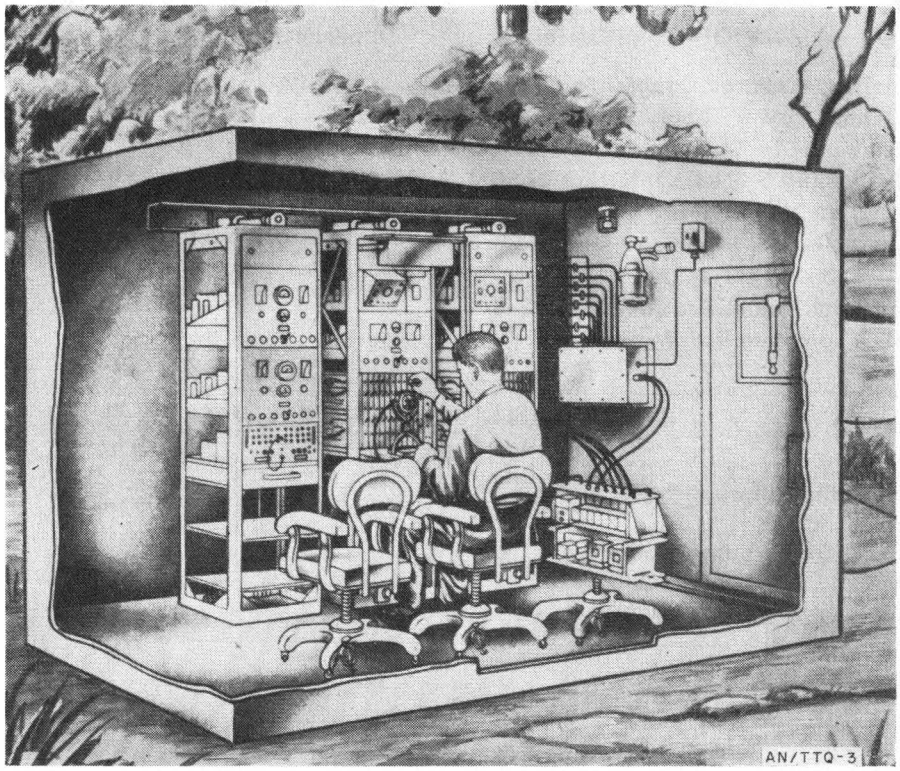
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

AN/TTQ–3

RADIO INTERCEPT CONTROL SET



Radio Intercept Control Set AN/TTQ–3 provides facilities for the supervision and control of a number of such equipment as Radio Intercept Group OA–596/TTQ–3. In a complete radio intercept system, the AN/TTQ–3 can supervise and control eight such groups.

Operating in such a system, it provides monitoring of radio signals that are intercepted by the operating positions located at the remote groups; local monitoring of intercepted radio signals; wire communication with all operating positions; establishment of conference calls between all intercept operator positions that are connected through one control position; and coordination of direction-finding operations.

The components of this set are grouped into three operating positions. Two identical control operator positions provide communication and monitoring facilities for supervisory personnel. The third position provides similar facilities for the coordination of direction-finding operations. Wiring within the AN/TTQ–3 is such that each control operator position controls and supervises half the remote groups; the df tracker position can receive signals from all intercept operator positions.

AN/TTQ-3

RADIO INTERCEPT CONTROL SET

INSTRUCTION LITERATURE: TM 11-5067

USING SERVICE: USA

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Holder, Antenna Coupler MT-1032/GR	24½ x 10 x 17½	19
1	Control-Power Supply Group OA-323/G		128
1	Shelter S-44/G	136 x 71 x 74	2,127
2	Switchboard, Radio Intercept Control SB-213/TTQ-3	20¼ x 23¼ x 71½	1,166
1	Switchboard, Direction Finder Control SB-214/TTQ-3	20¼ x 23¼ x 71½	145
2	Test Set, Telephone TS-725/TTQ-3		46

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Special applications.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

POWER REQUIREMENTS: 1,500 w, 115 v, 55/65 cy ac.

PHYSICAL CHARACTERISTICS

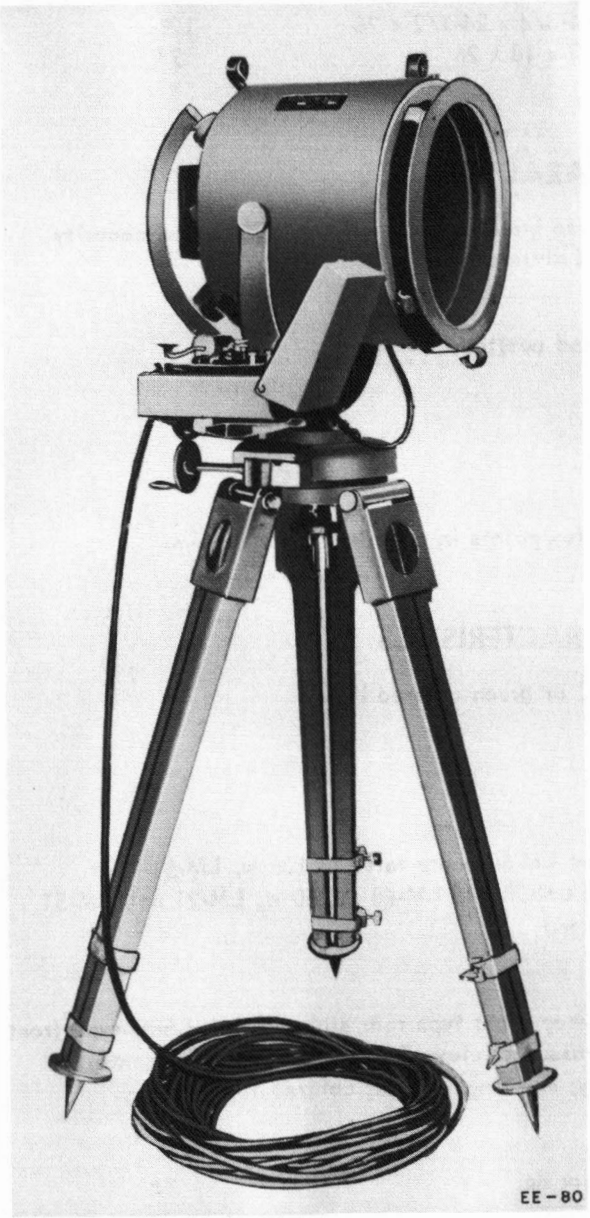
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		3,897			
DOMESTIC PACK:					
EXPORT PACK:		6,000			

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

AN/TVC-TYPE

SERVICE TYPE NUMBER: EE-80

SIGNAL LAMP EQUIPMENT



Signal Lamp Equipment EE-80 is a portable, a-c or d-c operated, tripod-mounted signaling lamp in metal housing, with telegraph key, and is used for signaling with white or colored lights in Morse code.

It is used in the field or harbor defense, coastal signal station and similar applications.

Equipment consists of lamp housing with sighting and control fittings, telescoping tripod, white, red, or green light filters, and accessories.

Signal Lamp Equipment EE-80 includes Signal Lamp M-124; Signal Lamp Equipment EE-80-A uses Signal Lamp M-283, these lamps are interchangeable.

Signal Lamp Equipment EE-80 has been superseded by Signal Lamp Equipment EE-80-A.

AN/TVC-TYPE

EE-80 :SERVICE TYPE NUMBER

SIGNAL LAMP EQUIPMENT

INSTRUCTION LITERATURE: TM 11-390

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army

DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Tripod LG-9	38-1/2 x 11	35
1	Chest CH-24	44-3/4 x 26-1/2 x 26	128
1	Signal Lamp M-124 or M-283, Filters, Lamps, Key J-47 etc.	30 x 18 x 26	74

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore signal stations, harbor defense installations, military police and security troops, infantry battalions, armored division traffic control.

INSTALLATION: Ground, portable, operates from fixed position.

APPROXIMATE RANGE (IN MILES): Day: - 7.
Night: - 45 .

CAN COMMUNICATE WITH: Observer stations, or relay points in a line-of-sight system.

TECHNICAL CHARACTERISTICS

NUMBER AND TYPE OF CHANNELS: 1 (white, red, or green colored light).

COMMUNICATION SPEED: Five wpm.

TYPE LIGHT SOURCE: Incandescent lamps. (Lamps LM-60-A are rated at 100 w; LM-51-A at 165 w; LM-20 and LM-60 at 250 w; LM-21 and LM-51 at 400 w.)

SPECIAL FEATURES: Lamp focusing adjustment, peep-sight type rear sight; crossed-hair-type front sight; gear adjustment mechanism for elevation and azimuthal alignment; telegraphic-type signaling key; masking louvres, colored light filters.

POWER REQUIREMENTS: 450 w of 110 ~ 120 v, ac or dc.

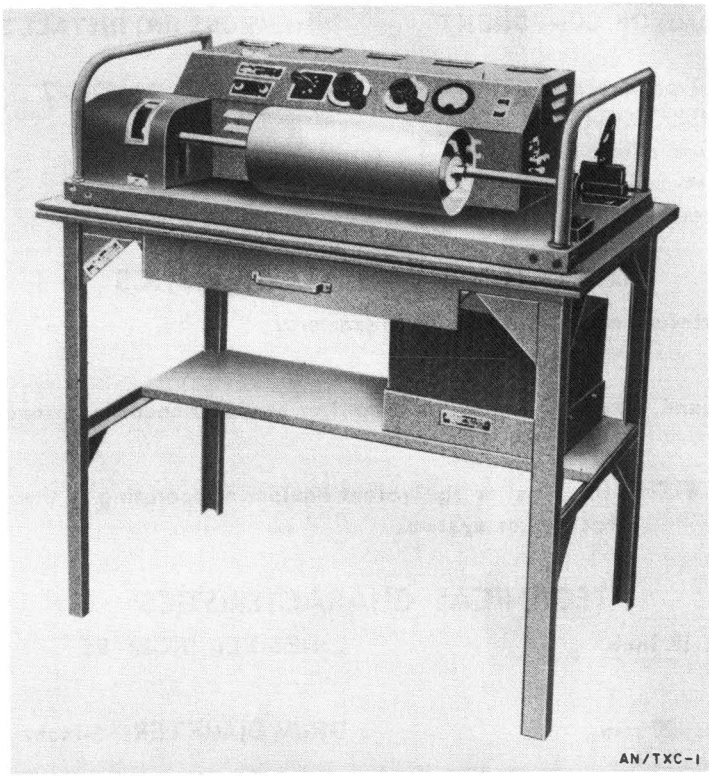
PHYSICAL CHARACTERISTICS

Signal Lamp Equipment EE-80 measures 60 x 60 x 60 inches, net weight 324 pounds, volume 4.0 cu ft.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 7 Feb 52

AN/TXC-1

FACSIMILE SET



Facsimile Set AN/TXC-1 is a transmitting and receiving equipment for communication of graphic material, such as documents, photographs, drawings, and charts, over conventional communication channels, and is used at division and higher headquarters.

This equipment consists essentially of a rotating drum and optical system and related control mechanisms which can be synchronized with transmitting or receiving facsimile sets operating on the same connecting facility.

This set can be used in wire lines by coupling directly to such facilities through input and output terminals provided on the equipment, or through a coil magnetically coupled to the receiver of a handset, or inductively to certain types of wire lines. It can also be used in radio circuits to produce an a-m signal by means of Converter CV-2/TX to operate on subcarrier frequencies; and by means of this converter in conjunction with Exciter Unit 0-5/FR to operate in frequency shift transmission.

Power requirements are: 250 w of 115-v ac.

AN/TXC-1

FACSIMILE SET

INSTRUCTION LITERATURE: TM 11-2258
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 7 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Facsimile Transceiver TT-1/TXC-1	40-1/2 x 15-1/2 x 22-1/2	218
1	Table MT-252/TXC-1	40 x 26 x 20	137
1	Rectifier Power Unit PP-86/TXC-1	17-1/2 x 15 x 15-1/4	89
1	Photographic Equipment PH-549/TXC-1 and spare parts	40 x 26 x 26	339

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division, corps or higher headquarters.

INSTALLATION: Ground, fixed station in permanent or semipermanent locations.

CAN COMMUNICATE WITH: Identical or equivalent equipment operating in the same connecting facility or system.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 18 inch.

LINES PER INCH: 96.

TRANSMISSION TIME: 20 min.

DRUM DIAMETER: 6-inch.

DRUM SPEED: 60 rpm.

PHASING SIGNAL: Pulse.

TYPE OF RECORDING: Direct, or photographic positive or negative.

TYPE OF MODULATION: The set itself is amplitude modulation. The frequency shift is in Converter CF-2/TX and is required only when the facsimile set is used on radio circuits.

TYPE TRANSMISSION FACILITIES REQUIRED: Balanced open wire, cable, or equal.

POWER REQUIREMENTS: 250 w at 100 to 130 v, 50/65 cyc.

PHYSICAL CHARACTERISTICS

Facsimile Set AN/TXC-1 weighs 190 pounds net, volume 10 cu ft. Packed for export shipment: total weight 783 pounds, total volume 39 cu ft, 1 ship ton.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/TXC–TYPE

CV–2( )/TX

CONVERTER

NO PHOTOGRAPH AVAILABLE

Converter CV–2( )/TX is used with Facsimile Equipment RC–120( ) to eliminate the effects of fading of facsimile signals sent over a regular am radio circuit.

This equipment consists of a converter, an indicator, cables, and accessories. It converts am facsimile signals to fm signals in the voice-frequency band. These signals are reconverted at the receiving end to am facsimile signals. A single converter is used with a facsimile transceiver for both sending and receiving.

The CV–2/TX and CV–2C/TX are functionally identical.

AN/TXC–TYPE

CV–2( )/TX

CONVERTER

INSTRUCTION LITERATURE: TM 11–2252A; TM 11–4021

USING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For CV–2C/TX:		
1	Indicator ID–176/GX	3⅝ x 9⁹⁄₁₆ x 8⅝	3.1

(For complete list of components, see appropriate supply manuals.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Converts am facsimile to fm voice.

POWER REQUIREMENTS: 100/130 v, 54/65 cy ac; 5.6 to 6.3 v dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: CV–2C/TX	9½ x 11⁹⁄₁₆ x 13⅝	35	1.1		
DOMESTIC PACK:					
EXPORT PACK: CV–2C/TX		55	3.7		1

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 9 Feb 52

AN/TXC-TYPE

SERVICE TYPE NUMBER: RC-120

FACSIMILE EQUIPMENT

Facsimile Equipment RC-120 is a transmitting and receiving set used for communicating graphic copy. It will receive positive and negative photographs, printed or written copy, and similar material on film or direct on teledeltos paper which requires no processing. It is used in fixed stations over communication circuits serving corps and higher headquarters.

This equipment consists of a receiver-transmitter unit, power supply, and associated accessories. A portable dark room tent is included for field use.

Operates on conventional a-c power or storage batteries.

AN/TXC-TYPE	INSTRUCTION LITERATURE: TM 11-375-B
RC-120 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FACSIMILE EQUIPMENT	USING SERVICE : Army
	DATE OF THIS SHEET : 9 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Facsimile Transceiver FX-1	22 x 12 x 10	60
1	Power Supply PE-150	8-3/4 x 11-1/2 x 14	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps and higher headquarters.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Identical or equivalent equipment or apparatus, operating in the connecting facility or system which can be adequately synchronized with this equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: Record direct: 6-1/4 x 7-3/8 inches.
Record photo: 6-3/4 x 7-3/8 inches.

TRANSMISSION TIME: Direct, and photo transmission: 7 minutes.

DRUM SPEED: 90 rpm.

TYPE OF RECORDING: Direct (teledeltos); photographic (positive and negative).

PHASING SIGNAL: Phase pulses.

TYPE OF MODULATION: Am.

TYPE TRANSMISSION FACILITIES REQUIRED: Regular voice communication lines, and/or radio terminals.

POWER REQUIREMENTS: 100 - 130 v, 50/60 cyc, ac; or, 6 v, dc (storage battery).

PHYSICAL CHARACTERISTICS

Information on Facsimile Equipment RC-120 not available.

STATUS: S/Std (–41,.–41A); Std (–41B)

CLASSIFICATION OF EQUIPMENT: Unclassified

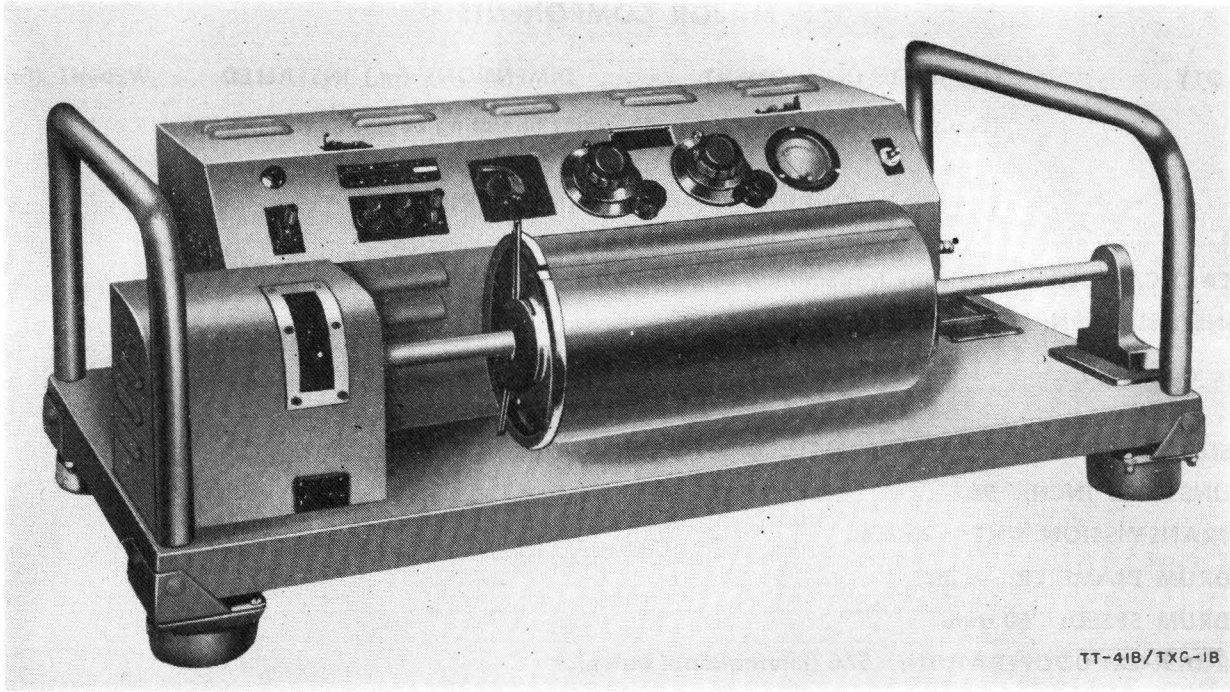
PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/TXC–TYPE

TT–41( )/TXC–1B

FACSIMILE TRANSCEIVER



Facsimile Transceiver TT–41( )/TXC–1B is an electromechanical-optical facsimile set of the revolving drum type used for transmission and reception of maps, photographs, sketches, or text between fixed stations, over point-to-point radio or wire communication channels.

The major differences between the TT–41/TXC–1B, TT–41A/TXC–1B, and TT–41B/TXC–1B are those of replaceable parts.

Radio Modulator MD–168/UX is required for audio frequency-shift radio transmission; Frequency Shift Converter CV–172/U, for radio reception; and Keyer Adapter KY–44( )/FX and Frequency Shift Keyer KY–58/GRT or KY–75/SRT, for carrier-shift radio transmission.

AN/TXC–TYPE

TT–41( )/TXC–1B

FACSIMILE TRANSCEIVER

INSTRUCTION LITERATURE: NAVSHIPS 91068A

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Page copy transmitting and receiving.

INSTALLATION: Ground, transportable.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 12 x 19⅙ in. (–41); 12 x 18^{11}⁄$_{16}$ in. (–41A, –41B).

LINES PER INCH: 96.

TRANSMISSION TIME: 20 min.

DRUM DIAMETER: 6 in.

DRUM SPEED: 60 rpm.

INDEX OF COOPERATION: 576 (international index).

TYPE OF RECORDING: Direct or photographic.

PHASING SIGNAL: Pulse (1/sec).

TYPE MODULATION: Am, 1.8-kc carrier freq on wire lines.

TYPE TRANSMISSION FACILITIES REQUIRED: Conventional am (voice) radio xmtr, rcvr converter w/exciter, and cw radio xmtr and rcvr or wire transmission facilities.

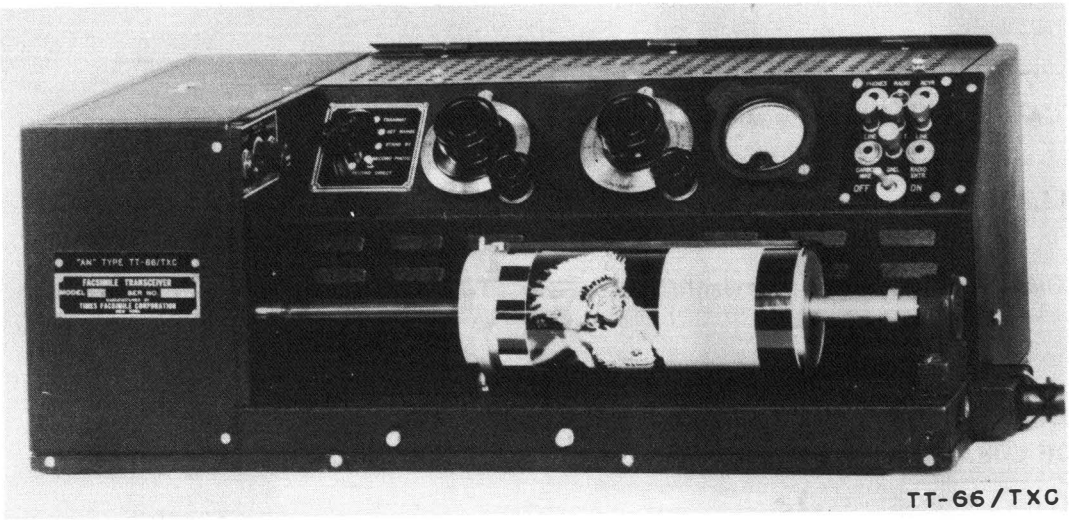
OUTPUT VOLTAGE LEVEL AND IMPEDANCE: 0 to +25 dbm, 600 ohms.

POWER REQUIREMENTS: 250 w, 100 to 130 v, 50/65 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:					
TT–41/TXC–1B	22½ x 35 x 18½	85			
TT–41A or TT–41B/TXC–1B	12¼ x 34⅝ x 17^{13}⁄$_{16}$	70			
DOMESTIC PACK:		218	12.7		1
EXPORT PACK:					

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	AN/TXC-TYPE AN/COMP TYPE NUMBER: TT-66/TXC FACSIMILE TRANSCEIVER



TT-66/TXC

Facsimile Transceiver TT-66/TXC is a transportable, general purpose transmitting and receiving unit for communication by means of photographic, written, or drawn material.

It consists essentially of a commercial (Times Facsimile Corp. Model CRA) equipment and is similar to Signal Corps Facsimile Transceiver FX-1, but is designed for two-speed operation.

This equipment is used with Rectifier Power Unit PP-86/TXC-1. It is not designed to operate from a battery power supply.

AN/TXC-TYPE	INSTRUCTION LITERATURE: Not Available
TT-66/TXC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
FACSIMILE TRANSCEIVER	USING SERVICE : Navy
	DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)

(Equipment consists only of a single major operating component).

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore communication stations.

INSTALLATION: Shipborne or shore.

CAN COMMUNICATE WITH: Facsimile Transceiver TT-66/TXC-1 and equivalent equipment.

TECHNICAL CHARACTERISTICS

SIZE OF COPY: 7 x 8-1/2 inches.

LINES PER INCH: 96.

TRANSMISSION TIME: 14 min. or 7 min.

DRUM DIAMETER: 2-3/4 inches.

DRUM SPEED: 45 or 90 rpm.

INDEX OF COOPERATION: 264.

TYPE OF RECORDING: Photographic or direct ("Teledeltos").

PHASING SIGNAL: (Prior to copy transmission).

TYPE OF MODULATION: Am (1800 cps carrier frequency).

TYPE TRANSMISSION FACILITIES REQUIRED: Wire or radio circuit capable of carrying voice (1200-2400 cps, compensated bandwidth).

POWER REQUIREMENTS: PP-86/TXC-1 required.

VOLTAGE LEVEL AND IMPEDANCE:
Output: 0 to +26 dbm (600 ohms).
Input: -45 to 0 dbm (600 ohms).

PHYSICAL CHARACTERISTICS

Facsimile Transceiver TT-66/TXC weighs 60 pounds net, volume 2 cu ft.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

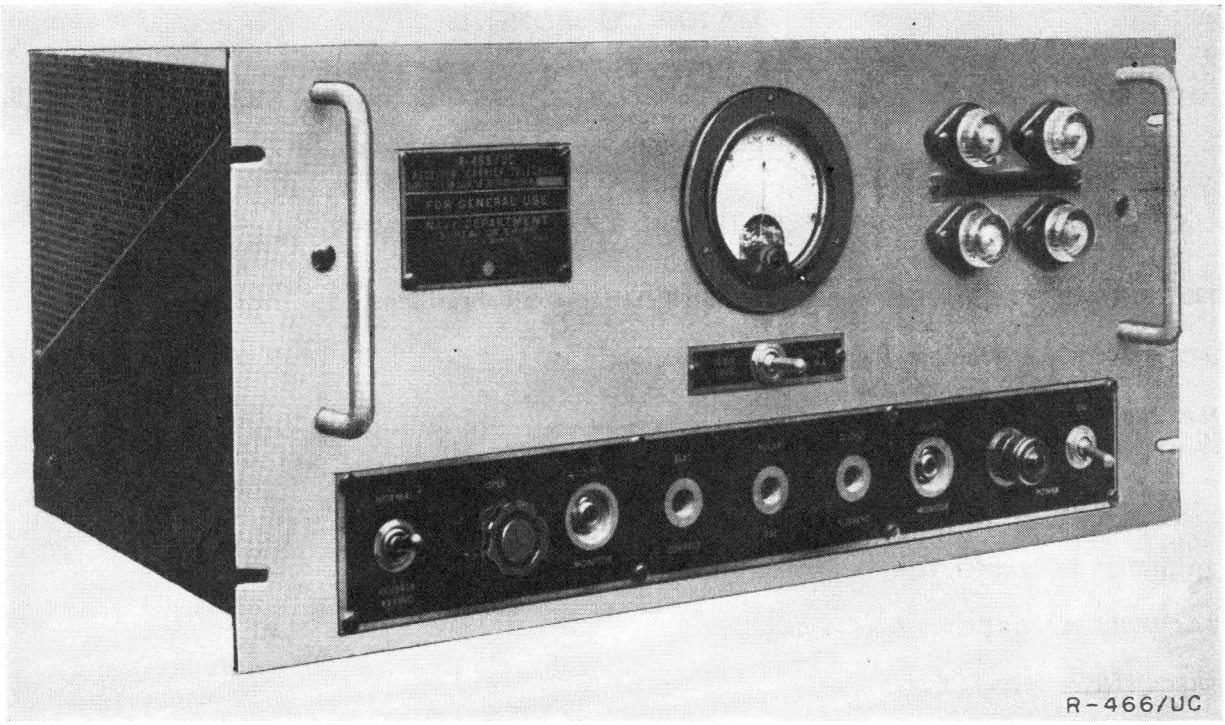
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/UCA—TYPE

R–466/UC

RECEIVER, CARRIER TELEGRAPH



Carrier Telegraph Receiver R–466/UC is capable of accepting an on-off tone telegraph signal and emitting a corresponding dc signal for use with such carrier terminal equipment as the AN/FCC–3.

This equipment can key a 20- to 60-ma neutral telegraph loop with battery supplied either from the receiver or the loop. It also may be used to key a 30-ma polar loop with battery supplied from the receiver.

AN/UCA–TYPE

R–466/UC

RECEIVER, CARRIER TELEGRAPH

STRUCTION LITERATURE: NAVSHIPS 91612

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operation with multichannel carrier terminal facilities.

INSTALLATION: Shipboard or shore, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION:

FACILITIES AFFORDED: Tone keying.

FREQUENCY: 400 to 8,000 cy.

TYPE MODULATION: Am.

TYPE RINGING:

POWER REQUIREMENTS: 150 w, 115/230 v, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	19 x 14 9/16 x 8	36.5	1.38		
DOMESTIC PACK:		94.5	9.25		1
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

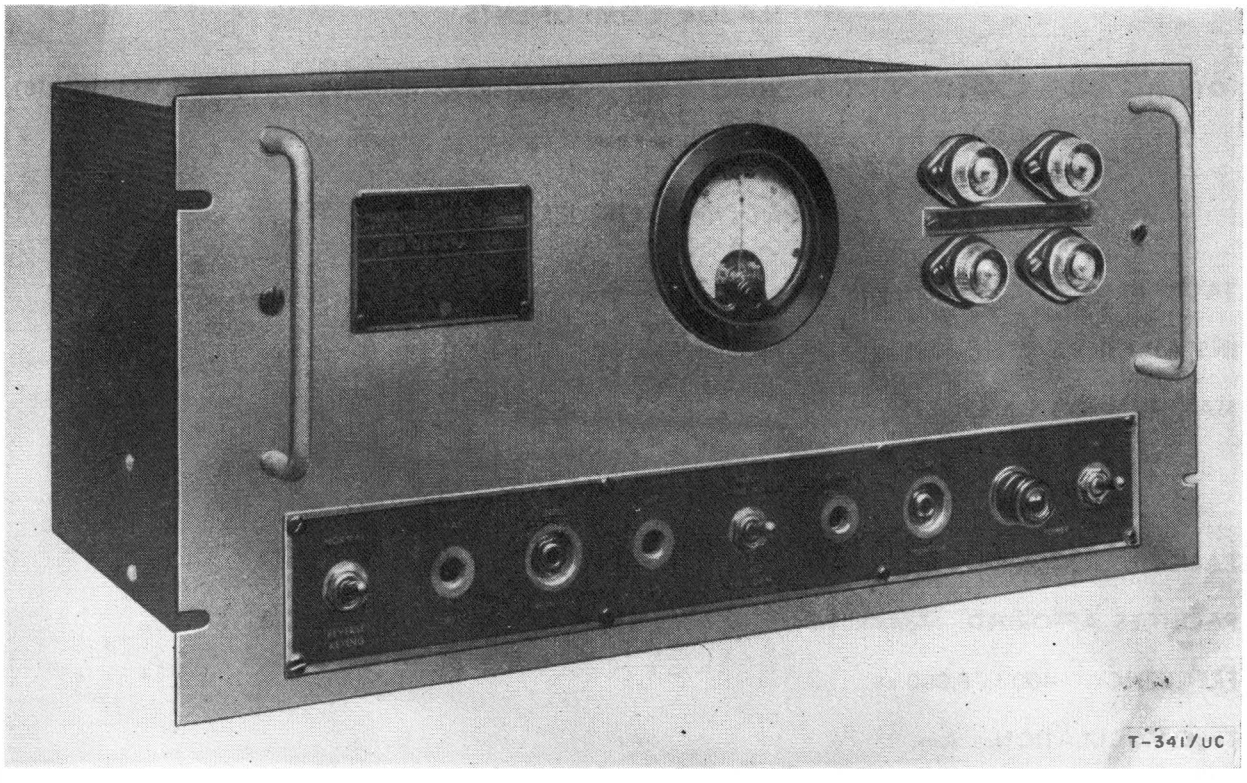
PREPARING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

AN/UCA—TYPE

T–341/UC

TRANSMITTER, CARRIER TELEGRAPH



Carrier Telegraph Transmitter T–341/UC is capable of accepting a dc telegraph signal and emitting a corresponding on-off tone signal for use with such carrier telegraph terminals as the AN/FCC–3.

This equipment can be keyed from a 20- to 60-ma neutral telegraph loop with battery supplied either from the transmitter or the loop. It is also capable of being keyed from a 30-ma loop with battery supplied from the loop.

AN/UCA–TYPE

T–341/UC

TRANSMITTER, CARRIER TELEGRAPH

INSTRUCTION LITERATURE: NAVSHIPS 91663

USING SERVICE: USN

DATE OF THIS SHEET: 11 May 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Operation with multichannel carrier terminal facilities.

INSTALLATION: Shipboard or shore, fixed station.

MAXIMUM SYSTEM LENGTH:

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION:

FACILITIES AFFORDED: Tone keying.

FREQUENCY: 400 to 8,000 cy.

TYPE MODULATION: Am.

TYPE RINGING:

POWER REQUIREMENTS: 70 w, 115/230 v, 50/60 cy ac.

PHYSICAL CHARACTERISTICS

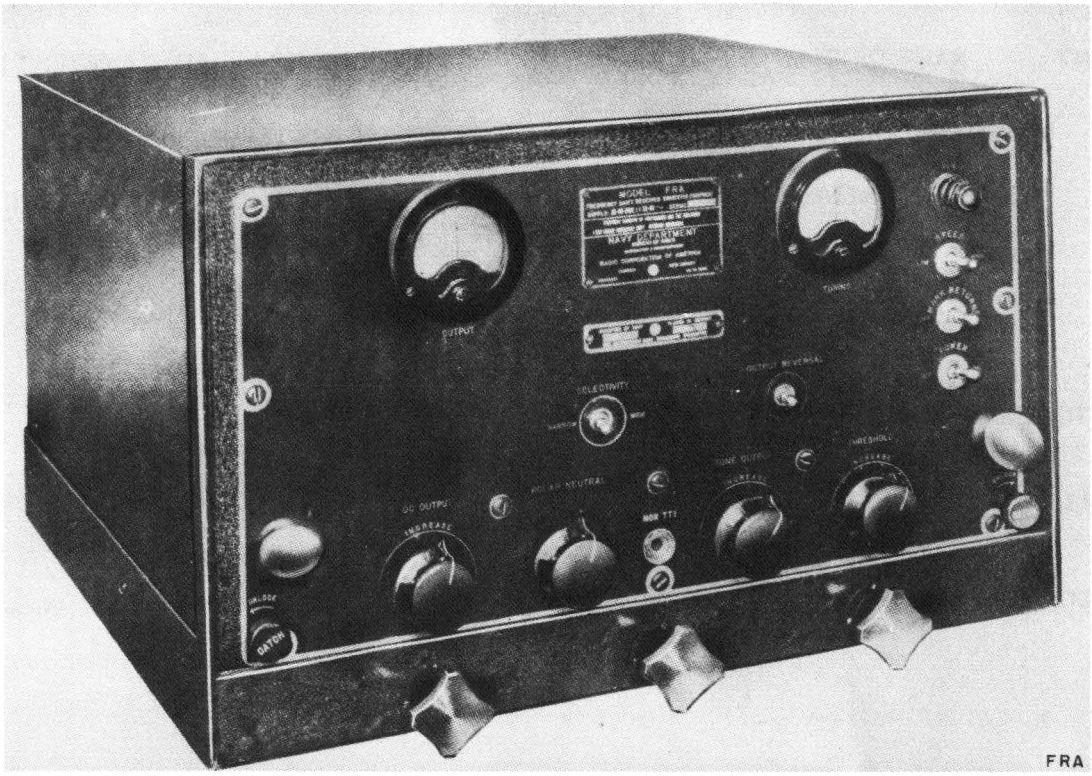
	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	19 x 14 9/16 x 8 23/32	34.5	1.38		
DOMESTIC PACK:		92.5	9.25		1
EXPORT PACK:					

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UGA-TYPE

SERVICE TYPE NUMBER: FRA

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT



Frequency Shift Receiver Converter Equipment FRA is a single channel, i-f type set for translating radiotelegraph characters and furnishing d-c mark-and-space pulses for operation of a teletypewriter when used in conjunction with Radio Receiving Equipments RBB and RBC.

By means of Panoramic Coupling Kit 10563, signal voltage is coupled from the last i-f tube of the receiver equipment. It is used with associated receiver equipment to provide ship-to-shore and point-to-point radiotelegraph or radioteletype reception.

This converter unit is designed to operate on any magnitude of shifts from 100 $\pm$ 50 cyc to 1,000 $\pm$ 500 cyc. The mark-and-space carrier frequency most commonly received is, respectively, 425 cps above and 425 cps below the assigned frequency of the transmitter.

A mark-return circuit is embodied in the unit to prevent the output from remaining on space for a period longer than 200 milliseconds.

The equipment is designed for polar or neutral operation of the teletypewriter.

AN/UGA-TYPE

FRA :SERVICE TYPE NUMBER

FREQUENCY SHIFT RECEIVER CONVERTER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,613
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Receiver Converter CRV-35122	11-3/4 x 19-3/4 x 18-1/4	98
1	Panoramic Coupling Kit, CN-10563	4 x 3 x 2	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.4.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift keying.

POWER OUTPUT: 60 ma dc for neutral or 25 ma dc for polar; into load impedance of 130 to 1,800 ohms.

POWER REQUIREMENTS: 135 w, 110 ~ 120 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

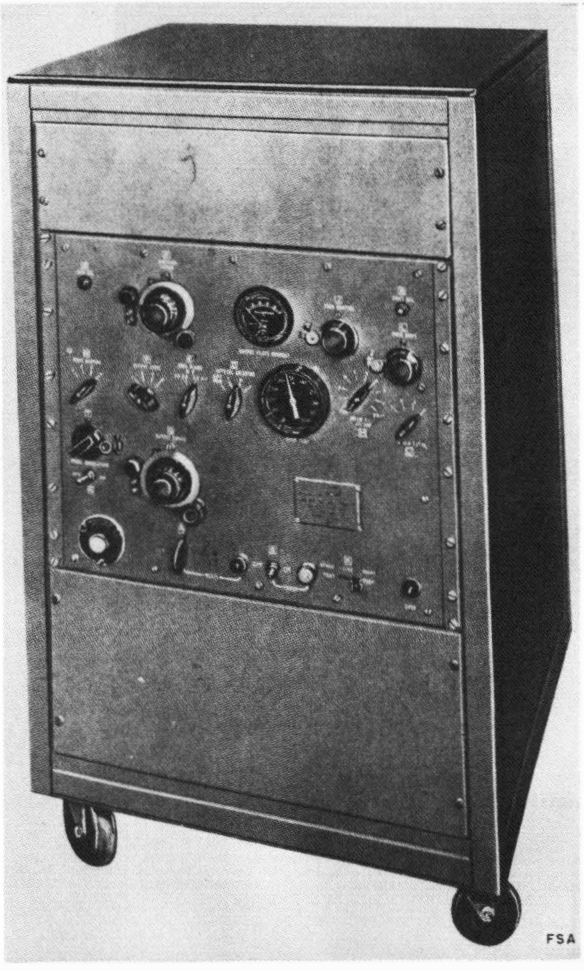
Frequency Shift Receiver Converter Equipment FRA measures 11-3/4 x 19-3/4 x 18-1/4 inches, net weight 175 pounds, volume 2.44 cu ft. Packed for domestic shipment: total weight 335 pounds.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 15 May 52

AN/UGA-TYPE

SERVICE TYPE NUMBER: FSA, FSA-a, -b

FREQUENCY SHIFT KEYER EQUIPMENT


FSA

Frequency Shift Keyer Equipments FSA, FSA-a, and FSA-b are auxiliary keying units used with shipborne or shore-based transmitters in long distance h-f telegraph systems to cause a radio transmitter to emit one frequency for a mark signal and a different frequency for a space signal (rather than to interrupt a single-frequency carrier). This two-frequency method of operation is less subject to distortion from radio fading and thus results in improved transmission. The keyer output is connected to the power amplifier of a radio transmitter. The FSA-a, and -b have provisions for facsimile operation as well as frequency-shift keying.

The keyer input frequency is 200 kc lower than the r-f output frequency. This frequency is obtained either from a self-contained crystal oscillator with three-preset channels or from an external oscillator which may be the oscillator of the associated transmitter.

Input telegraph signals up to 600 wpm can be handled. Signals may originate from a telegraph key, a teletypewriter keyboard, or a tape transmitter.

The equipment is mounted in a mobile cabinet for land installation, in a shock-resisting cabinet when used aboard ship, or inside the associated radio transmitter if space is available.

AN/UGA-TYPE

FSA, FSA-a, -b :SERVICE TYPE NUMBER

FREQUENCY SHIFT KEYER EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,754
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 15 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Frequency Shift Keyer CW-35060 *	16 x 19 x 18	130
1	Mobile Cabinet CW-10389	37 x 22 x 24	165
	or Shock Resisting Cabinet CW-10390	20 x 20 x 25	150

* Applies to FSA.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, or ground.

CAN COMMUNICATE WITH: This is signal-modifying equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.0 - 6.7 in 2 bands:

Band 1: 1.0 - 2.6. Band 2: 2.6 - 6.7.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: FSA: Frequency shift.
FSA-a, -b: Frequency shift, facsimile.

POWER OUTPUT: 20 v across 75 ohm.

POWER REQUIREMENTS: 200 w, 115 / 230 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Keyer Equipments FSA, FSA-a, -b measure 37 x 22 x 24 inches, net weight 445 pounds, volume 11.3 cu ft. Packed for domestic shipment: total weight 752 pounds, total volume 42 cu ft, 1.5 ship tons.

STATUS: S/Std (–47, –48); Std (–47A, –48A)

CLASSIFICATION OF EQUIPMENT: Unclassified

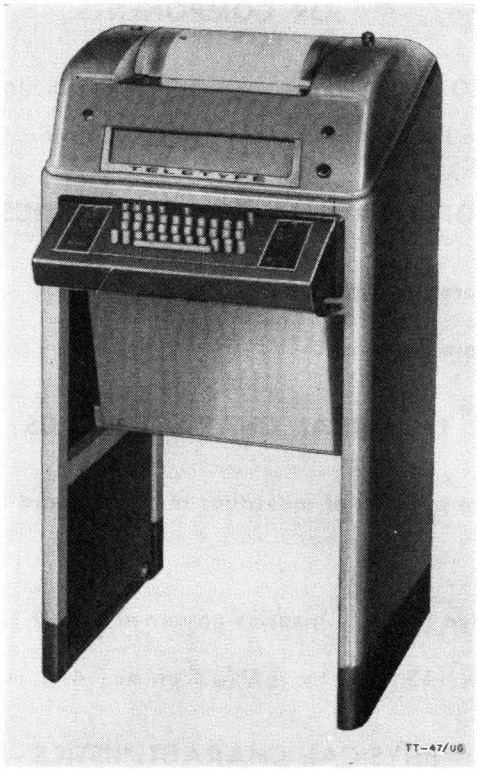
PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/UGC–TYPE

TT–47( )/UG, TT–48( )/UG

TELETYPEWRITER



Teletypewriters TT–47( )/UG and TT–48( )/UG are used for transmission or reception over wire or radio communication circuits.

These teletypewriters are identical except for the type of motor used. The TT–47/UG and TT–47A/UG use a synchronous motor (PD–17/U or PD–17A/U); the TT–48/UG and TT–48A/UG use a series-governed motor (PD–18/U). The later models of these teletypewriters have an increased number of connectors in the terminals, a new and improved keyboard, and an increase to 85 characters per line, as well as various other electrical and mechanical improvements.

These equipments are similar to Teletypewriters TT–69( )/UG and TT–70( )/UG except for the type of cabinet supplied.

AN/UGC—TYPE

TT—47( )/UG, TT—48( )/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 91713

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of messages recd; keyboard typing of messages xmtd.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (–47( )); series-governed (–48( )).

POWER REQUIREMENTS: 65 w, 115 v, 60 cy ±5%, 1 ph ac (–47).

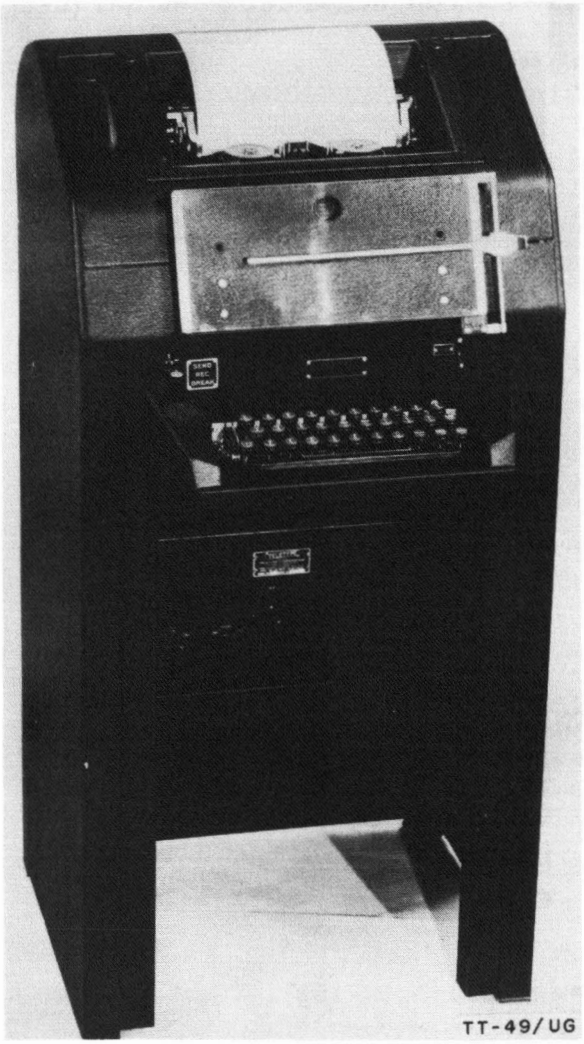
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	40½ x 20½ x 18¼	130			
DOMESTIC PACK:		315	24.09	.6	1
EXPORT PACK:					

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 8 May 52

AN/UGC-TYPE

AN/COMP TYPE NUMBER: TT-49/UG, TT-50/UG
TELETYPEWRITER



TT-49/UG

Teletypewriters TT-49/UG and TT-50/UG are page-printing teletypewriter station equipments used on shipboard, or at shore stations. They type English characters; 72 characters per line and are identical except for the motor unit component of each.

They are essentially similar to the commercial (Teletype Corp Model 15) teletypewriter with combined base-keyboard but have been modified for shipboard operation by use of aluminum side frames, a new carriage return assembly, and lighter weight carriage parts.

As a result of these modifications, they operate satisfactorily while tilted as much as 45 degrees.

AN/UGC-TYPE

TT-49/UG, TT-50/UG :AN/COMP TYPE NUMBER

TELETYPEWRITER

INSTRUCTION LITERATURE: NavShips 91128
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET: 8 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit BP149/247	Not Available	Not Available
1	Base-Keyboard BBK200BJ/LD	" "	" "
1	Motor Unit MU40	" "	" "
1	Apparatus Cabinet AC203BJ	" "	" "
1	Gear Set 80437	" "	" "
1	Set of Equipment Spares 106965	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Terminal, repeater, and related equipment operating in the connecting facility or system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Break-in, Remote motor stop, Bell, Blank, Shift and unshift, Space-repeat, Unshift on-space, Line feed, Carriage Return.

OPERATING SPEED: 368 opm; approximately 61 wpm.

MOTOR CHARACTERISTICS: TT-49/UG: Synchronous motor unit, for regulated power supply.
TT-50/UG: Series, governor-controlled, for unregulated power supply.

POWER REQUIREMENTS: TT-49/UG: 175 w, 115 v, 60 ($\pm$ 0.05) cyc, 1 phase, ac.
TT-50/UG: 175 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Teletypewriters TT-49/UG and TT-50/UG not available.

STATUS: S/Std (–69, –70); Std (–69A, –70A)

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

AN/UGC–TYPE

TT–69( )/UG, TT–70( )/UG

TELETYPEWRITER

Teletypewriters TT–69( )/UG and TT–70( )/UG are used for transmission or reception over wire or radio communication circuits.

These teletypewriters are identical except for the types of motors used. The TT–69/UG and TT–69A/UG use a synchronous motor; the TT–70/UG and TT–70A/UG use a series-governed motor. The later models of these teletypewriters have an increased number of connectors in the terminals, a new and improved keyboard, and an increase to 85 characters per line, as well as various other electrical and mechanical improvements.

Except for the type of cabinet supplied, these equipments are similar to Teletypewriters TT–47( )/UG and TT–48( )/UG.

AN/UGC–TYPE

TT–69( )/UG, TT–70( )/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 91713

USING SERVICE: USN

DATE OF THIS SHEET: 27 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)

(For complete list of major components, see instruction literature.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; ground.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Page printing of messages recd; keyboard typing of messages xmtd.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (–69( )); series-governed (–70( )).

POWER REQUIREMENTS: 65 w, 115 v ±10%, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	15½ x 20½ x 18¼	119	7.36		
DOMESTIC PACK:		250	18.88		
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/UGC–TYPE

TT–176/UG

TELETYPEWRITER

Teletypewriter TT–176/UG is a general purpose transmitting and receiving page printer used to exchange typewritten messages between two or more ships (or stations) that are connected via a radio (or wire) telegraph channel.

The operating speed of this equipment is 60 words per minute but can be increased to 75 or 100 words per minute by replacing appropriate gears (not supplied).

AN/UGC-TYPE

TT-176/UG

TELETYPEWRITER

INSTRUCTION LITERATURE: NAVSHIPS 92361

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard; shore installations.

INSTALLATION: Shipborne; shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS:

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 65 w, 115 v, 60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	12 x 17 x 24	81	6.9		
DOMESTIC PACK:		230	19.7		
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 20 June 1956

AN/UGR–TYPE

CV–62/U

CONVERTER, FREQUENCY SHIFT

NO PHOTOGRAPH AVAILABLE

Frequency Shift Converter CV–62/U is used to convert af, fsk signals or make-and-break teletypewriter signals into dc output pulses for the operation of a teletypewriter.

It is intended for use at the receiving terminal of a radioteletype system and is arranged for rack-and-panel mounting.

AN/UGR–TYPE

CV–62/U

CONVERTER, FREQUENCY SHIFT

INSTRUCTION LITERATURE:

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 20 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS(in.) INSTALLED	WEIGHT (lb)
	(Equipment consists of a single major operating component.)		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

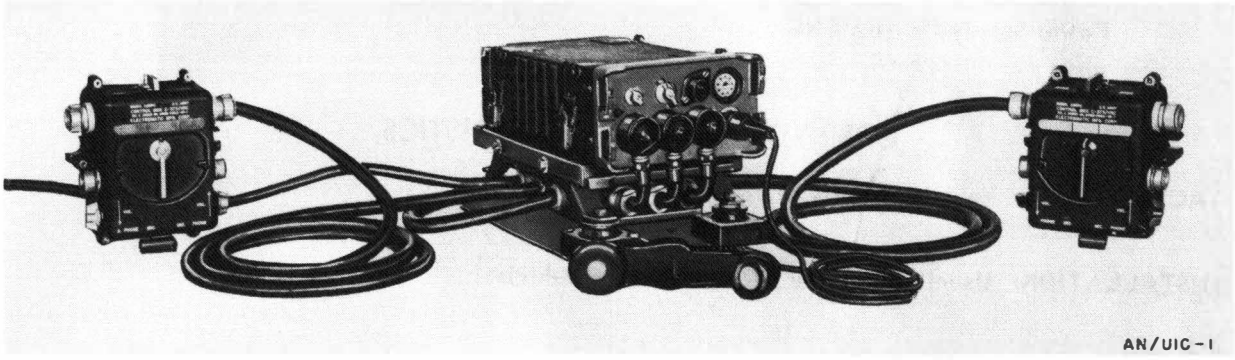
TYPE OF COMMUNICATION CIRCUITS: 1- or 2-chan diversity for fsk sig; ctr freq of 2,500 cy w/shifts of 100 to 1,100 cy.
1- or 2-chan diversity for make-and-break sig in the range of 500 to 5,000 cy.
1-chan (using ext discriminator) w/ctr freq bet. 850 and 5,000 cy.

POWER REQUIREMENTS: 130 va, 115 v ±10%, 50/60 cy, 1 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	10½ x 13½ x 19	60	1.6		
DOMESTIC PACK:					
EXPORT PACK:		155	12.1		1

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	**AN/UIC-1** INTERCOMMUNICATION SET



AN/UIC-1

Intercommunication Set AN/UIC-1 is a vehicular interphone equipment used to provide two-way communication in inclosed or armored vehicles.

This equipment consists of an audio power amplifier, two interphone control stations, and power components plus accessories, depending upon the type of vehicle in which the system is installed. An additional control box can be added to the system.

This equipment provides control of one or two radio sets installed and operated within the vehicle equipped with this interphone system. It is designed for use in conjunction with the integrated series of radio equipment.

It is powered from vehicular 12-v or 24-v storage batteries through appropriate power supply components.

AN/UIC-1

INTERCOMMUNICATION SET

INSTRUCTION LITERATURE: TM 11-2643
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 22 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AF Amplifier AM-65/GRC	4-1/4 x 12-7/8 x 7-7/8	10.0
2	Control Box C-375/VRC	6-13/16 x 3-1/4 x 7	3.25
1	Mounting MT-300/GR	3-1/16 x 13 x 8-5/16	10.0
1	Power Supply PP-281/GRC or Power Supply PP-282/GRC	4-1/4 x 5-3/4 x 2-15/16	5.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Vehicles of armored and artillery units.

INSTALLATION: Usually installed in large armored vehicles.

CAN COMMUNICATE WITH: Radio equipment and stations of the vehicle in which it provides interphone facilities.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Two or more stations. Each station can accommodate two operators; amplifier can accommodate another. Amplified signals supplied to all positions.

TYPE CONTROLS: Volume selector switch (on amplifier).
Two volume switches, a station selector switch, and a RADIO TRANS switch (on control box).

POWER OUTPUT: 0.35 to 1.8 w depending on input signal and channel.

POWER REQUIREMENTS: 3.85 amp at 12 v (using Power Supply PP-281/GRC) or
2.4 amp at 24 v (using Power Supply PP-282/GRC).

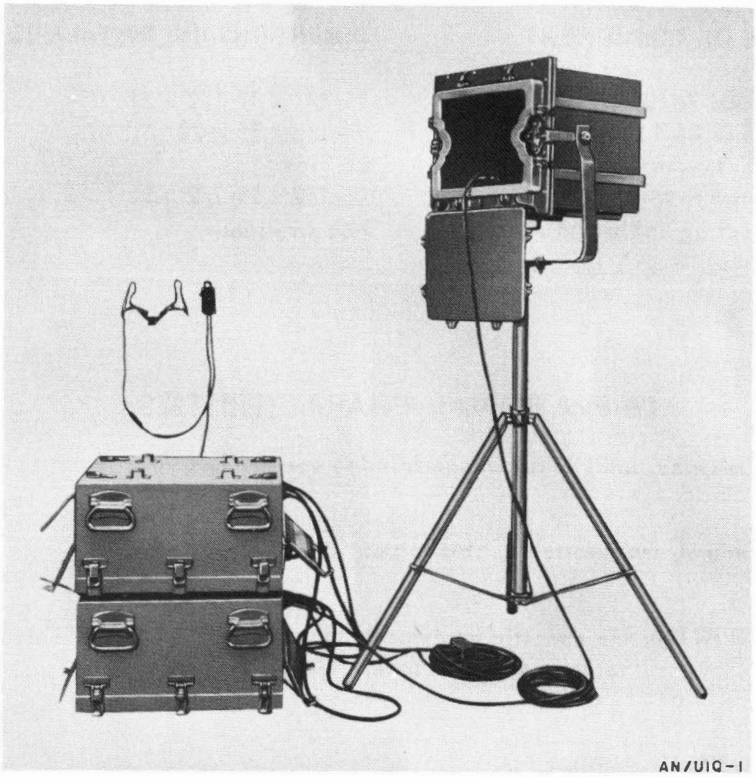
PHYSICAL CHARACTERISTICS

Intercommunication Set AN/UIC-1 weighs 38.3 pounds net, volume 0.78 cu ft. Packed for export shipment: total weight 71 pounds, total volume 1.72 cu ft. Shipped in 2 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 30 Jan 52

AN/UIQ-1

PUBLIC ADDRESS SET



Public Address Set AN/UIQ-1 is a high-power, transportable, field, sound amplifying and projecting equipment used to deliver commands, instructions, and similar matter to distances up to 2 miles. It is used to direct landings, command ground operations from aircraft, issue instructions to enemy personnel under combat conditions, and similar applications.

This equipment consists essentially of two amplifiers, which operate in parallel, and loudspeaker equipment with accessories.

There are two general types of this equipment, one of which (not illustrated) is equipped with a megaphone-type horn fitted to the loudspeaker face. This set is carried in watertight carrying cases permitting the floating of the equipment ashore during amphibious operations.

Power is derived from the two field power units which are components of this equipment.

AN/UIQ-1

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2505
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 30 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Amplifier AM-76/UIQ-1	11-3/4 x 17-1/2 x 21	123
1	Loudspeaker LS-111A/UIQ-1	16-1/2 x 21 x 22	
1	Tripod MT-356/UIQ-1	44 high	19
2	Power Unit PE-75	26-1/2 x 19-1/2 x 36	330
	Interconnecting cable and spare fuses, tubes, lamps	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Company, army level, range training command.

INSTALLATION: Ground, transportable, shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Single-channel public address and audio amplification.

TYPE CONTROLS: Volume and power on-off switches.

POWER OUTPUT: 350 w peak.

POWER REQUIREMENTS: Two Power Units PE-75 (one for each amplifier).

For each amplifier: 440 w rated / 520 w peak at input of 115-127 v, 60 cyc.

PHYSICAL CHARACTERISTICS

Information on Public Address Set AN/UIQ not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/UIQ-3** PUBLIC ADDRESS SET

Public Address Set AN/UIQ-3 is a transportable, high-power, long-range, sound amplifying and projecting equipment used for directing landings, commanding ground operations, issuing orders under combat conditions, and similar operations.

This equipment consists of corrosion-resistant components which are easily assembled, are water-tight when container covers are closed, and can be floated ashore during amphibious operations. May be operated on power supplied by a field power unit.

AN/UIQ-3

PUBLIC ADDRESS SET

INSTRUCTION LITERATURE: TM 11-2560
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 11 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Amplifier MC-225	11-3/4 x 17-1/2 x 21	157
1	Speaker AA-7	24-1/2 x 18-1/4 x 23-1/4	205
1	Stand	44 high	19
1	Microphone T-45	Not Available	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Engineer, amphibious support regiment.

INSTALLATION: Ground, portable; and shipborne.

CAN COMMUNICATE WITH: No specific equipment. Sound-in-air apparatus which projects sound to groups of personnel.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Single-channel public address and audio amplification.

TYPE CONTROLS: Power: on-off switch.
Microphone: on-off switch.

POWER OUTPUT: 175 w.

POWER REQUIREMENTS: 115-127 v, 60 cyc single phase.
440 w at rated output (175 w).
520 w at peak output (350 w).

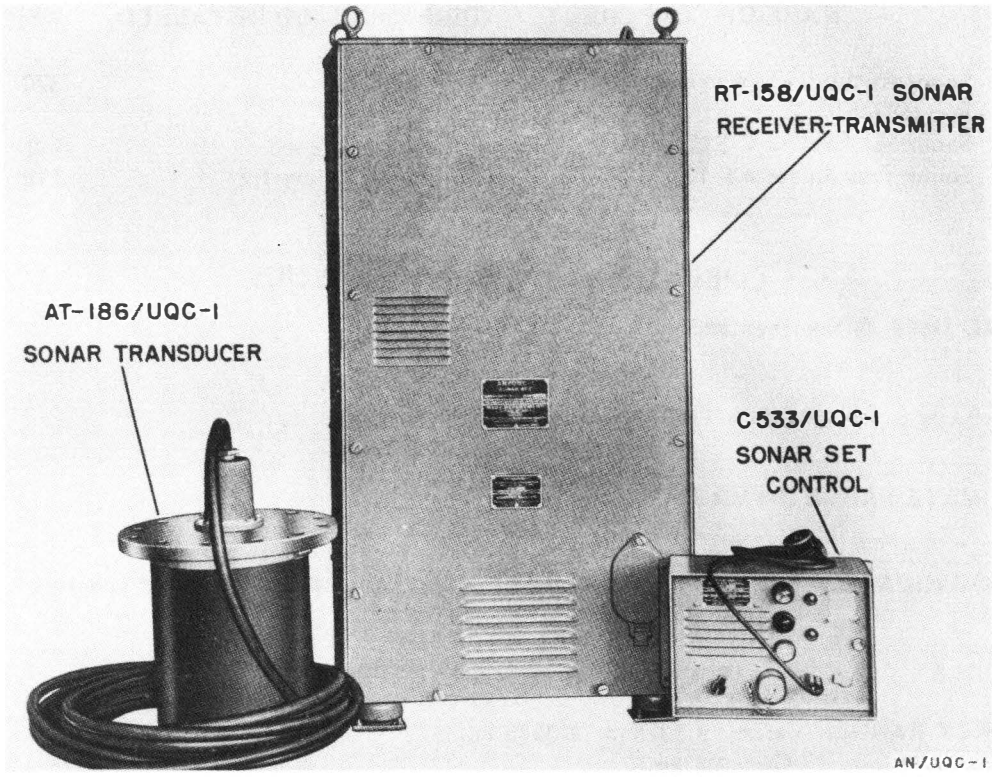
PHYSICAL CHARACTERISTICS

Public Address Set AN/UIQ-3 packed for export shipment: total weight 540 pounds, total volume 15.6 cu ft. Shipped in 5 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/UQC-1

SONAR SET



Sonar Set AN/UQC-1 is a single side band, suppressed-carrier receiver-transmitter designed for underwater radiotelephone communication between submarines and surface craft.

It is used as a simple standard telephone. A microphone switch provides "transmit-receive" switching.

Provision is made for complete remote control of the equipment through use of Sonar Set Control C-533/UQC-1.

The transmitter-receiver, transducer, and control unit may be installed in widely separated parts of the ship.

AN/UQC-1

SONAR SET

INSTRUCTION LITERATURE: NavShips 91180
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Sonar Receiver-Transmitter RT-158/UQC-1	43 x 21 x 13	370
1	Sonar Set Control C-533/UQC-1	13-1/4 x 6-1/2 x 8	8
1	Sonar Transducer AT-186/UQC-1	16-1/2 x 12 diameter	118

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Submarines and surface craft.

INSTALLATION: Shipborne, submarine.

APPROXIMATE RANGE (IN MILES): 6.

CAN COMMUNICATE WITH: Sonar Set AN/UQC-1 and equivalent remote station apparatus.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: Voice: 8.3375 to 11.0875 kc.
Cw: 8.8 kc.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice: Single side band, suppressed carrier.

POWER OUTPUT: Transmitter: 400 w to transducer;
125 w through transducer.
Receiver: 4 w into 3.2-ohm speaker.

POWER REQUIREMENTS: 1,200 w, 115 v, 60 cyc, 1 phase ac.

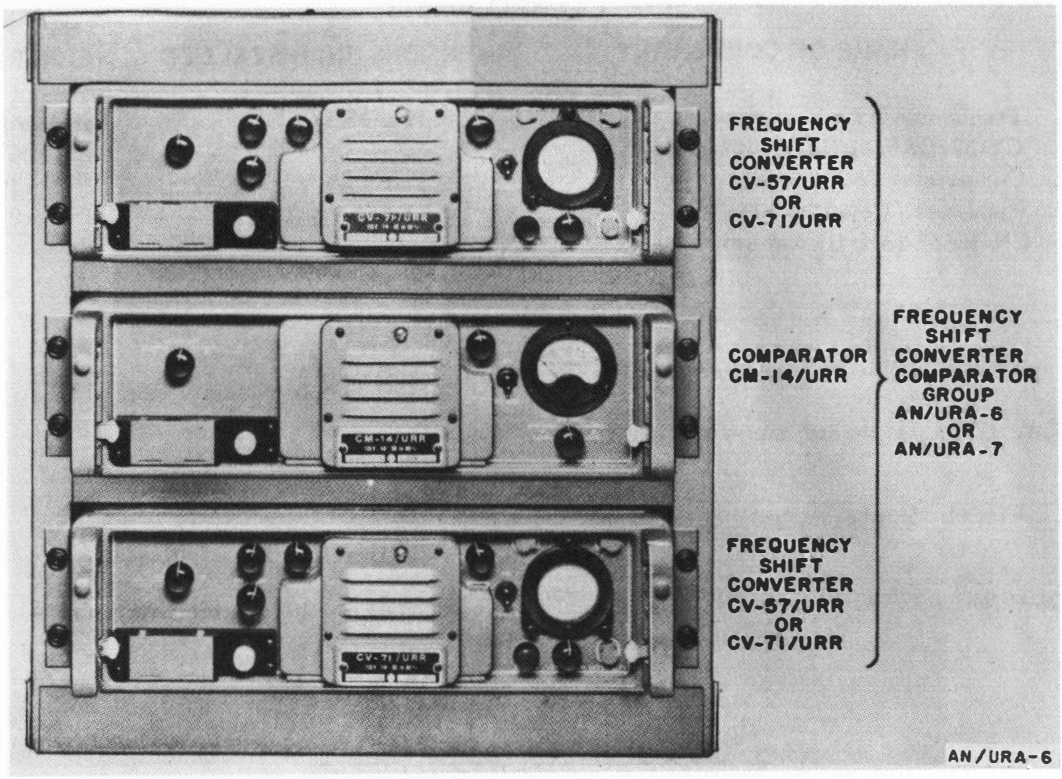
PHYSICAL CHARACTERISTICS

Sonar Set AN/UQC-1 measures 43 x 21 x 13 inches, net weight 601 pounds, volume 10.1 cu ft. Packed for domestic shipment: Total weight 819 pounds, total volume 26.7 cu ft. Shipped in 4 packages.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Navy
DATE OF THIS SHEET: 9 May 52

AN/URA-6, -7

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP



Frequency Shift Converter-Comparator Groups AN/URA-6 and AN/URA-7 are dual diversity equipments designed for demodulating frequency-shift keyed radio telegraph signals (as derived from the i-f circuits of diversity radio receivers) to provide keying facilities for teletypewriters, printers, or other similar automatic recording devices.

Keying speeds are possible up to 100-dot cps; corresponding to four channel multiplex (100 wpm) each channel.

Both equipments are intended for table mounting, but the converter and comparator units may be removed and installed in a standard relay rack.

Typical companion receivers, for the AN/URA-6 are Radio Receiving Equipments RBB and RBC, and Diversity Radio Receiving Equipment of the RDM Series.

For the AN/URA-7, Diversity Radio Receiving Equipments RBP and RCP are satisfactory; any receiver having good stability and operating in correct frequency range can be used with these converters.

AN/URA-6, -7

FREQUENCY SHIFT CONVERTER-COMPARATOR GROUP

INSTRUCTION LITERATURE: NavShips 91355
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE : Navy
DATE OF THIS SHEET : 9 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Frequency Shift Converter CV-57/URR or CV-71/URR	5-1/8 x 19 x 15-1/4	Not Available
1	Comparator CM-14/URR	5-1/8 x 19 x 15-1/4	" "
2	Panoramic Coupling Kit CN-10563 (AN/URA-6 only)	4-5/16 x 1-7/8 x 3-3/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard, shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: This is signal modifying equipment which operates with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: AN/URA-6: 395 — 470 kc.
AN/URA-7: 50 kc.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency-shift keying.

POWER OUTPUT: Electron tube keying of 60 mc loop.
Tone: 12 mw into 600 ohm load.

POWER REQUIREMENTS: 240 w, 105 — 125 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter-Comparator Group AN/URA-6,-7 measure 21-3/4 x 20-1/4 x 17-5/32 inches, volume 5.8 cu ft. Packed for domestic shipment: total volume 8.25 cu ft.