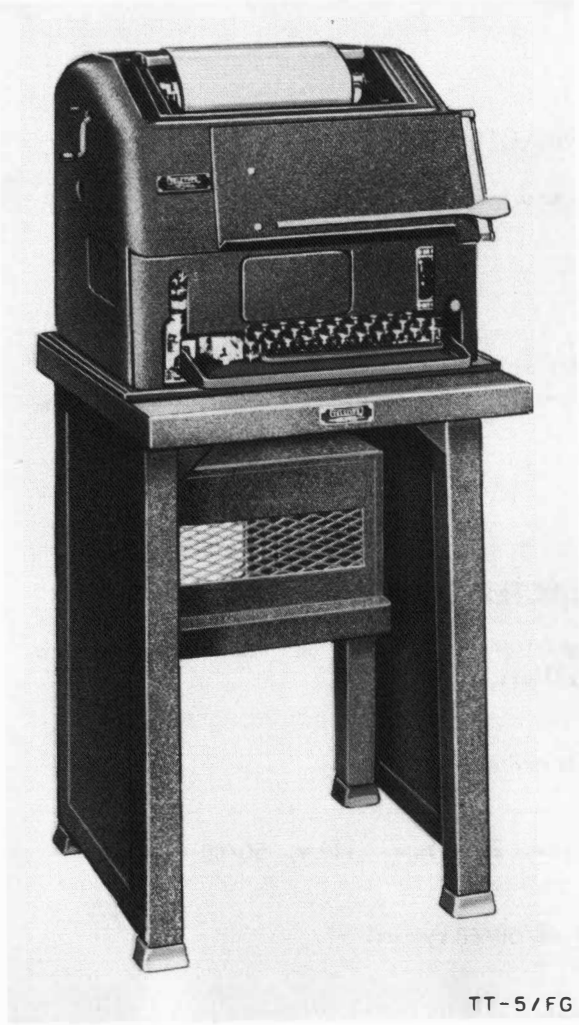
STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 17 Feb 52

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-5/FG

TELETYPEWRITER



TT-5/FG

Teletypewriter TT-5/FG is a standard communication, page-printing sending and receiving teletypewriter station equipment, used in permanent and semipermanent installations at corps and higher headquarters.

This equipment consists essentially of commercial (Teletype Corp Model 15) teletypewriter and includes the operating table and base, a rectifier and related equipment. The unit can be operated on a half-duplex or receive-only basis and adapted to receive either neutral or polar signals. It sends and receives on a single loop, but can be used by means of additional equipment for double-loop operation and for transmitting polar or polarential signals.

AN/FGC-TYPE

TT-5/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2215
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Printer (Model 15)	18 x 21 x 15-1/2	112
1	Table (XRT115)	21-5/16 x 18 x 26-1/2	39
1	Rectifier Power Unit (REC 29)	12-9/16 x 9-1/4 x 8-3/16	46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: 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: Remote control motor stop on upper case "H" and standard communications keyboard and type pallets.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm. 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/40/50/60 cyc ac.

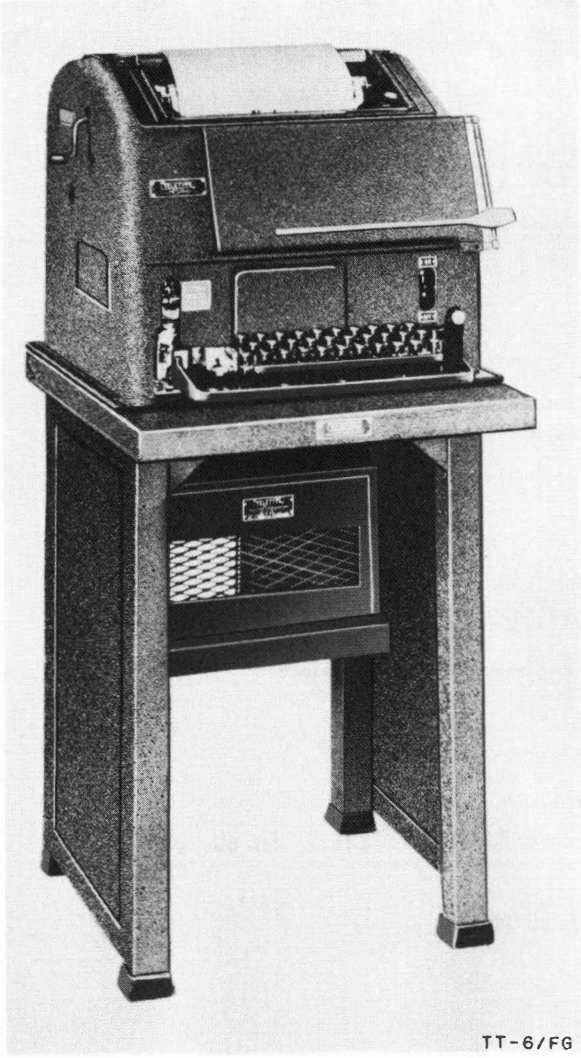
PHYSICAL CHARACTERISTICS

Teletypewriter TT-5/FG measures 21-5/16 x 18 x 42-1/8 inches, net weight 200 pounds, volume 9.35 cu ft. Packed for domestic shipment: total weight 255 pounds, total volume 25 cu ft, 0.63 ship ton. Packed for export shipment: total weight 746 pounds, total volume 64.7 cu ft, 1.6 ship tons. Shipped in 4 packages both domestic and export.

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

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-6/FG
TELETYPEWRITER



TT-6/FG

Teletypewriter TT-6/FG is a standard weather communication, page-printing sending and receiving teletypewriter station equipment used in permanent and semipermanent installations at corps and higher headquarters.

This equipment consists essentially of a commercial (Teletype Corp Model 15) teletypewriter and includes the operating table and base, a rectifier and related equipment. The unit can be operated on a half-duplex or receive-only basis and adapted to receive either neutral or polar signals. It sends and receives on a single loop, but can be used by means of additional equipment for double-loop operation and for transmitting polar or polarential signals.

AN/FGC-TYPE

TT-6/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: TM 11-2215
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army, Navy
DATE OF THIS SHEET : 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Printer (Model 15)	18 x 21 x 15 1/2 approx	112
1	Table (XRT115)	21-5/16 x 18 x 26-1/2	39
1	Rectifier Power Unit (REC 29)	12-9/16 x 9-1/2 x 8-3/16	46

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: Fixed station.

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 communications keyboard and type pallets.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm. 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/40/50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-6/FG measures 21-5/16 x 18 x 42/1/8 inches, net weight 200 pounds, volume 9.35 cu ft. Packed for domestic shipment; total weight 255 pounds, total volume 25 cu ft, 0.75 ship ton. Packed for export shipment: total weight 746 pounds, total volume 64.7 cu ft, 1.6 ship tons. Shipped in 4 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 17 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-7/FG TELETYPEWRITER

Teletypewriter TT-7/FG is a standard communication, page-printing, tape-perforating and transmitting, fixed station sending and receiving teletypewriter station equipment used in a communications zone of a theater of operations or in the zone of interior.

This equipment consists essentially of a commercial (Teletype Corp Model 19) teletypewriter and includes the operating table and base, a transmitter-distributor, rectifier, and associated components.

Can be used for neutral half-duplex or full-duplex operation with or without simultaneous production of (or automatic transmission from) perforated paper tape. It can be arranged, by the addition of supplementary components, to operate in polar or polarential facilities, and can be used as a tape relay station.

Can be operated from 95-125 v or 190-250 v, 25/40/50/60 cyc ac through the rectifier component which can be adjusted, by means of voltage tape, to deliver the required step-down voltages needed by the operating units of this equipment.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2216
TT-7/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit		29
1	Perforator-transmitter		24
1	Distributor-Transmitter, Teletypewriter TT-52/FG	36 x 24 x 42	30
1	Rectifier (REC 30)		106
1	Table		112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone of a theater of operations or zone of interior.

INSTALLATION: 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: Keyboard operation, standard communication. Tape perforation. Remote control motor stop mechanism.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: A-c series-governed motor; 110 v, 50 to 60 cyc ac.

POWER REQUIREMENTS: 95-125 v or 190-250 v, 25/60 cyc ac.
Where required, step-down voltage can be obtained from power supply for motor operation.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-7/FG weighs 810 pounds net, volume 59 cu ft, 1.5 ship tons.
Packed for export shipment: total weight 1,352 pounds, total volume 97.4 cu ft, 2.4 ship tons.
Shipped in 7 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 17 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-8/FG TELETYPEWRITER

Teletypewriter TT-8/FG (the weather communication version of Teletypewriter TT-7/FG) is a page-printing, tape-perforating and automatic tape-transmitting, sending and receiving teletypewriter station equipment used for weather data communication at fixed plant installations in the communications zone of a theater of operations and in the zone of interior.

This equipment consists essentially of a teletypewriter equipped with a perforator-transmitter and weather keyboard and type pallets, plus a transmitter-distributor, a rectifier, an operating table, and accessories.

Operates on a half-duplex or full-duplex basis, with automatic tape transmission to an independent line. A line selector switch is provided and the equipment can function as a teletypewriter relay station. Wiring includes an integral testing circuit and connection terminals for a reperforator.

Can be operated on 95-125 v or 190-250 v, 25/60 cyc ac by means of the rectifier component.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2216
TT-8/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TELETYPEWRITER	USING SERVICE : Army, Navy
	DATE OF THIS SHEET: 17 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing unit		29
1	Perforator-transmitter		24
1	Distributor-Transmitter Teletype-writer TT-52/FG	36 x 24 x 42	30
1	Rectifier (REC 30)		106
1	Table		112

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Communications zone or zone of interior.

INSTALLATION: Fixed station.

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: Keyboard operation, weather arrangement, tape perforation.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

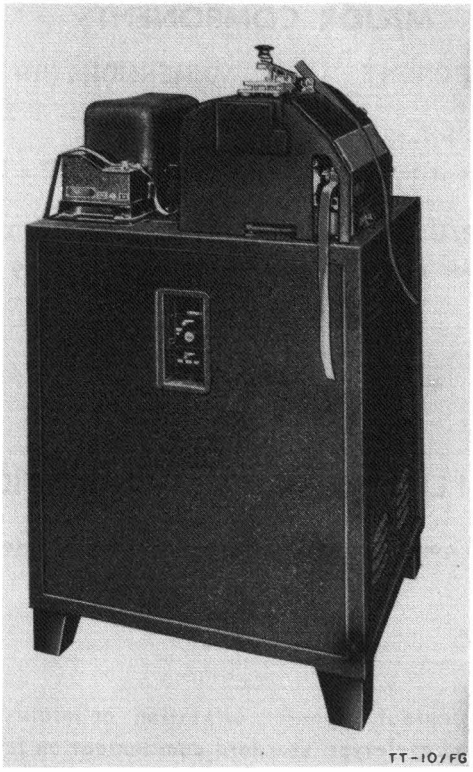
MOTOR CHARACTERISTICS: A-c series governed motor; 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: A 95-125 or 190-250 v, 25/60 cyc source. Where required, step-down voltage can be obtained from power supply for motor operation.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-8/FG weighs 810 pounds net, volume 59 cu ft, 1.5 ship tons. Packed for export shipment: total weight 1,353 pounds, total volume 97.4 cu ft, 2.4 ship tons. Shipped in 7 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-10/FG TELETYPEWRITER



Teletypewriter TT-10/FG is an automatic sending and receiving teletypewriter station equipment used for receiving, recording, and retransmitting teletypewriter communications, by means of perforated paper tape, at corps and higher headquarters.

This equipment consists essentially of a reperforator-teletypewriter and a transmitter-distributor, an operating table and base, a power supply, and accessories. It is used in conjunction with carrier or radio terminal equipment and enables torn-tape switching or teletypewriter tape relay service.

A synchronizing circuit is provided for the adjustment or improvement of incoming radio signals.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2210
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-10/FG :AN/COMP TYPE NUMBER	USING SERVICE : Army
TELETYPEWRITER	DATE OF THIS SHEET : 18 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Teletypewriter Table FN-49/FG	26 x 22 x 34	215
1	Reperforator Teletypewriter TT-53/FG	16-3/4 x 13-1/2 x 11-1/2	63
1	Power Supply PP-748/U	7-5/8 x 19-3/4 x 9-3/16	78
1	Distributor-Transmitter Teletypewriter TT-52/FG	8-3/8 x 15-1/2 x 9	33

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps, army, communications zone, and zone of interior.

INSTALLATION: 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 SPEED: 368.1 opm.

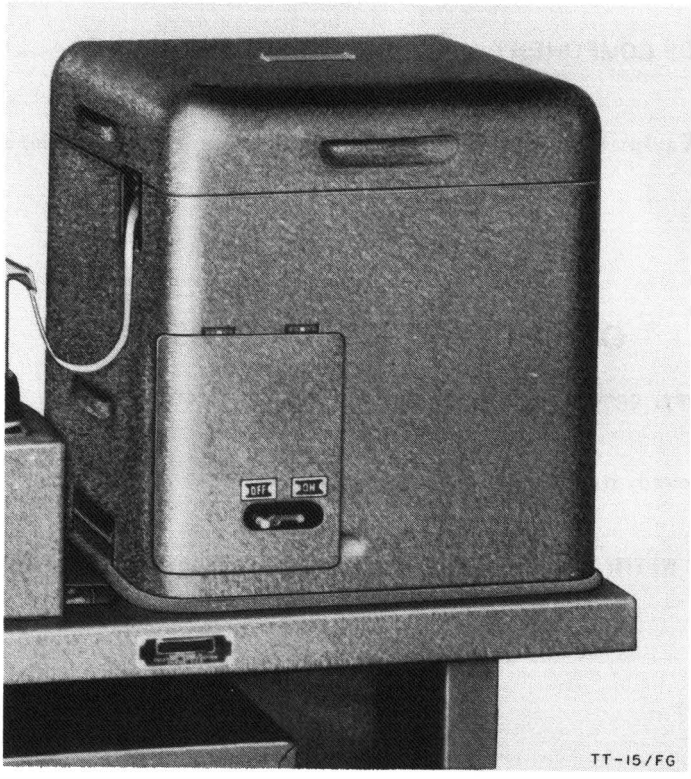
MOTOR CHARACTERISTICS: A-c series-governed motor; 2,100 rpm.

POWER REQUIREMENTS: 180 - 300 w of 105-125 v dc or 95-250 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-10/FG weighs 400 pounds net. Packed for domestic or export shipment: total weight 652 pounds, total volume 33.75 cu ft, 0.84 ship ton. Shipped in 3 packages.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-15/FG REPERFORATOR



Reperforator TT-15/FG is an automatic teletypewriter receiving equipment which receives electrical impulses (according to the five-unit, start-stop teletypewriter code) and delivers messages so received in the form of perforated paper tape. It is used at army and higher headquarters.

This equipment consists of a motor-driven mechanism that provides adjustment for distortion in the circuit in which it operates and also includes a low auxiliary table with casters.

It can be used in conjunction with Teletypewriter TT-7/FG and similar equipment to provide an automatic teletypewriter receiving facility, and the perforated tape produced can be used to transmit from standard transmitter-distributor equipment to another line, as in tape relay applications.

It is powered by conventional 110 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2223
TT-15/FG : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR	USING SERVICE : Army, Navy
	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: Army, communications zone, and zone of interior.

INSTALLATION: Ground, fixed.

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 from line circuits in perforated tape without typing.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 110 v, 50/60 cyc ac.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac

PHYSICAL CHARACTERISTICS

Reperforator TT-15/FG weighs 134 pounds net, volume 2 cu ft. Packed for export shipment: total weight 180 pounds, total volume 7 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-16/FG REPERFORATOR

Reperforator TT-16/FG is an automatic teletypewriter receiving equipment designed to operate in standard teletypewriter communication facilities serving army and higher headquarters.

This equipment consists essentially of a single unit having standard communication type pallets, perforating, control, and related mechanisms inclosed in a steel unit housing installed on a low table.

It can be used for automatic receiving or for monitoring and produces typed and perforated tape of messages received which can be used to transmit automatically from transmitter-distributor equipment. This reperforator can be used in conjunction with automatic transmitting equipment in torn-tape switching, relay, and similar applications.

It operates from 110 v ac.

AN/FGC- TYPE	INSTRUCTION LITERATURE: TM 11-2223
TT-16/FG : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REPERFORATOR	USING SERVICE : Army, Navy
	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: Army, communications zone, and zone of interior.

INSTALLATION: Fixed plant or semipermanent.

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 from line circuits in perforated tape with typewritten characters.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor; 110-v, 50/60 cyc ac.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Reperforator TT-16/FG weighs 62.5 pounds net, volume 2.2 cu ft. Packed for export shipment: total weight 150 pounds, total volume 9.8 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-17/FG REPERFORATOR

Reperforator TT-17/FG is an automatic teletypewriter receiving equipment designed to operate in weather data teletypewriter facilities serving army and higher headquarters.

This equipment consists essentially of a single unit that has its weather data communication type pallets and perforating, control, and related mechanisms inclosed in a steel unit housing installed on a low table.

It can be used for automatic receiving or for monitoring and produces typed and perforated tape of messages received which can be used to transmit automatically from transmitter-distributor equipment. This teletypewriter can be used in conjunction with automatic transmitting equipment in torn-tape switching, relay, and similar applications.

It operates from 110 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2223
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-17/FG :AN/COMP TYPE NUMBER	USING SERVICE : Army, Navy
REPERFORATOR	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: Army, communications zone, and zone of interior.

INSTALLATION: Ground, fixed.

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: Automatic reception from line circuits in perforated tape with typewritten characters.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

MOTOR CHARACTERISTICS: Series-governed motor.

POWER REQUIREMENTS: 110 v, 50/60 cyc ac.

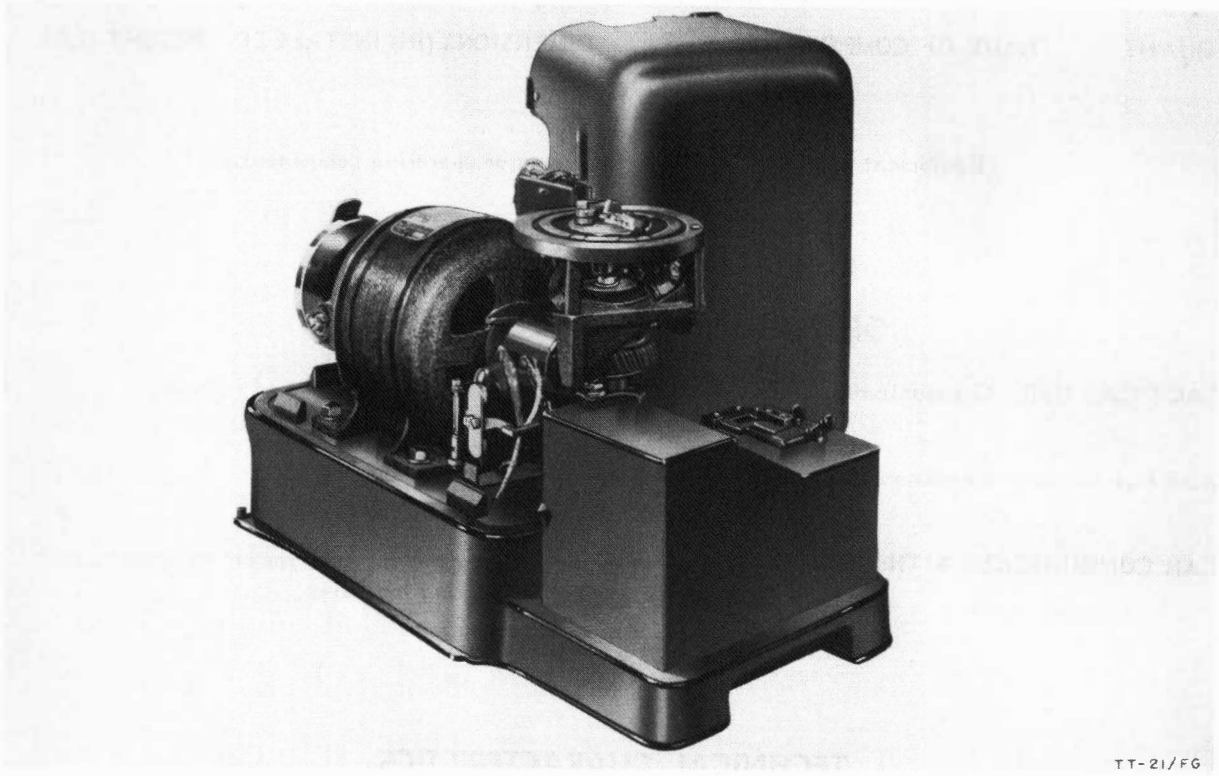
PHYSICAL CHARACTERISTICS

Reperforator TT-17/FG weighs 62.5 pounds net, volume 2.2 cu ft. Packed for export shipment: total weight 150 pounds, total volume 9.8 cu ft.

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

AN/FGC-TYPE

AN/COMP TYPE NUMBER: TT-21/FG
TRANSMITTER-DISTRIBUTOR



TT-21/FG

Transmitter-Distributor TT-21/FG is an automatic teletypewriter transmitting equipment. It is used where necessary to insure privacy of teletypewriter communication in large communications centers in the communications zone of a theater of operations or in the zone of interior.

This equipment is a single-channel, motor-driven unit consisting of tape-sensing, tape-feeding, and transmitting mechanisms and a motor inclosed within a metal housing. Includes a special start magnet, power and line cords, and end-of-line stop mechanism.

Operates from 115 v, 25/60 cyc ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
TT-21/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE : Army, Navy
	DATE OF THIS SHEET : 12 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: Communications zone of theater of operations or in the zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

CAN COMMUNICATE WITH: Terminal or station apparatus in a privacy teletypewriter system, over specially provided secure connecting facilities.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Transmits five-unit, start-stop teletypewriter code impulses from a perforated tape through electromechanical operation.

OPERATING SPEED: 368.1 opm.

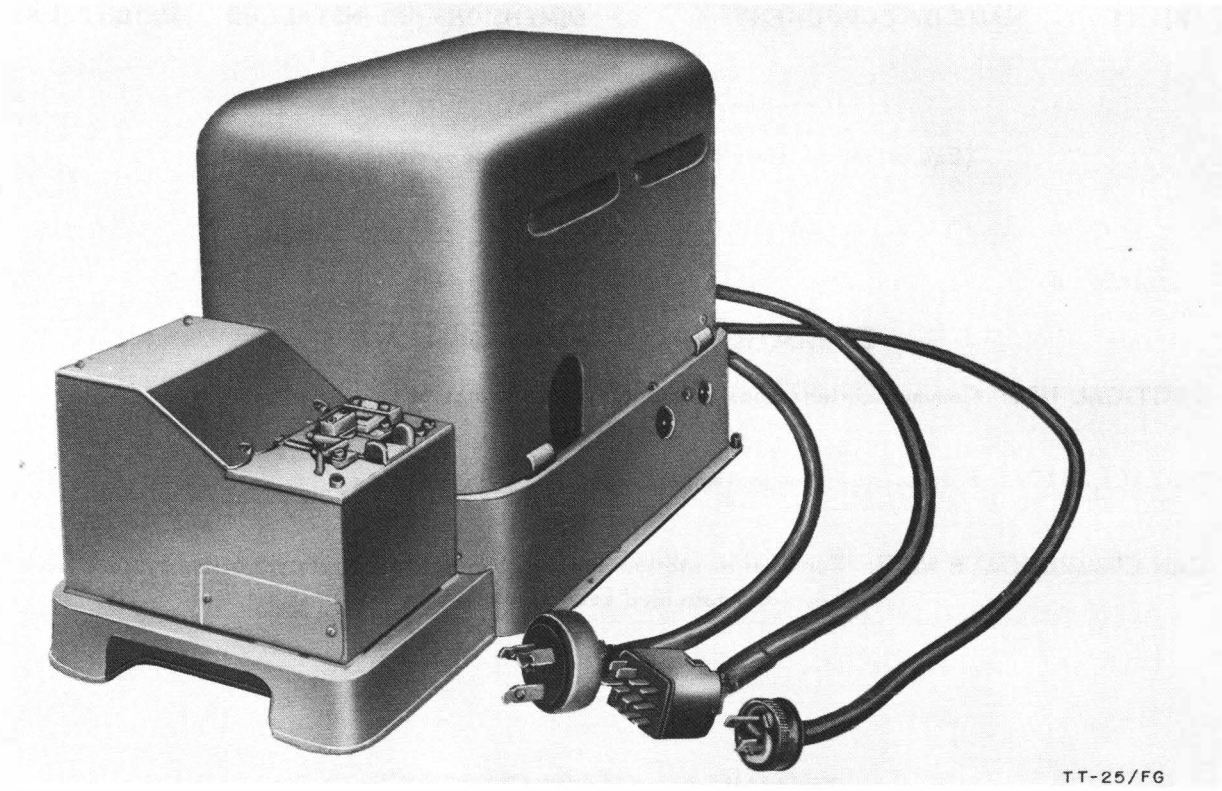
MOTOR CHARACTERISTICS: A-c series-governed motor; tuning fork 87.6 vps; 2,100 rpm.

POWER REQUIREMENTS: 115 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-21/FG measures 15-1/2 x 8-3/4 x 9 inches, net weight 35 pounds, volume 1.5 cu ft. Packed for domestic shipment: total weight 70 pounds, total volume 5 cu ft. Packed for export shipment: total weight 107 pounds, total volume 5.2 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 12 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-25/FG TRANSMITTER-DISTRIBUTOR



Transmitter-Distributor TT-25/FG is an automatic teletypewriter transmitting equipment which sends from perforated paper tape. It is used where necessary to insure privacy of teletypewriter communication at large communications centers in the communications zone of a theater of operations or in the zone of interior.

This equipment is a single-channel, motor-driven unit consisting of tape-sensing, tape-feeding, and signal impulse transmitting mechanisms and a motor inclosed within a metal housing. Includes a special start magnet, power and line cords, and end-of-line stop mechanism.

It is operated from 115 v ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
	CLASSIFICATION OF EQUIPMENT: Unclassified
TT-25/FG : AN/COMP TYPE NUMBER	USING SERVICE : Army
TRANSMITTER-DISTRIBUTOR	DATE OF THIS SHEET: 12 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: Communications zone of theater of operations or in zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

CAN COMMUNICATE WITH: Terminal or station apparatus in a privacy teletypewriter system, over specially provided secure connecting facilities.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Transmits five-unit, start-stop teletypewriter code impulses from perforated tape through electromechanical operation.

OPERATING SPEED: 368.1 opm.

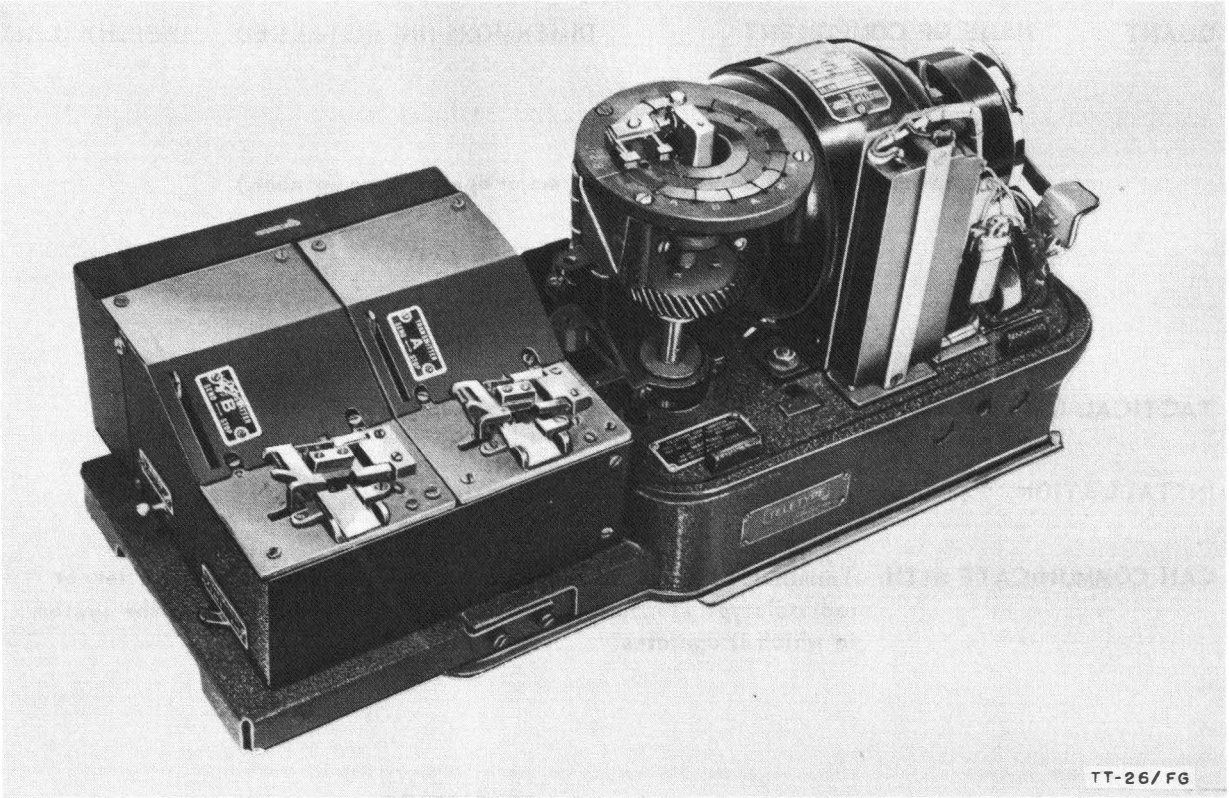
MOTOR CHARACTERISTICS: A-c series-governed motor; tuning fork 87.6 vps; 2,100 rpm.

POWER REQUIREMENTS: 115 v, 25/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-25/FG measures 15-1/2 x 8-3/4 x 9 inches, net weight 35 pounds, volume 1.5 cu ft. Packed for domestic or export shipment: total weight 70 pounds, total volume 5 cu ft.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 18 Feb 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-26/FG TRANSMITTER-DISTRIBUTOR



Transmitter-Distributor TT-26/FG is an automatic teletypewriter transmitting equipment which sends electrical impulses (according to the five-unit, start-stop teletypewriter code) to two lines, simultaneously from previously perforated paper tape. It is used in the communications zone of a theater of operations or in the zone of interior.

This equipment consists essentially of a motor-driven unit and electrical pulsing contacts and related controls.

It can be used in torn-tape switching applications and teletypewriter tape relay operation.

It operates on 105/125 v, 50/60 cyc, ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: TM 11-2222
TT-26/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE: Army
	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: Communications zone of a theater of operations or the zone of interior.

INSTALLATION: Permanent or semipermanent fixed plant installations.

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: Transmits five-unit, start-stop teletypewriter code impulses from perforated tape.

OPERATING SPEED: 368.1 opm and 404 opm; 60 wpm and 66 wpm.

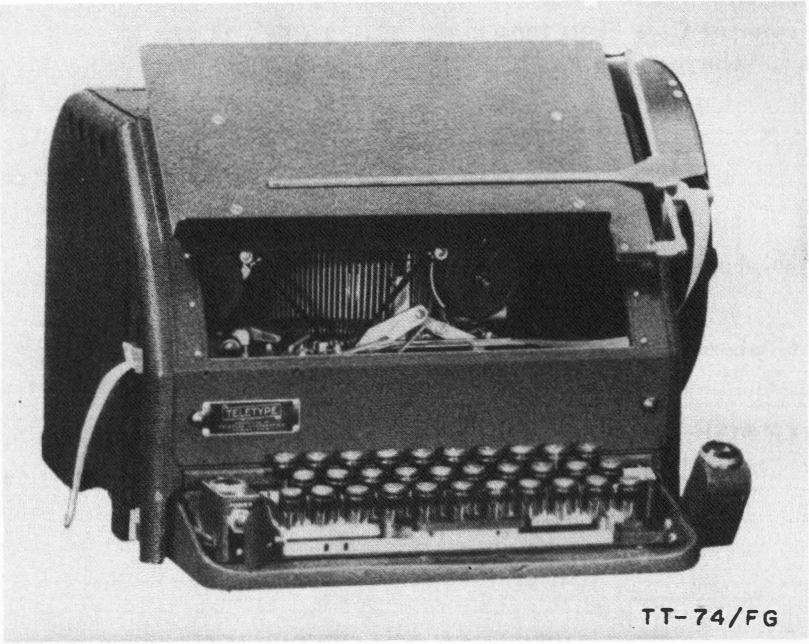
MOTOR CHARACTERISTICS: Series-governed motor; 105/125 v, 50/60 cyc ac.

POWER REQUIREMENTS: 105/125 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Transmitter-Distributor TT-26/FG weighs 35 pounds net, volume 0.83 cu ft. Packed for both domestic or export shipment: total weight 70 pounds, total volume 5 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/FGC-TYPE** AN/COMP TYPE NUMBER: TT-74/FG TELETYPEWRITER REPERFORATOR



Teletypewriter Reperforator TT-74/FG is sending and receiving teletypewriter station equipment which produces typed and perforated paper tape of messages received from the line and which can transmit to the line from tape so produced. It can be used in tape-relay and torn-tape switching applications and for monitoring where a permanent record of messages is needed.

It consists essentially of a commercial (Teletype Corp Model 14) send-receive typing reperforator and is designed for table or shelf mounting.

AN/FGC-TYPE

TT-74/FG :AN/COMP TYPE NUMBER

TELETYPEWRITER REPERFORATOR

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Reperforator Teletype Corp FPR23GB246	Not Available	Not Available
1	Cover, Teletype Corp FPRC200AA	10-1/2 x 14 x 16-1/2	" "
1	Keyboard, Teletype Corp FK110LD 15	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne or ground.

CAN COMMUNICATE WITH: Identical or equivalent, terminal, repeater, and transmitting and receiving teletypewriter equipment operating in the connecting facility or system.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Receives teletypewriter messages and simultaneously prints and perforates a tape for retransmitting the message when desired. On outgoing messages, it transmits a neutral or polar signal on the line and simultaneously prints and perforates a tape for station record or duplicate transmission.

OPERATING SPEED: 368 opm, approximately 60 wpm.

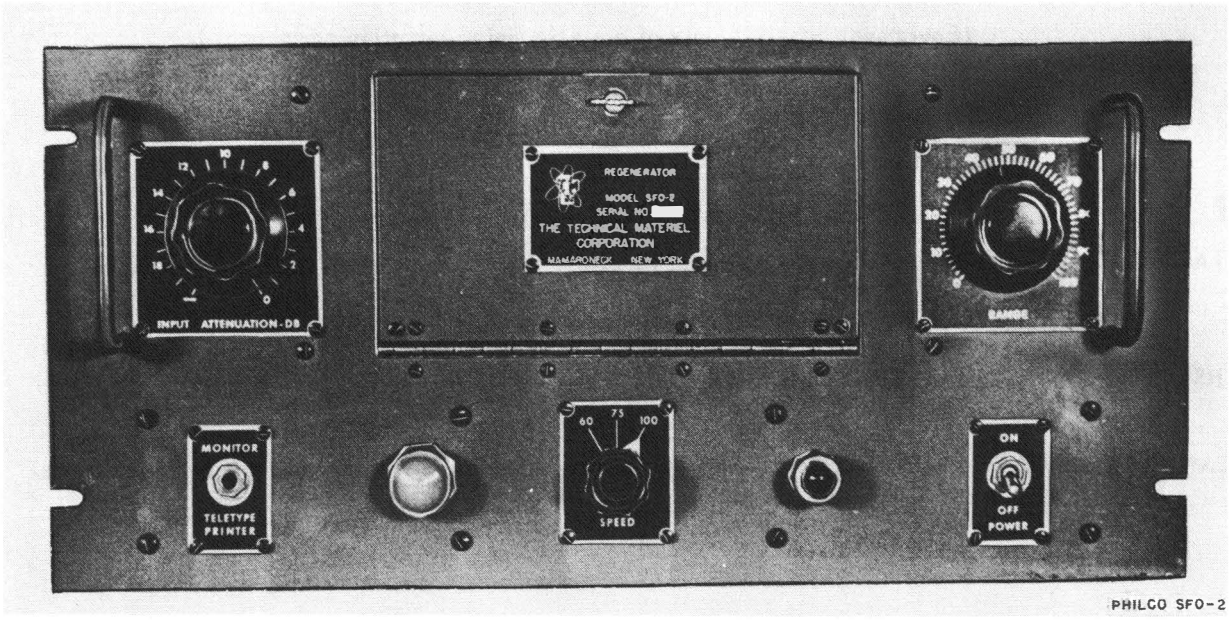
MOTOR CHARACTERISTICS: Series-governed.

POWER REQUIREMENTS: 110 - 115 v, 50/60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Teletypewriter Reperforator TT-74/FG measures 10-1/2 x 14 x 16-1/2 inches.

STATUS: Commercial CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 11 Jun 52	**AN/FGC-TYPE** COMMERCIAL TYPE NUMBER: PHILCO MODEL SFO-2 REGENERATOR



PHILCO SFO-2

The Philco Model SFO-2 Regenerator (Technical Materiel Corporation) is a device used for the correction of mark-space distortion of teletypewriter signals on either wire or radio communication facilities.

This regenerator equipment accepts signals in either audio (ON/OFF) form or in d-c form (polar or neutral), at 60, 75, or 100 wpm. The acceptable input distortion may be as much as 45%; the output distortion is less than 5%.

Regeneration of the signals is accomplished by electronic means. Sampling pulses are generated in the unit to synchronize with the center of each pulse. When the sampling pulse coincides with a mark, the pulse operates a relay circuit to produce a regenerated mark at the output; when the sampling pulse coincides with a space, a space pulse of proper duration is produced at the output.

Power requirements are 85 w of 110/220 v, 50/60 cyc ac.

AN/FGC-TYPE	INSTRUCTION LITERATURE: Not Available
PHILCO MODEL SFO-2 :COMMERCIAL TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
REGENERATOR	USING SERVICE : Air Force
	DATE OF THIS SHEET : 11 Jun 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: Long distance, radio link or landline. Project material issued in accordance with AFR-100-17.

INSTALLATION: Ground, fixed, rack mounted.

CAN COMMUNICATE WITH: This equipment is used in conjunction with related primary communication apparatus.

TECHNICAL CHARACTERISTICS

TYPE COMMUNICATION CIRCUITS: Input Keying: (tone 500 to 3,600 cps) -20 db to 0 db into 600-ohm line; 30 ma polar or 60 ma neutral dc (d-c positive or negative to ground). Output: Mercury relay contacts closed on mark during operation or during any steady input state into 600-ohm line.

CONTROLS: 60, 75, or 100 wpm teletypewriter signal selector; input attenuator OFF/ON; monitor plug-in jack; signal selector panel; range adjuster.

POWER REQUIREMENTS: 85-w, 110/220 v, 50/60-cyc ac.

PHYSICAL CHARACTERISTICS

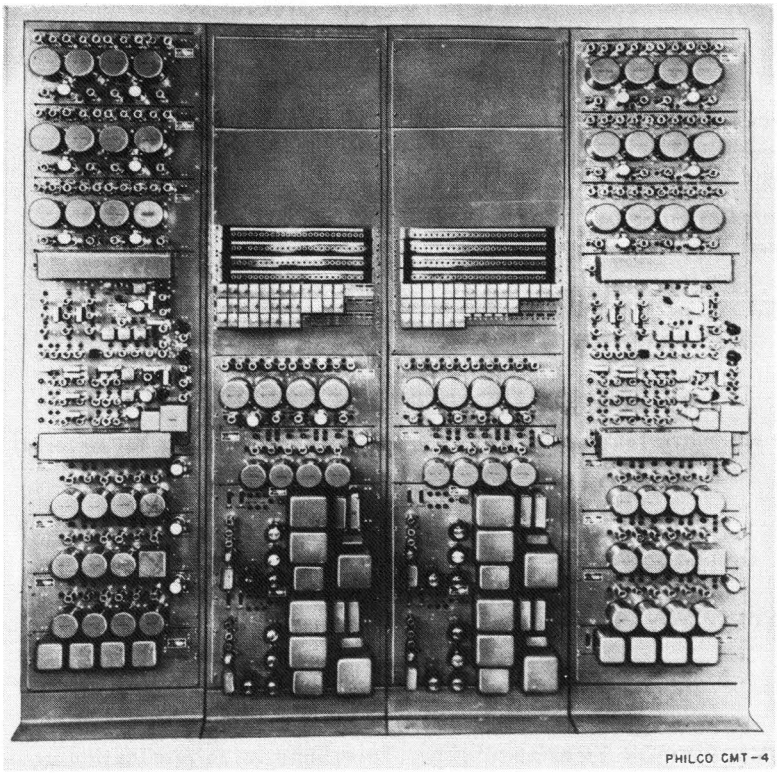
Philco Model SFO-2 Regenerator measures 19 x 8-3/4 x 10 inches, net weight 55 pounds, volume 0.98 cu ft. Packed for domestic or export shipment: total weight 85 pounds, total volume 1 cu ft. Shipped in 1 package.

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

AN/FGC-TYPE

COMMERCIAL TYPE NUMBER: PHILCO TYPE CMT-4

VOICE CARRIER EQUIPMENT



Voice Carrier Equipment Philco Type CMT-4 is a 4- to 24-channel, multiplex pulse, a-m terminal facility which normally operates with AN/TRC-30 to form a microwave radio relay terminal station. This equipment is built on a four-channel basis and any combination of these units may be made to provide additional circuits up to a maximum of 24 channels.

For teletypewriter operation, any channel can be subdivided into 12 teletypewriter channels by using Philco CMT-2 teletypewriter equipment, or equal.

Normal output is on a four-wire basis; therefore, for voice operation, additional voice terminating equipment, (Philco VTE or equal) is required for party line, dial, or ring-down two-wire systems.

Each of the available 24 channels is from 50 to 3,300 cps but wide-band channels of 50 to 6,600 cps are also available.

This equipment is capable of handling telephone, telemetering, facsimile, and teletypewriter communications by adding auxiliary equipment.

Audio inputs are 600 ohms, balanced, at a normal level of -13 db. Facilities are available for insertion and drop-out of channels at relay stations.

Power requirements for a 24-channel duplex system are 1 kw of 117-v, 60-cyc, 1 phase ac.

AN/FGC-TYPE

PHILCO TYPE CMT-4 :COMMERCIAL TYPE NUMBER
VOICE CARRIER EQUIPMENT

INSTRUCTION LITERATURE: Not Available
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	Transmitter common band amplifier	19 x 15-3/4 x 15	Not Available
1	Receiver	19 x 15-5/8 x 15	" "
1 to 6	Demodulator units	19 x 8-3/4 x 15	" "
1 to 6	Modulator units	19 x 7 x 15	" "
2	Filament supplies	19 x 3-3/8 x 15	" "
4	Power supplies	19 x 12-1/4 x 15	" "
6	Jack fields and 2 attenuator fields	Not Available	" "
1 to 5	Racks (with equipment)	20-3/8 x 84-3/8 x 15	320 (each)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground fixed.

CAN COMMUNICATE WITH: This is an auxiliary equipment used in conjunction with primary communication apparatus.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Telephone voice termination equipment, microwave radio relay equipment, teletypewriter carrier equipment, facsimile equipment, cable and wire.

FACILITIES AFFORDED: Four wire telephone circuits, 4 to 24 channels (narrow band, voice) 60 to 3,300 cps; or any two narrow band voice channels can be combined to form 1 wide band 50 to 6,600 kc channel.

FREQUENCY: Normal channel 50 to 3,300 cps. Wide band channels 50 to 6,600 cps.

TYPE OF MODULATION: Pulse amplitude modulation.

TYPE RINGING: 20 cyc (normally supplied by ancillary voice termination equipment).

POWER REQUIREMENTS: 24-channel, full duplex operation: 1 kw, 117-v ($\pm$ 5%) 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Voice Carrier Equipment Philco Type CMT-4 measures 102 x 84-3/8 x 15 inches, net weight 1,600 pounds, volume 74.77 cu ft. Packed for either domestic or export shipment: total weight 1,840 pounds, total volume 80 cu ft, 2 ship tons. Shipped in 5 packages.

(Logistical data is for 24-channel duplex termination.)

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FGQ-1

TELETYPEWRITER REPEATER-MIXER

Teletypewriter Repeater-Mixer AN/FGQ-1 is used with other teletypewriter equipment, shown above, to provide a secrecy system in which plain text messages may be automatically enciphered before transmission to a distant station. Incoming messages received in cipher are automatically deciphered and appear on the recording teletypewriter in plain text.

These teletypewriter station arrangements are adaptable for on-line and off-line operations. The former operation applies to the direct connection of this equipment to the transmission path to the distant station; the latter, to local enciphering and deciphering of messages received and sent by other apparatus to the distant station.

AN/FGQ–1

TELETYPEWRITER REPEATER-MIXER

INSTRUCTION LITERATURE: TM 11–2209

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Teletypewriter Repeater-Mixer AN/FGQ–1	30½ x 26 x 22	160

OPERATIONAL CHARACTERISTICS

TACTICAL USE: In communication centers at higher headquarters.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: CIPHER-LOCAL TEST-TEXT, BREAK-BREAK RELEASE, STA TEST keys.

OPERATING SPEED: 60 wpm or 368 opm.

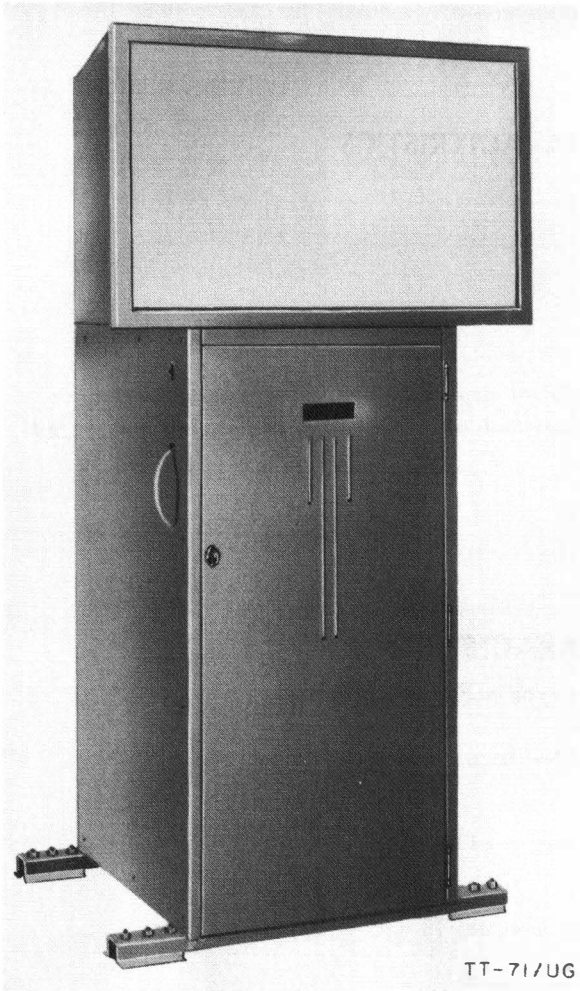
MOTOR CHARACTERISTICS: 95, 105, 115, 125, 190, 210, 230, or 250 v; 25, 40, 50, or 60 cy ac (ac series or univ); 95 to 125 v, 60 cy ac (ac syn); 105 to 125 v dc (univ).

POWER REQUIREMENTS: 300 to 315 w, 115/125 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:	30½ x 26 x 22	160	10.1		
DOMESTIC PACK:					
EXPORT PACK:		408	20.9	.52	2

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 18 Feb 52	**AN/FGQ-TYPE** AN/COMP TYPE NUMBER: TT-71/UG TELETYPEWRITER PRINTER-PROJECTOR



TT-71/UG

Teletypewriter Printer-Projector TT-71/UG is fixed station receiving-only equipment. It projects its received messages upon a translucent screen and is used for conference communication, group orientation and instruction, and similar applications. It is used at higher headquarters.

This equipment consists of a single unit which contains two receiving units and the optical projection system and illumination source. One of the receiving units is a commercial (Teletype Corp Model 14, or equal) page-printing teletypewriter. This unit is supported within the cabinet by the projector frame which also holds the optical assembly. The other receiving unit is a commercial (Teletype Corp Model 14, or equal) type-bar tape printer. The page-printer unit produces typewritten messages, in successive lines, upon a transparent web, from which the message is projected upon a screen, approximately, 3 feet wide by 2 feet high. The tape-printer unit typewrites the message upon a continuous strip of paper tape which may be used for reference purposes.

Operates on about 1-kw of 110-v ac.

AN/FGQ-TYPE

TT-71/UG :AN/COMP TYPE NUMBER
TELETYPEWRITER PRINTER-PROJECTOR

INSTRUCTION LITERATURE: TM 11-2228
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
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: Army and higher headquarters.

INSTALLATION: Fixed plant.

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 communications type pallet arrangement.
Five-unit start-stop code.
Optical system, using 500-w lamp.

OPERATING SPEED: 368.1 opm, 45 English characters per line.

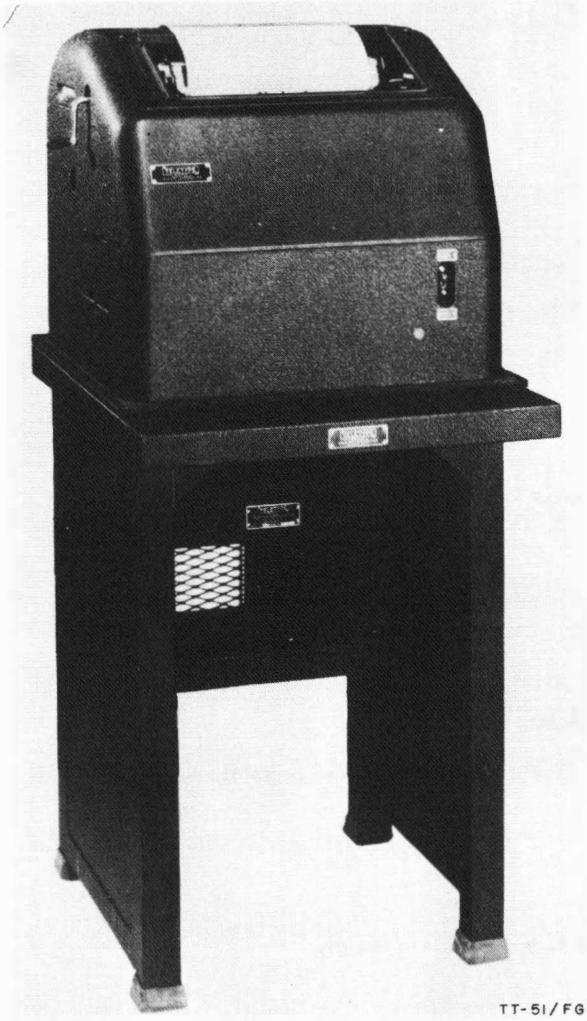
MOTOR CHARACTERISTICS: Synchronous; 110 v, 60 cyc, ac; 10-amp start - 2-amp run.

POWER REQUIREMENTS: 110 v, 60 cyc, ac; approximately 1 kw.

PHYSICAL CHARACTERISTICS

Teletypewriter Printer-Projector TT-71/UG measures 81 x 33 x 37 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 10 Jun 52	**AN/FGR-TYPE** AN/COMP TYPE NUMBER: TT-51/FG TELETYPEWRITER



TT-51/FG

Teletypewriter TT-51/FG is a general purpose, receiving only, page printing teletypewriter equipment used in wire or radio communication circuits at shore stations. The typing unit has standard English characters.

It consists essentially of a commercial (Teletype Corp Model 15) page printing teletypewriter, and associated component.

The equipment has a governed-series motor, and can be operated from any 50/60-cyc, 1-phase, a-c power source.

AN/FGR-TYPE

TT-51/FG :AN/COMP TYPE NUMBER
TELETYPEWRITER

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Typing Unit, Teletype Corp Model, BP119/210	Not Available	Not Available
1	Base, Teletype Corp Model, BB50	" "	" "
1	Power Unit, Teletype Corp Model, REC29	" "	" "
1	Table, Teletype Corp Model, XRT115	" "	" "
1	Motor, Teletype Corp Model, MU27	" "	" "
1	Relay, Teletype Corp Model, RY30	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore station.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Five unit code teletypewriter transmitting equipment operating at 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic reception from line circuits in printed page form.

OPERATING SPEED: 368 opm; 72 English characters per line.

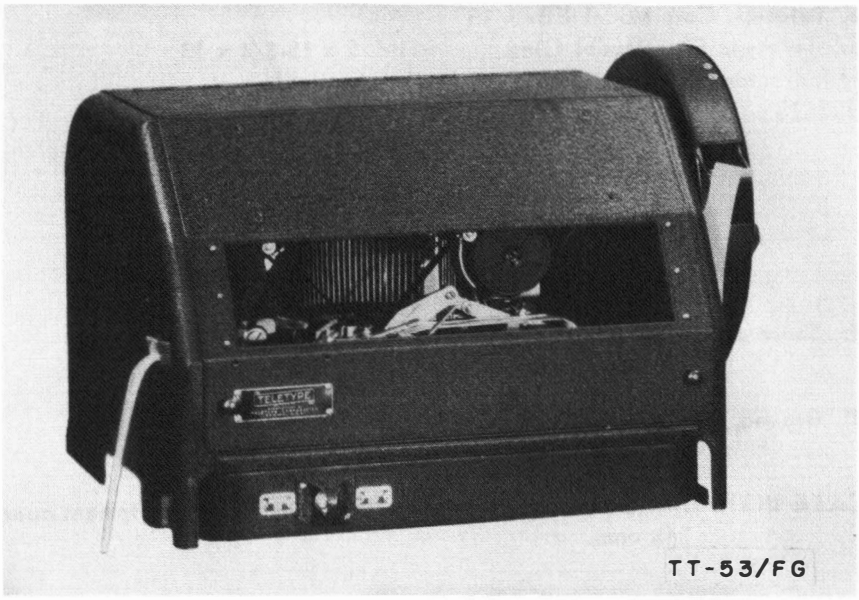
MOTOR CHARACTERISTICS: Governed-series, 2,102 rpm, 115-v, a-c motor.

POWER REQUIREMENTS: 240 w, 115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Teletypewriter TT-51/FG measures 38-3/4 x 24 x 24 inches, net weight 215 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 12 Jun 52	**AN/FGR-TYPE** AN/COMP TYPE NUMBER: TT-53/FG REPERFORATOR



Reperforator TT-53/FG is an automatic tape-perforating and typing teletypewriter receiving equipment used for production of message tapes which may be distributed later by a transmitter-distributor to line circuits or to local page printers. It prints English characters.

It consists essentially of a commercial (Teletype Corp Model 14) reperforator (receive only) and may be operated from any 115-v, 50/60-cyc, 1 phase power source.

Printed characters simplify tape handling by eliminating the necessity of reading code perforations.

AN/FGR-TYPE

TT-53/FG :AN/COMP TYPE NUMBER
REPERFORATOR

INSTRUCTION LITERATURE: TM 11-2223
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 12 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Reperforator, Teletype Corp Model FPR21GB226	Not Available	Not Available
1	Base, Teletype Corp Model FB43/15	" "	" "
1	Cover, Teletype Corp Model C166	11-1/2 x 15-3/4 x 13	" "
1	Speed Indicator, Teletype Corp No. 103628	Not Available	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Any 5 unit code teletypewriter transmitting equipment operating at 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Communications characters; 5 unit code; automatic reception from line circuits in perforated tape, with typing.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed motor, 2,102 rpm.

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

PHYSICAL CHARACTERISTICS

Reperforator TT-53/FG measures 11-1/2 x 15-3/4 x 13 inches.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGR–TYPE

TT–92/FG

REPERFORATOR, TELETYPEWRITER

Teletypewriter Reperforator TT–92/FG is a general-purpose receiving-only typing reperforator that automatically types and perforates messages on 11/16-inch paper tape.

This equipment is used as fixed plant equipment in message and signal centers.

AN/FGR-TYPE

TT-92/FG

REPERFORATOR, TELETYPEWRITER

INSTRUCTION LITERATURE: Teletype Manual 96MA

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: Shore installations.

INSTALLATION: Shore stations.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Communication characters (7.42 unit code).

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 160 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:	7½ x 11½ x 12	67.5			
DOMESTIC PACK:		180.0	13		1
EXPORT PACK:					

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

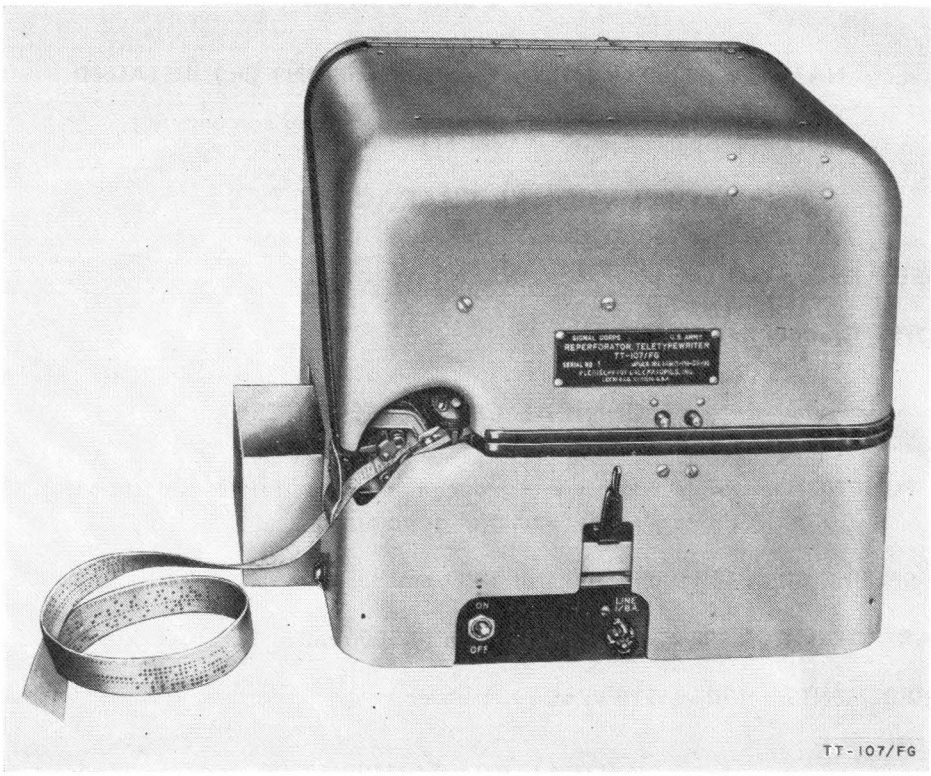
PREPARING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

AN/FG[illegible]-TYPE

TT-107/FG

REPERFORATOR, TELETYPEWRITER



Teletypewriter Reperforator TT-107/FG is a fixed station, receiving only, lightweight typing reperforator used to automatically receive messages directly from the line, or to monitor copy produced by other teletypewriters. It may be operated by either polar or neutral signals.

This equipment consists of a printing reperforator, spare parts, and accessories.

It prints English characters and perforates standard start-stop five-unit code groups at the rate of 60 or 100 wpm; the speed depends on the motor drive gear set used.

AN/FGR–TYPE

INSTRUCTION LITERATURE: TM 11–2226

USING SERVICE: USA

DATE OF THIS SHEET: 29 June 1956

TT–107/FG

REPERFORATOR, TELETYPEWRITER

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

OPERATING FUNCTIONS: Prints English and std comm sig; perforates std start-stop five-unit code groups; receives neutral or polar sig.

OPERATING SPEED: 60 or 100 wpm; 386.1 or 600 opm.

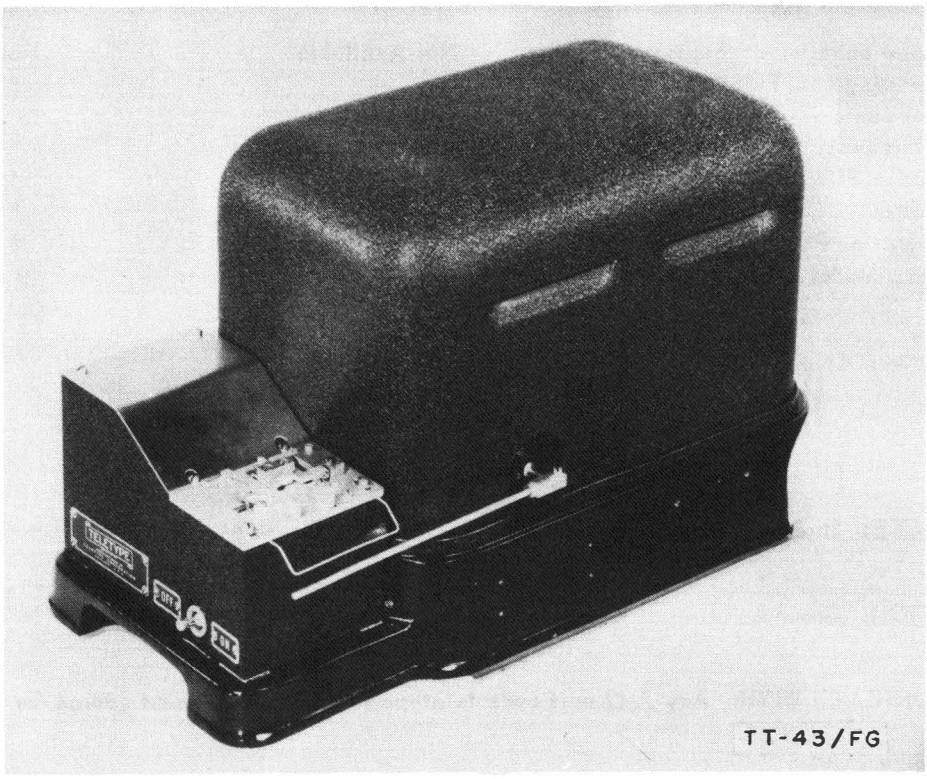
MOTOR CHARACTERISTICS: Syn, cap.-start-and-run (3,600 rpm).

POWER REQUIREMENTS: 120 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 5/16 x 12 5/8 x 12 1/4	37	1.5		
DOMESTIC PACK:		68	4.1		
EXPORT PACK:		75	5.4		1

STATUS: Standard	AN/FGT-TYPE
CLASSIFICATION OF EQUIPMENT: Unclassified	AN /COMP TYPE NUMBER: TT-43/FG
USING SERVICE: Navy	TRANSMITTER-DISTRIBUTOR
DATE OF THIS SHEET: 8 May 52	



Transmitter-Distributor TT-43/FG is a tape-transmitting equipment used for automatic transmission, tape relay, or torn-tape switching in teletypewriter communication applications.

It is a single channel unit using chad or chadless tape 11/16 inches wide. It consists essentially of a commercial (Teletype Corp Model XD208AA/AJ) unit and is normally used with Teletypewriter TT-42/FG.

AN/FGT-TYPE

TT-43/FG :AN/COMP TYPE NUMBER
TRANSMITTER-DISTRIBUTOR

INSTRUCTION LITERATURE: Not Available
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	Tape Sensing Mechanism	Not Available	Not Available
1	Feeding and Transmitting Mechanism	" "	" "
1	Distributor Motor and Base	" "	" "
1	Radio Filter	" "	" "
1	Cover	" "	" "
1	Mounting Plate Teletype Corp Model 115932BA	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

CAN COMMUNICATE WITH: Any 7.42 unit code teletype receiving equipment geared for 460 OPM.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 460 OPM, approximately 75 wpm.

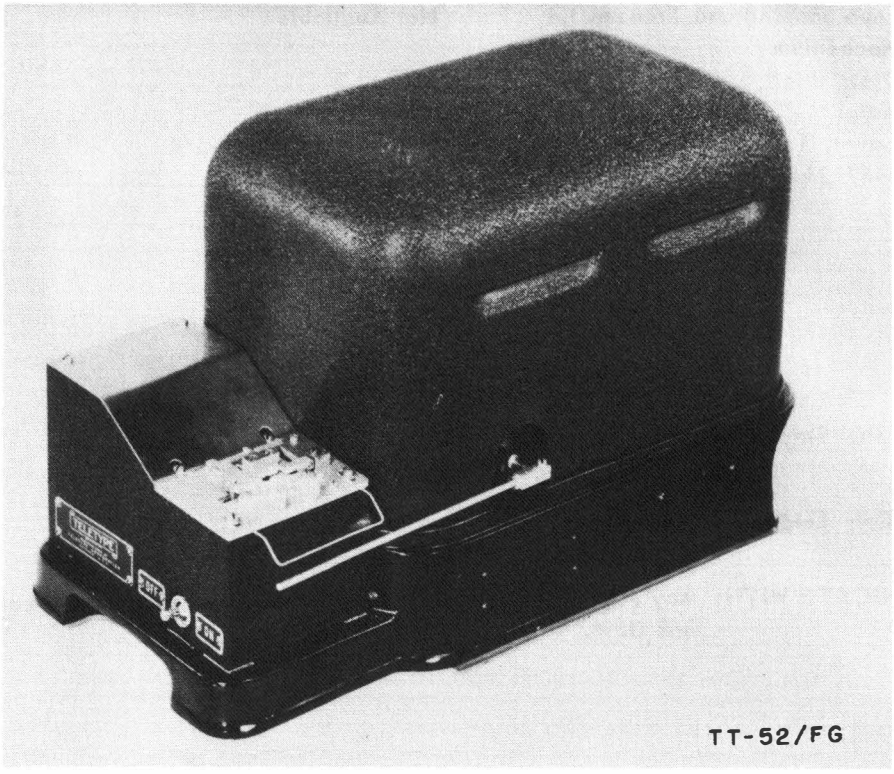
MOTOR CHARACTERISTICS: Synchronous motor, 1,800 rpm.

POWER REQUIREMENTS: 115v, 60 ($\pm$ 0.5) cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Transmitter-Distributor TT-43/FG not available.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 8 May 52	AN/FGT-TYPE AN/COMP TYPE NUMBER: TT-52/FG DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER



Distributor-Transmitter, Teletypewriter TT-52/FG is used for the automatic transmission of teletypewriter messages from perforated tape.

It is a general purpose transmitter-distributor designed for table or shelf mounting.

It is part of Teletypewriter Set AN/TGC-3 but may be used separately.

AN/FGT-TYPE

TT-52/FG :AN/COMP TYPE NUMBER
DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

INSTRUCTION LITERATURE: Teletype Bulletin No. 1109
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	Tape Sensing and Transmitter Mechanism	Not Available	Not Available
1	Distributor	" "	" "
1	Motor	" "	" "
1	Cover, Teletype Corp Model 114713AA	9-1/2 x 16-1/4 x 8-3/4	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shipboard or shore stations.

INSTALLATION: Shipborne, ground.

CAN COMMUNICATE WITH: Any 7.42 unit code teletypewriter receiving equipment geared for 368 OPM.

TECHNICAL CHARACTERISTICS

OPERATING SPEED: 368 opm, approximately 60 wpm.

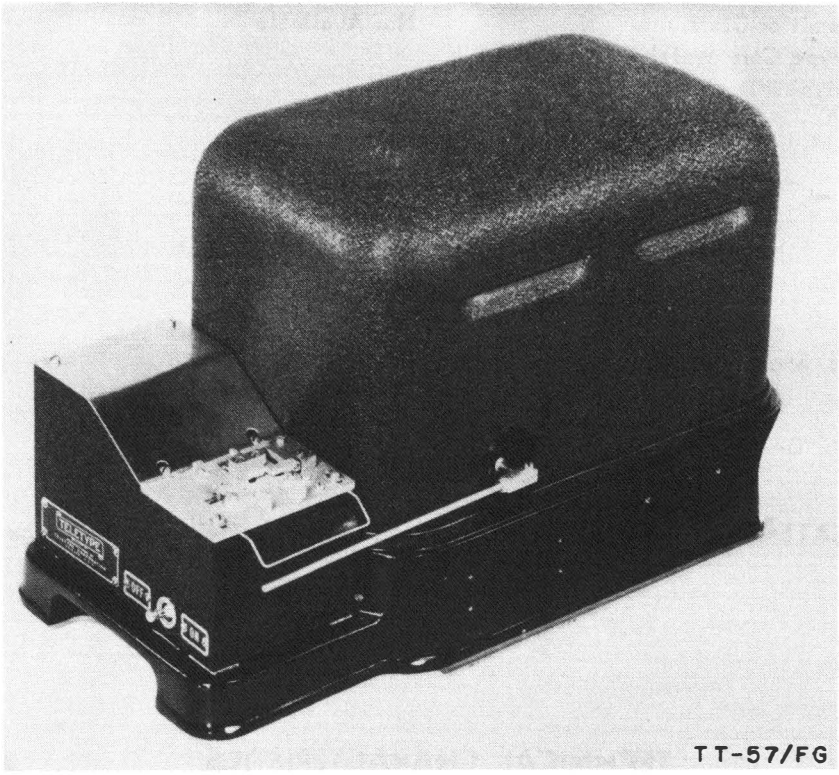
MOTOR CHARACTERISTICS: Series-governed motor.

POWER REQUIREMENTS: 65 w, 110-115 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Distributor-Transmitter, Teletypewriter TT-52/FG not available.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FGT-TYPE** AN/COMP TYPE NUMBER: TT-57/FG TRANSMITTER-DISTRIBUTOR



TT-57/FG

Transmitter-Distributor TT-57/FG is communication equipment used for the automatic transmission of teletypewriter messages from perforated tape. It translates code combinations into electrical impulses and transmits the impulses to one or more receiving stations.

This equipment is a single channel unit and uses chad or chadless tape. It consists of a sensing mechanism, feeding and transmitting mechanism, distributor motor, and radio filters mounted on a teletypewriter table.

AN/FGT-TYPE	INSTRUCTION LITERATURE: Teletype Corp Bulletin No. 144
TT-57/FG :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
TRANSMITTER-DISTRIBUTOR	USING SERVICE : Navy
	DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Transmitter-Distributor Teletype Corp Model XD200AA/AJ	Not Available	Not Available
1	Teletypewriter Table FN-31/FG	" "	40

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: Any 7.42 unit code teletypewriter receiving equipment geared for 368 opm.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: 7.42 unit code; automatic transmission to line circuits from perforated tape.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Synchronous motor, 1,800 rpm.

POWER REQUIREMENTS: 115 v, 60 cyc, 1 phase.

PHYSICAL CHARACTERISTICS

Information on Transmitter-Distributor TT-57/FG not available.

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

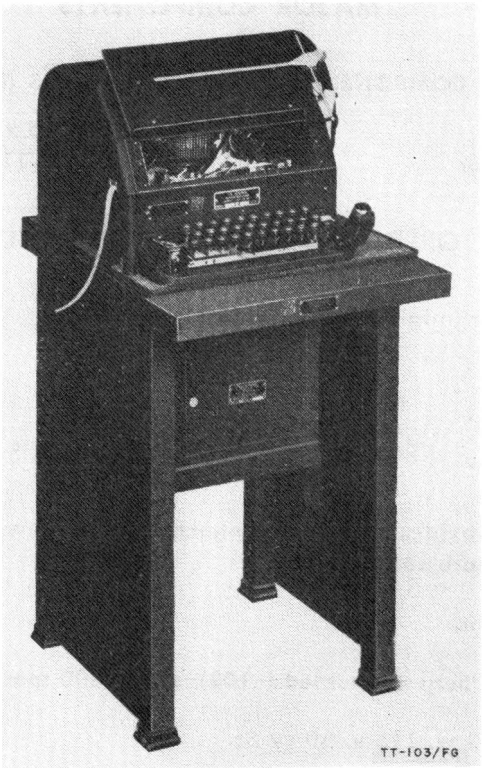
PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGT—TYPE

TT–102/FG, TT–103/FG

REPERFORATOR-TRANSMITTER, TELETYPEWRITER



Teletypewriter Reperforator-Transmitters TT–102/FG and TT–103/FG are general-purpose send-receive typing reperforator sets. Transmission is accomplished through direct keyboard operation and messages are received on 1 1/16-inch typed and perforated paper tape.

Both equipments are identical except for the type of motors used.

AN/FGT–TYPE

INSTRUCTION LITERATURE: Teletype Manual 96MA

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

TT–102/FG, TT–103/FG

REPERFORATOR-TRANSMITTER, TELETYPEWRITER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Keyboard	9 x 15 x 16	17
1	Typing reperforator	7½ x 11½ x 12	33

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Signal center (originating and relay).

INSTALLATION: Fixed.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Provides means for interchanging typewritten messages between two or more points.

OPERATING SPEED: 368 opm.

MOTOR CHARACTERISTICS: Series-governed (–102); syn, 1,800 rpm (–103).

POWER REQUIREMENTS: 160 w, 115 v, 60 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		157			
DOMESTIC PACK:		400	29.1	.7	2
EXPORT PACK:					

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

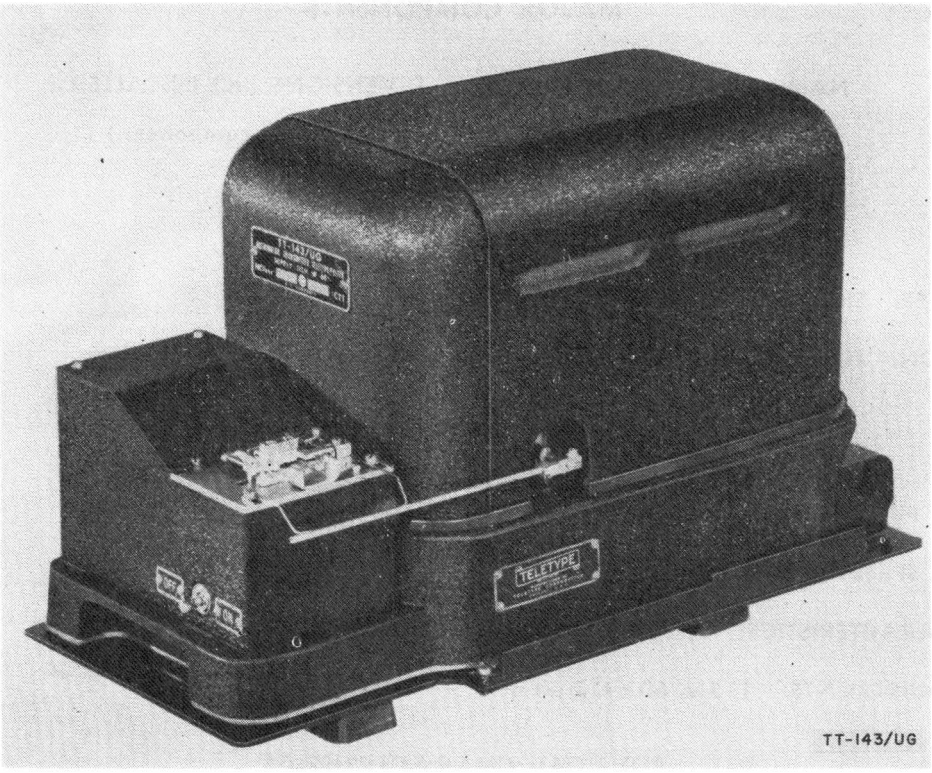
PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

AN/FGT-2 TYPE

TT–143/UG

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER



Teletypewriter Distributor-Transmitter TT–143/UG is a general-purpose teletypewriter equipment that automatically transmits from perforated paper tape.

This equipment is used as a fixed station equipment where large amounts of traffic must be handled quickly.

AN/FGT–TYPE

TT–143/UG

INSTRUCTION LITERATURE: Teletype Manual 103 MA

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

DISTRIBUTOR-TRANSMITTER, TELETYPEWRITER

MAJOR COMPONENTS

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

(Equipment consists of a single major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

OPERATING FUNCTIONS: Automatic tape transmission.

OPERATING SPEED: 390 opm.

MOTOR CHARACTERISTICS: Syn (1,800 rpm).

POWER REQUIREMENTS: 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:	7⅞ x 9½ x 15½	33			
DOMESTIC PACK:		110	7.4		1
EXPORT PACK:					

STATUS: L/Std

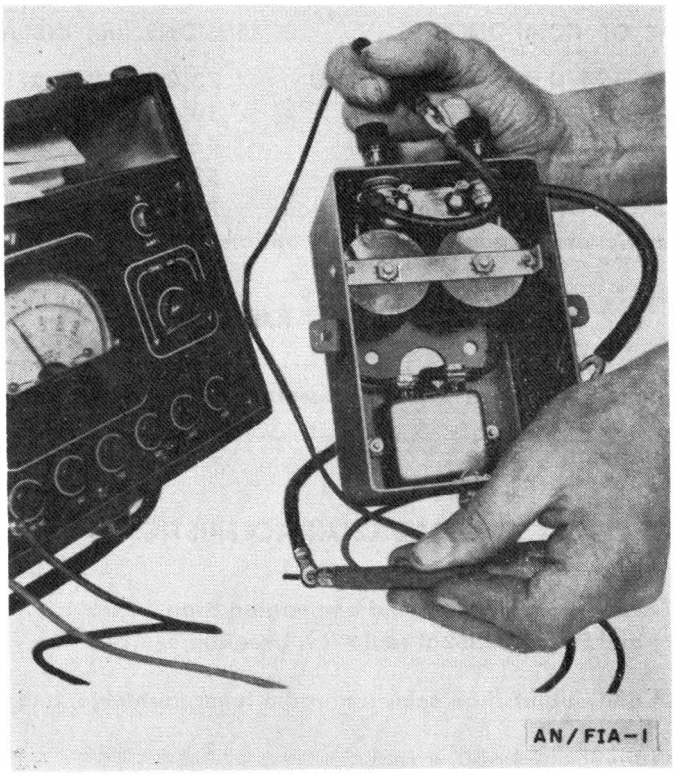
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FIA-1

AUDIO DISTRIBUTING CENTRAL



Audio Distributing Central AN/FIA-1 and its associated audio input equipment amplify and distribute program material to pillow, program, and paging speakers in hospitals and similar institutions.

This equipment can originate programs from recordings or transcriptions, and it can pick up and amplify two fm, am, or short-wave broadcast programs simultaneously. Programs piped in from telephone lines or originated by speech input equipment, such as Amplifier AM-129/U, also can be distributed by this system. Four program channels and one paging channel are available. Provisions have been made for the addition of a fifth program channel and two additional radio receiver program sources.

AN/FIA–1

AUDIO DISTRIBUTING CENTRAL

INSTRUCTION LITERATURE: TM 11–2590

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENTS	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1 ea	Amplifier AM–124/U through AM–128/U	73¼ x 16½ x 22½	171 to 293
3	Microphone M–10/FIA–1	10¼ h x 7½ d	9.3
1	Console OA–23/FIA–1, desk section	4 x 15 x 32	30
1	Console OA–23/FIA–1, main section	57⅜ x 30 x 74⅛	439
2	Console OA–23/FIA–1, phonograph section	33½ x 24 x 27	121

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installations, such as hospitals and similar institutions.

INSTALLATION: Fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Four program chan and one paging chan w/provisions for a fifth program chan and two additional radio rcvr program sources.

TYPE CONTROLS: Input and output chan selection, radio tuner, turntable, and ampl cab. cont.

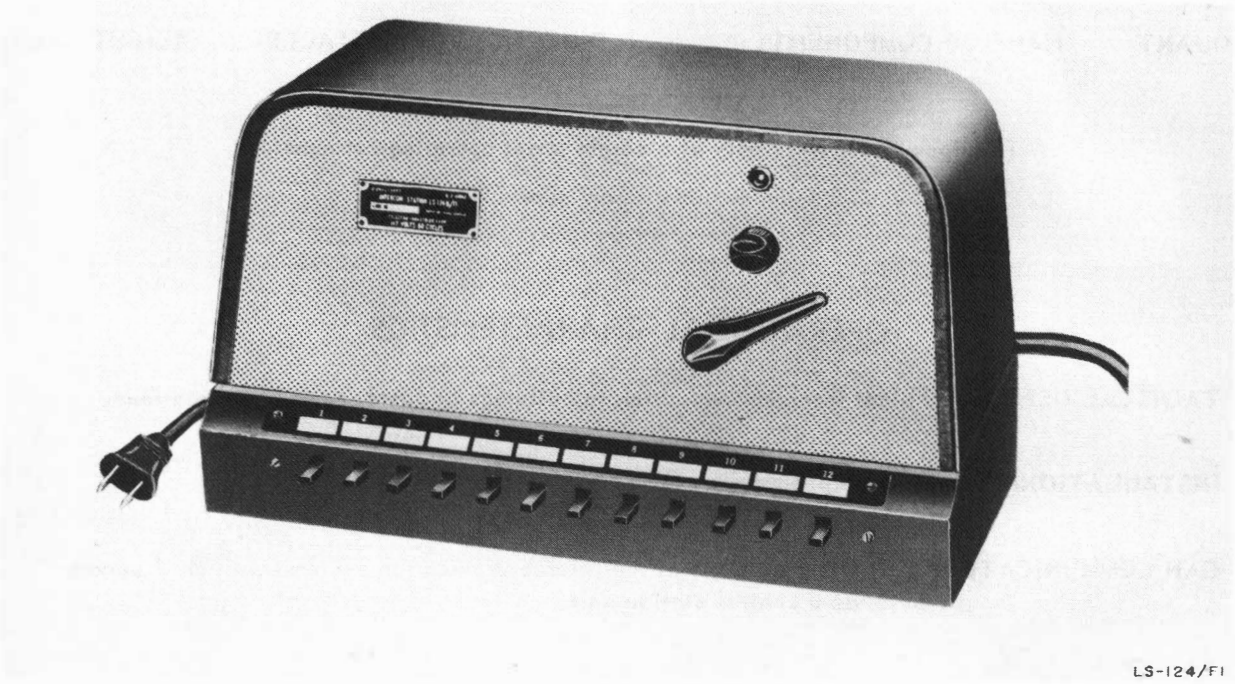
POWER OUTPUT: .5 w (driver ampl); 50 w (pa).

POWER REQUIREMENTS: 60 w (max, driver ampl), 120 w (rcvr), 206 w (max, pa), 3,072 w (max, console), 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:	74⅛ x 57⅜ x 63½	1,918.5			
DOMESTIC PACK:		3,051			16
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-124/FI INTERCOMMUNICATING STATION



LS-124/FI

Intercommunicating Station LS-124/FI is a master control station unit of an intercommunication system serving large headquarters buildings, depots, and communications centers at air stations or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include 12 station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, a volume control, and a pilot light.

This equipment is usually operated in conjunction with remote speaker microphone station units which cannot signal this master station.

Can operate over a trunk line connecting to another master station; the resulting combination can provide intercommunication and paging facilities.

Operates on 110/125 v ac.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572 and TM 11-2572A
LS-124/FI : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERCOMMUNICATING STATION	USING SERVICE : Army
	DATE OF THIS SHEET : 8 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Ground or shipboard.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 11 remote stations if one or more is a master station or 12 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selection (push button), volume control switch, talk-listen level switch.

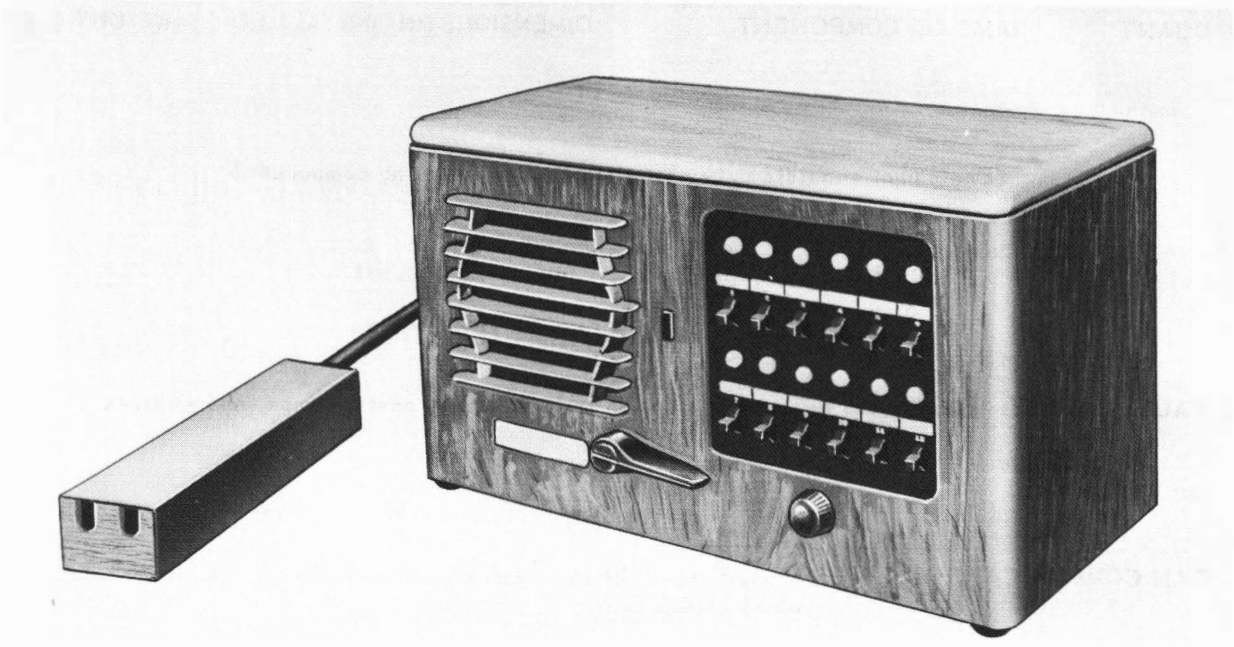
POWER OUTPUT: To line, 2 w; to speaker, 1 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 25 w when in use, 12 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-124/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 35 pounds, total volume 1.8 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 29 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-125/FI INTERCOMMUNICATING STATION



LS-125/FI

Intercommunicating Station LS-125/FI is a master or control station unit used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include 12 station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, and a volume control.

This unit is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

Operates from a conventional a-c power source and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-125/FI AN/COMP TYPE NUMBER	USING SERVICE: Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 29 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 11 remote stations if one or more is a master station or 12 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-125/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20-1/2 pounds, volume 0.5 cu ft. Packed for export shipment; total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

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

AN/FIC-TYPE

AN/COMP TYPE NUMBER: LS-126/FI
INTERCOMMUNICATING STATION

Intercommunicating Station LS-126/FI is a master or control station unit used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, or similar installations.

This equipment consists of a speaker microphone and an audio amplifier assembled as a single unit and is used in conjunction with as many as six other local station units on a one-way, talk-back, selected station, or all-talk basis.

Controls include six station selector switches, a talk-listen-idle switch which operates the annunciators at outlying station units, and a volume control.

This unit is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

Operates from a conventional a-c power source and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-126/FI : AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 29 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves five remote stations if one or more is a master station or six remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v ac; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-126-FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20-1/2 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	AN/FIC-TYPE AN/COMP TYPE NUMBER: LS-127/FI INTERCOMMUNICATING STATION

Intercommunicating Station LS-127/FI is the master or control station unit of an intercommunication system and is used in systems serving large headquarters buildings, depots, communications centers, or similar fixed plant installations.

This equipment consists essentially of a self-contained speaker microphone and amplifier having 24 station selector switches, a talk-listen-idle switch, a volume control, and pilot light.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

The unit can be switched to either 50- or 500-ohm impedances, is powered from a conventional a-c power source, and consumes 15 w when idle.

This equipment is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-127/FI : AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET : 31 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: Fixed plant intercommunication in buildings at posts, camps and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 23 remote stations if one or more is a master station or 24 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

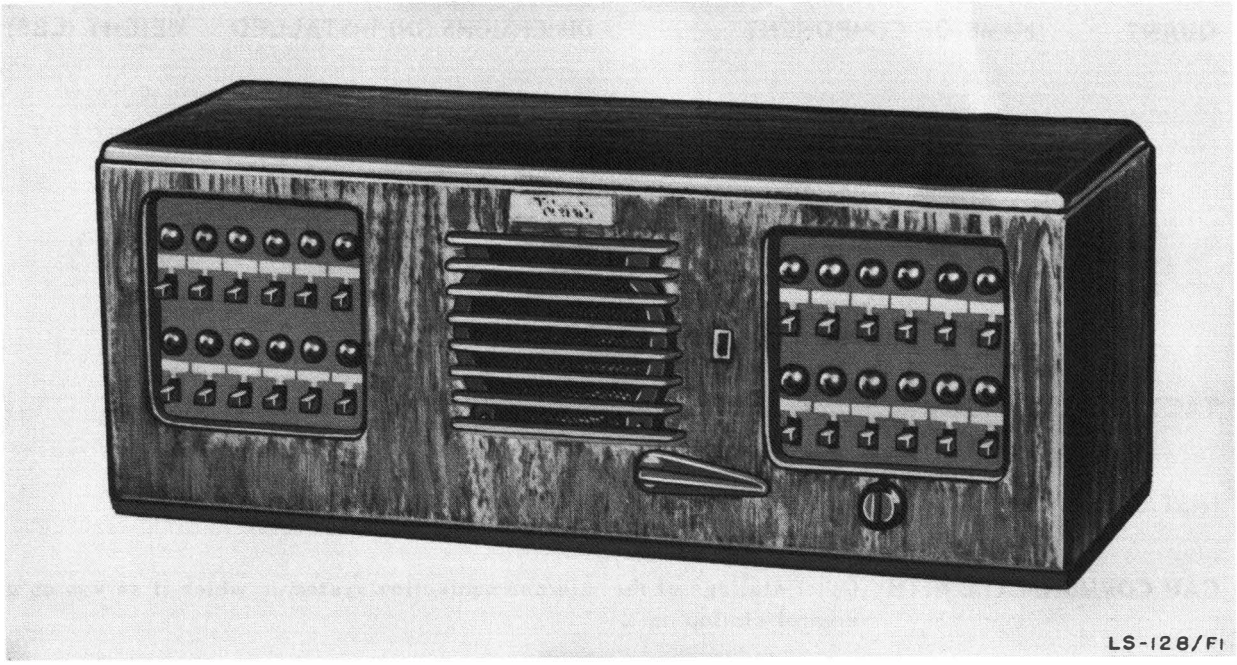
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: Conventional a-c source; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-127/FI measures 7-3/8 x 6-7/8 x 19-3/4 inches, net weight 30 pounds, volume 0.75 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.75 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 31 Jan 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-128/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-128/FI is the master or control station unit of an intercommunication system and is used in systems serving large headquarters buildings, depots, communications centers, or similar fixed plant installations.

This equipment consists essentially of a self-contained speaker microphone and amplifier having 24 station selector switches, arranged on two panels, and has signal lamps, a talk-listen-idle switch, a volume control, and pilot light.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

The unit can be switched to either 50- or 500-ohm impedances, is powered from a conventional a-c power source, and consumes 15 w when idle.

This equipment is designed specifically for use with Intercommunicating Station LS-129/FI or LS-130/FI.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-128/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 31 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 23 remote stations if one or more is a master station or 24 remote stations if all are speaker microphone units.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-listen-talk switch.

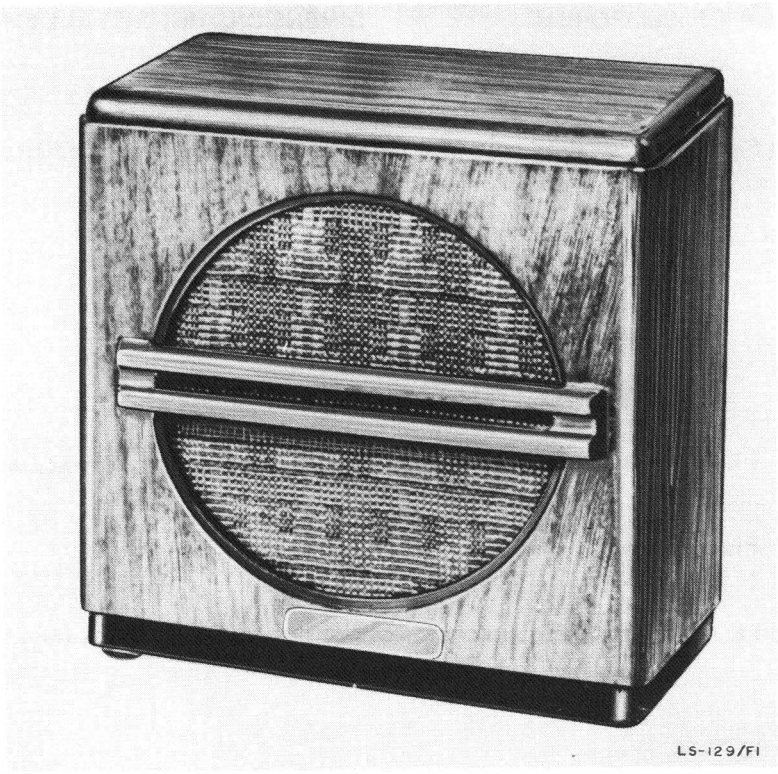
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110–125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-128/FI measures 7-3/8 x 6-7/8 x 19-3/4 inches, net weight 30 pounds, volume 0.5 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.9 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 22 Jan 52	AN/FIC-TYPE AN/COMP TYPE NUMBER: LS-129/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-129/FI is a speaker microphone equipment used in an intercommunication system. It is used in headquarters buildings, depots, communications centers, and similar installations.

This equipment consists of a speaker microphone housed in a wooden cabinet. It cannot initiate calls to other speaker microphone units or to the master station unit of a system in which it is used.

In an emergency, it can be used in 500-ohm impedance systems, but with reduced efficiency.

It may be used with Intercommunicating Station LS-125/FI and is powered by the master station unit of the system.

AN/FIC-TYPE	INSTRUCTION LITERATURE: TM 11-2572
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-129/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET : 22 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed plant.

CAN COMMUNICATE WITH: Master control stations of the system in which it serves as a listening station or talk-back unit.

TECHNICAL CHARACTERISTICS

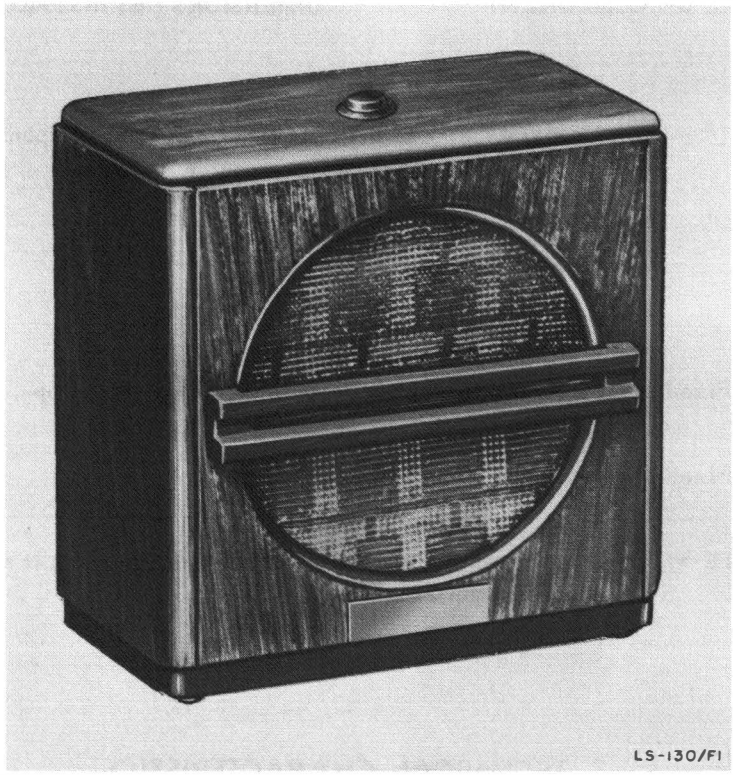
FACILITIES AFFORDED: Local intercommunication station.

POWER OUTPUT: 2 w.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-129/FI measures 7-3/8 x 3-3/4 x 7-1/8 inches, net weight 4.25 pounds, volume 0.125 cu ft.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-130/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-130/FI is a speaker microphone equipment designed for use as a local station unit in an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

Consists of a 5-inch speaker microphone housed in a wooden cabinet and is equipped with a push button for signaling annunciator-equipped master station units.

This equipment cannot initiate calls to other speaker microphone units or to master station units not equipped with annunciators.

AN/FIC-TYPE

LS-130/FI : AN/COMP TYPE NUMBER
INTERCOMMUNICATING STATION

INSTRUCTION LITERATURE: TM 11-2572
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET: 15 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed station.

CAN COMMUNICATE WITH: Master control stations of the system in which it serves as a listening station or talk-back unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: No special facilities.

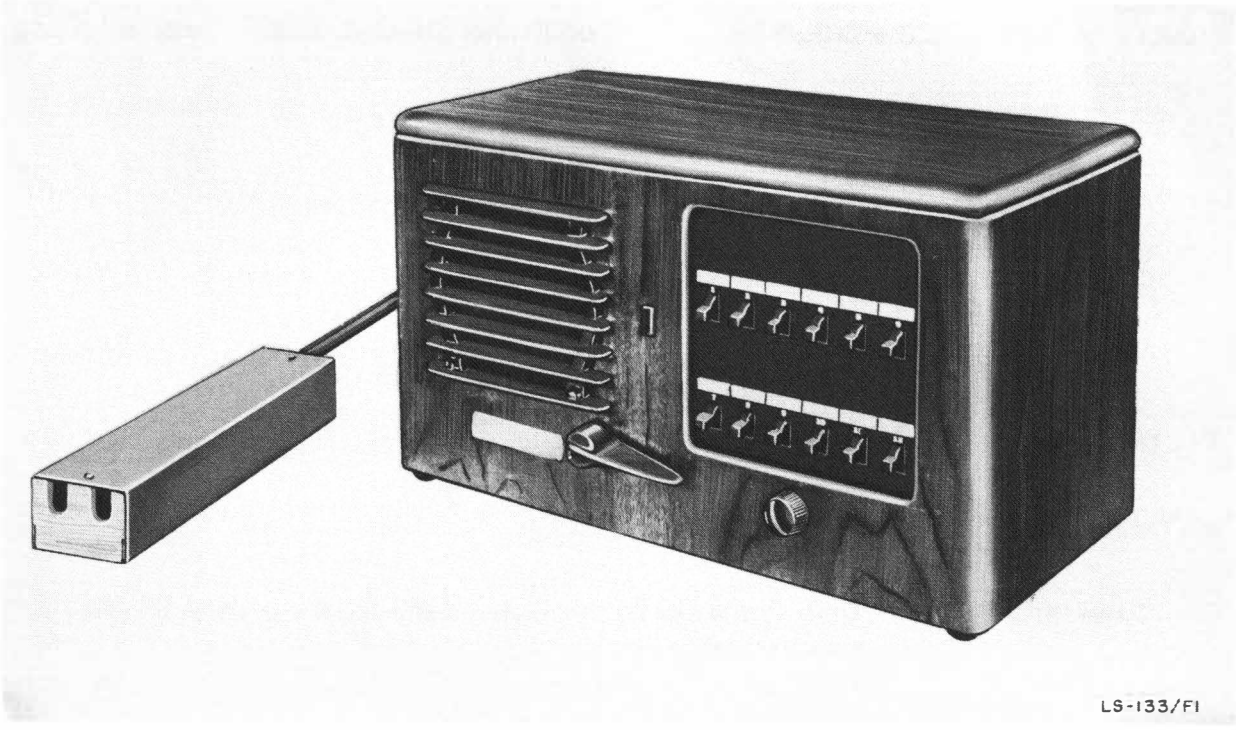
TYPE CONTROLS: Push button for calling master station.

POWER OUTPUT: 2 w.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-130/FI measures 7-3/8 x 3-3/4 x 7-1/8 inches, net weight 4.25 pounds, volume 0.125 cu ft. Packed for export shipment: total weight 40 pounds (10 units), total volume 4 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-133/FI INTERCOMMUNICATING STATION



LS-133/FI

Intercommunicating Station LS-133/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 12 station selector switches, a press-to-talk switch, and a volume control.

It can be used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

It can be switched to either 50- or 500-ohm impedances, is powered by a conventional a-c power source, and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-133/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 15 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 12 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and idle-talk-listen switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110/220 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-133/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 cu ft, volume 0.4 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-134/FI INTERCOMMUNICATING STATION

Intercommunicating Station LS-134/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 24 station selector switches, on-off switch, volume control, and an idle-talk-listen switch.

It can be used in conjunction with as many as 24 other station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

It has a special circuit which prevents reception by an outside station without consent of stations conversing, but which allows an outside station to interrupt with a priority message.

Operates on 110-125v and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
	CLASSIFICATION OF EQUIPMENT: Unclassified
LS-134/FI :AN/COMP TYPE NUMBER	USING SERVICE : Army
INTERCOMMUNICATING STATION	DATE OF THIS SHEET: 15 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 24 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and an idle-talk-listen switch.

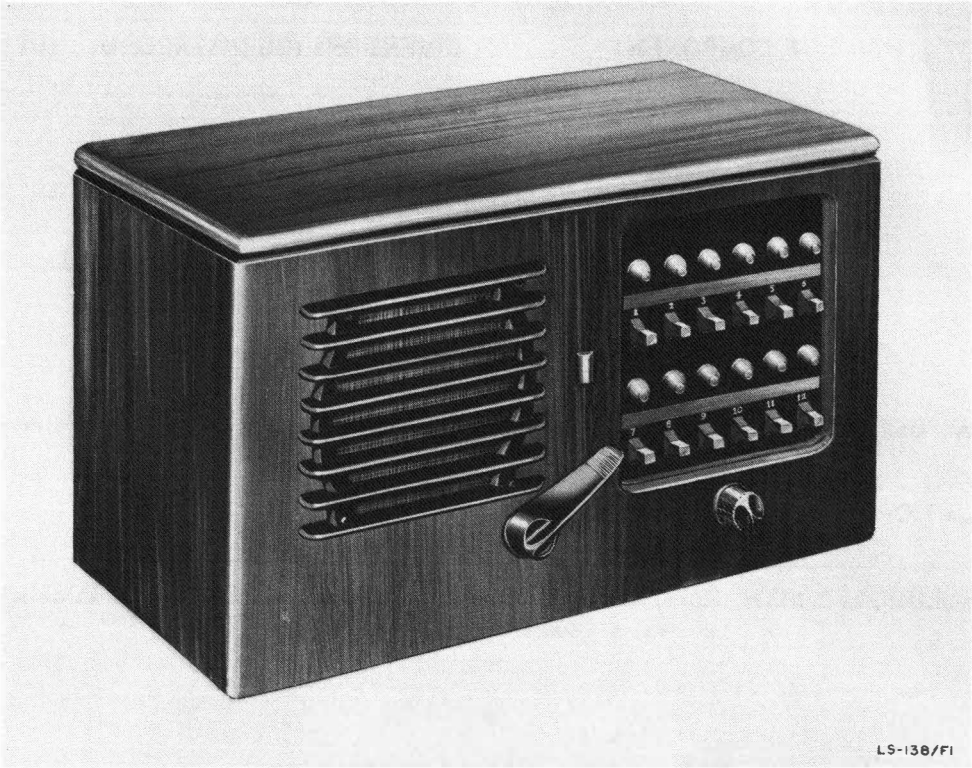
POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110-125 v, 50/60 cyc; 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-134/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.4 cu ft. Packed for export shipment: total weight 79.5 pounds, total volume 3.9 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 15 Feb 52	**AN/FIC-TYPE** AN/COMP TYPE NUMBER: LS-138/FI INTERCOMMUNICATING STATION



Intercommunicating Station LS-138/FI is a master or control station unit of an intercommunication system. It is used in systems serving large headquarters buildings, depots, communications centers, or similar installations at army and higher headquarters.

This equipment consists of a self-contained speaker microphone and amplifier unit having 12 station selector switches, a press-to-talk switch, and a volume control.

It is designed to be used in conjunction with as many as 12 other local station units on a one-way, talk-back, selected station, or all-talk basis.

This unit can communicate with other master stations and through them with their remote stations.

Operates on conventional 110/220 v ac and consumes 15 w when idle.

AN/FIC-TYPE	INSTRUCTION LITERATURE: None
LS-138/FI : AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
INTERCOMMUNICATING STATION	USING SERVICE : Army
	DATE OF THIS SHEET : 15 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: Fixed plant intercommunication in buildings at posts, camps, and stations.

INSTALLATION: Fixed.

CAN COMMUNICATE WITH: Other stations of the intercommunication system in which it serves as a control station unit.

TECHNICAL CHARACTERISTICS

FACILITIES AFFORDED: Serves 12 remote stations.

TYPE CONTROLS: Station selector switches, on-off and volume switch, and an idle-talk-listen switch.

POWER OUTPUT: 2-1/2 w.

POWER REQUIREMENTS: 110/220 v 50/60 cyc, 15 w when idle.

PHYSICAL CHARACTERISTICS

Intercommunicating Station LS-138/FI measures 7-3/8 x 6-7/8 x 13-3/8 inches, net weight 20.5 pounds, volume 0.4 cu ft. Packed for export shipment: total weight 70 pounds, total volume 3.3 cu ft. Shipped in 1 package.

STATUS: Std

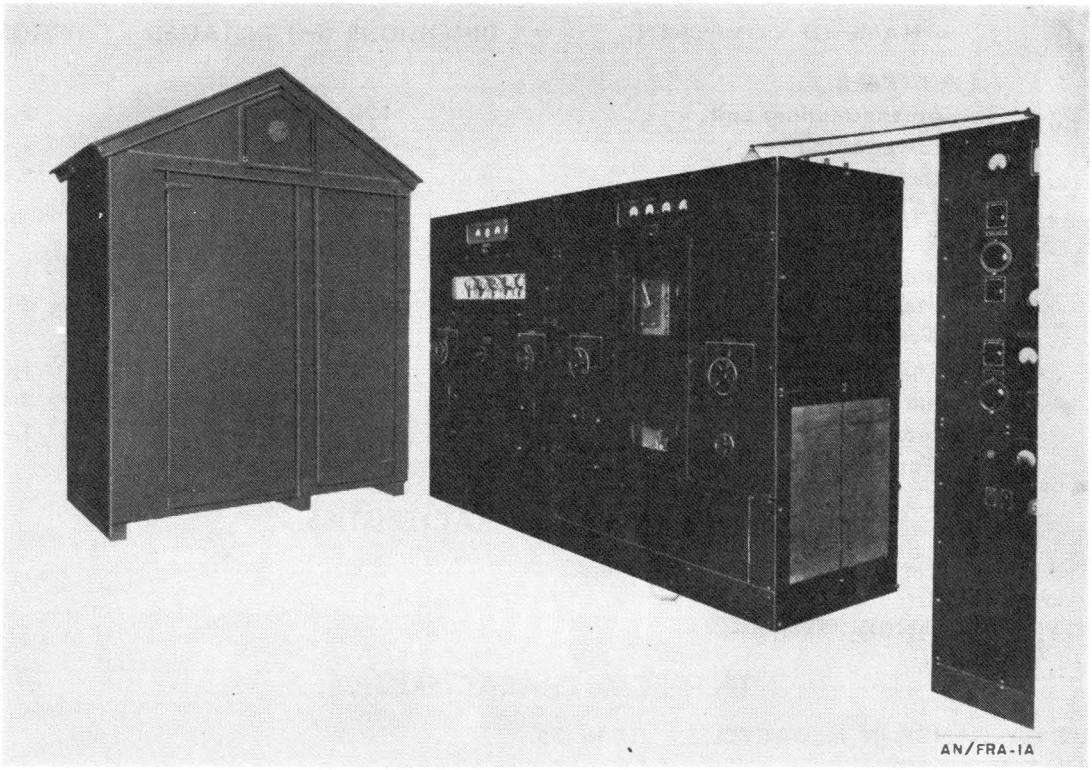
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRA–1( )

AMPLIFIER ASSEMBLY



Amplifier Assembly AN/FRA–1( ) is a low- to medium-frequency, medium-power (class C), rf power-amplifier equipment intended for military fixed station radiotelegraph service. It is operated with such exciters as Radio Transmitter BC–365–( ).

This equipment consists essentially of the power amplifier, its related rectifier, an antenna tuning unit, and associated items.

Models A and B include a prefabricated wooden house that contains the antenna tuning networks. All models are functionally interchangeable but differ in arrangement of controls, control circuitry, and similar design details.

AN/FRA-1( )

AMPLIFIER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-1055, TM 11-5028

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRA-1:		
1	Antenna tuning unit	120 x 97 x 68	2,540
1	Power amplifier	78 x 60 x 36	1,400
1	Rectifier	78 x 60 x 36	1,600
	For AN/FRA-1A:		
1	Amplifier	76 x 60 x 36	900
1	Antenna tuning unit	98 x 84 x 58	1,400
1	Rectifier unit	76 x 60 x 36	2,000
	For AN/FRA-1B:		
1	Amplifier	76 x 60 x 36	1,650
1	Antenna tuning unit	110 x 84 x 62	2,600
1	Rectifier unit	76 x 60 x 36	1,700

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station radiotelegraph.
INSTALLATION: Ground, fixed station.
APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .15 to .55.
ANTENNA CHARACTERISTICS: 750 to 3,000 $\mu\mu$f; 6 to 12 ohms.
TYPE MODULATION: Am (A1, A2).
TYPE OF SIGNAL: Cw, on-off, or fsk (200-wpm International Morse Code).
POWER OUTPUT: 6 to 10 kw.
POWER REQUIREMENTS: 22 kva, 200/240 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	16½ x 5½ x 7 ft (-1)	5,540 (-1)			
	19 x 5 x 7 ft (inside xmtr house, -1A, -1B)	4,300 (-1A)			
	9 x 7 ft (clear area adjacent to ant. down lead, -1A, -1B)	5,950 (-1B)			
DOMESTIC PACK:					
EXPORT PACK:		9,915 (-1)	646.82	16.2	17
		9,488 (-1A)			13
		8,846 (-1B)			10

STATUS: Std

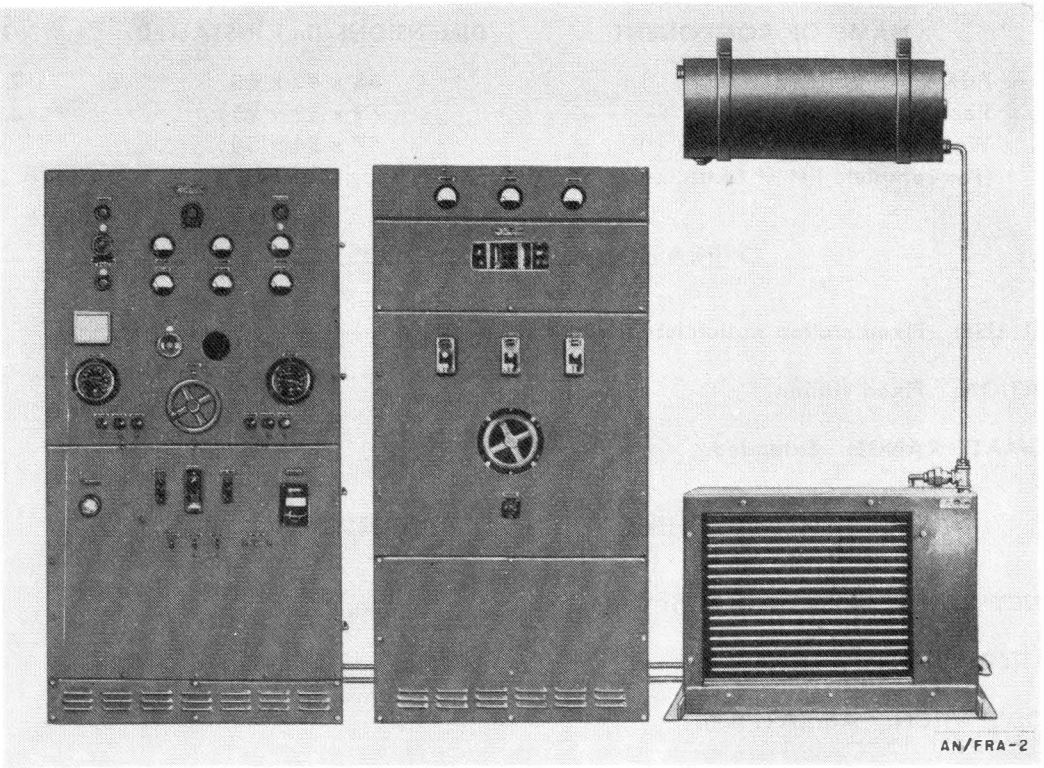
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRA-2

AMPLIFIER GROUP



Amplifier Group AN/FRA-2 is a low- to medium-frequency, medium-power, cw or frequency-shift keying, rf power-amplifying equipment used for fixed station radioteletypewriter communication.

This equipment consists essentially of the power-amplifier unit (a push-pull, class C amplifier), its associated rectifier, and a water-cooling unit.

This power amplifier is operated with Radio Transmitter BC-339-( ) or equal and is available in several models, all of which are functionally interchangeable but different in design details.

AN/FRA–2

AMPLIFIER GROUP

INSTRUCTION LITERATURE: TM 11–801

USING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Power Amplifier BC–340–( )	83 x 42 x 60	2,370
1	Rectifier RA–22–( )	79 x 39 x 95	3,105
1	Water Cooling Unit RU–2–( )	47 x 54 x 54	850

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed station radioteletypewriter.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 26.5.

EXCITER REQUIREMENTS: 400 w to 1 kw.

TYPE MODULATION: Am (A1, A2).

TYPE OF SIGNAL: Cw or fsk (300-wpm International Morse Code; 425 cy either side of mean carrier freq).

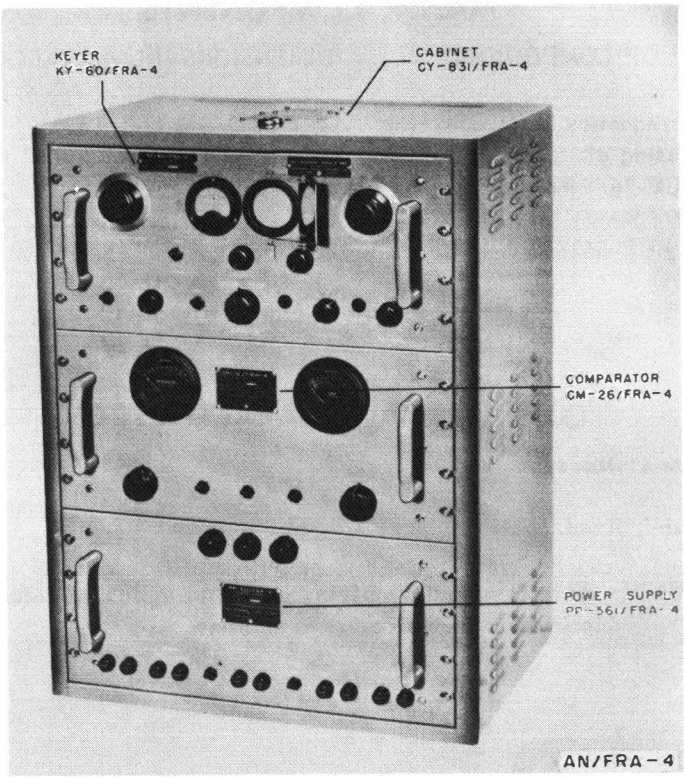
POWER OUTPUT: 10 kw.

POWER REQUIREMENTS: 200 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:		7,357	335.9	8.4	
DOMESTIC PACK:					21
EXPORT PACK:		9,258	653.7	16.3	21

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Confidential USING SERVICE: Navy DATE OF THIS SHEET: 14 May 52	**AN/FRA-4** FREQUENCY SHIFT CONVERTER GROUP



Frequency Shift Converter Group AN/FRA-4 is used to select the strongest of three frequency-shift signals from associated diversity radio receiving equipments, and to convert mark-space type frequency-shifts into polar-relay operation, keyed-tone output, and keyed d-c output; or to convert multiple-shift facsimile-type signals into a-m tone output. These outputs are used to operate teletypewriter perforated tape recorders, remotely located telegraph, or teletypewriter terminal equipment, facsimile recorders, or other similar equipments.

The signals used by the equipment are the 50 kc i-f outputs from three RBP or RCP Diversity Radio Receiving Equipments. It can be used with one- or two-channel diversity receiving system as well as the customary three receiver system.

The frequency of the keyed-tone output is continuously adjustable from 850 to 3,750 cps by a tone frequency key.

An external audio oscillator can be connected to the external tone input jack. A polar relay is provided for keying d-c telegraph loop circuits at keying speeds corresponding to teletypewriter speeds of up to 100 wpm.

The comparator, keyer, and power supply may be removed from the main table-mounted type cabinet, and mounted in any 19-inch relay rack.

AN/FRA-4

FREQUENCY SHIFT CONVERTER GROUP

INSTRUCTION LITERATURE: NavShips 91496
CLASSIFICATION OF EQUIPMENT: Confidential
USING SERVICE : Navy
DATE OF THIS SHEET : 14 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	AN/FRA-4 Frequency Shift Converter Group Consisting of:	28 x 28-3/8 x 17-1/16	159
	Comparator CM-26/FRA-4	8-3/4 x 19 x 15-3/16	Not Available
	Keyer KY-60/FRA-4	8-3/4 x 19 x 15-3/16	" "
	Power Supply PP-561/FRA-4	8-3/4 x 19 x 15-3/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This is signal modifying apparatus which operates in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .05, .01 bandwith.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Frequency Shift.

POWER OUTPUT: Tone output: 10 v across 600 ohms.
D-c signal: 90 v across 3,000 ohms.
Polar relay: 270 v, dc.

POWER REQUIREMENTS: 227 w, 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Frequency Shift Converter Group AN/FRA-4 measures 28 x 28-3/8 x 17-1/16 inches, net weight 245 pounds, volume 10.85 cu ft. Packed for domestic shipment: total weight 372 pounds, total volume 26.5 cu ft, 0.66 ship ton. Shipped in 2 packages.

STATUS: Std

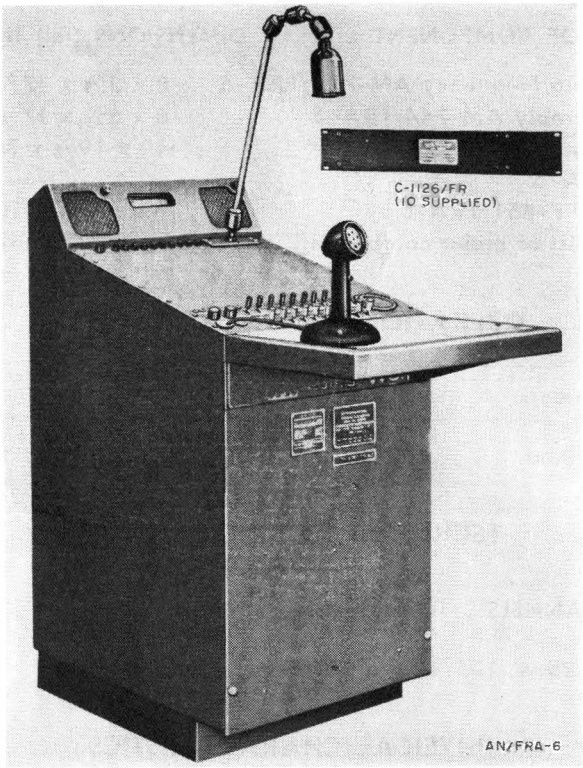
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRA–6

CONTROL-MONITOR GROUP



Control-Monitor Group AN/FRA–6 is an airport remote-control console used for the operation of 1 to 10 transmitters remotely located from the airport control tower. It is also used for selecting and controlling the output of 1 to 10 remotely located receivers.

When required, two of these groups can be connected in multiple to share any or all the remote equipment available.

AN/FRA-6

CONTROL-MONITOR GROUP

INSTRUCTION LITERATURE: NAVSHIPS 91816(A)

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Audio Frequency AM-728/FRA-6	8 x 2 7/8 x 17 7/16	
1	Amplifier Assembly AM-744/FRA-6	8 x 5 3/4 x 17 7/16	
1	Console, Communication Control OA-408/FRA-6	40 x 19 1/2 x 36	
1	Power Supply PP-851/FRA-6	7 1/4 x 8 5/8 x 10 7/8	

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport towers.

INSTALLATION: Ground, fixed.

TECHNICAL CHARACTERISTICS

NO. OF CONTROLLED CHANNELS: 10 ea (max; rcvr, xmtr).

POWER REQUIREMENTS: 25 w, 105/125 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:	40 x 19 1/2 x 36	310			
DOMESTIC PACK:		705	39.2	1	4
EXPORT PACK:					

STATUS: Std

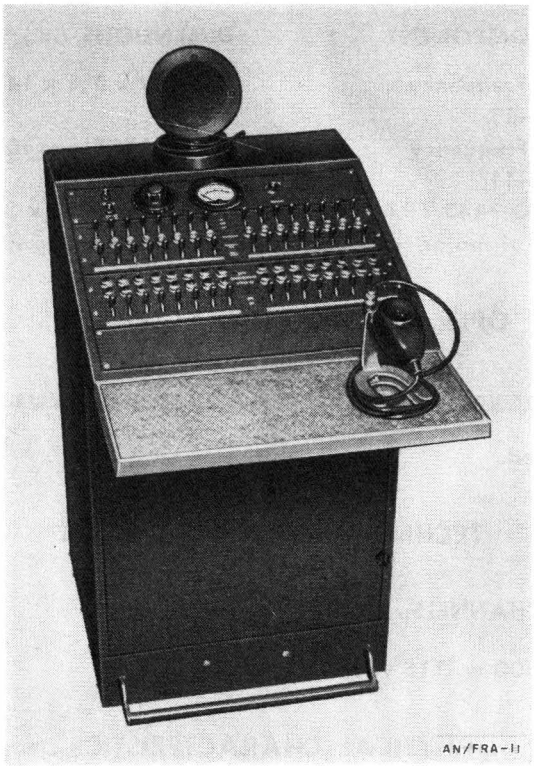
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRA-11

CONTROL-MONITOR GROUP



Control-Monitor Group AN/FRA-11 is an aircraft communication control system that provides unified air-to-ground voice communication.

This equipment provides flexible control of 16 transmit-receive communication channels. The transmitters and receivers may be either locally or remotely located.

AN/FRA-11

CONTROL-MONITOR GROUP

INSTRUCTION LITERATURE: NAVSHIPS 92273

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
4	Amplifier, Audio Frequency AM-1042/FRA-11	19 x 8¾ x 14	
4	Amplifier, Audio Frequency AM-1043/FRA-11	19 x 5¼ x 10½	
3	Control-Indicator C-1443/FRA-11	20 1/16 x 35 x 34⅜	

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Aircraft communication control at airport control towers.

INSTALLATION: Ground, fixed.

TECHNICAL CHARACTERISTICS

NUMBER OF CONTROLLED CHANNELS: 16 ea (rcvr, xmtr).

POWER REQUIREMENTS: 1,600 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:					
DOMESTIC PACK:		1,956.2	142.7	3.6	15
EXPORT PACK:					

STATUS: Std

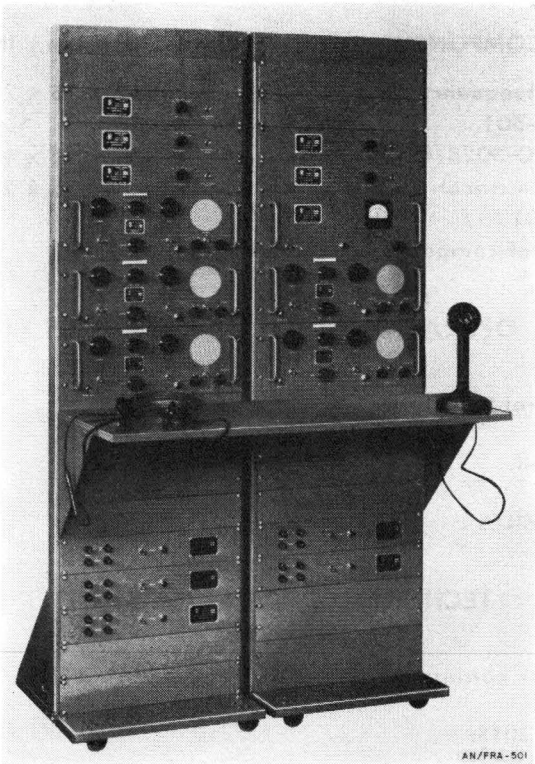
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRA–501

RECEIVER CONTROL GROUP



Receiver Control Group AN/FRA–501 is a remote-control equipment used to operate a radio receiver, or another radio device from a central station, over a land line or radio microwave link.

This equipment provides up to 15 vernier and 10 on/off control functions within a standard voice-frequency band of 400 to 3,000 cycles.

It consists essentially of two operating groups: one at the control site and the other at the remote operating site, interconnected by either radio or telephone facilities.

AN/FRA-501

RECEIVER CONTROL GROUP

INSTRUCTION LITERATURE: NAVSHIPS 92600A

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier, Audio Frequency AM-5028/FRA-501	27 x 15 x 24	16
1	Control, Receiver C-5028/FRA-501	27 x 15 x 11	15
1	Filter Assembly, Electrical F-5010/FRA-501	27 x 15 x 24	32

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Remote-control facilities.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Audio tone carrier.

TYPE COMMUNICATION CIRCUITS:

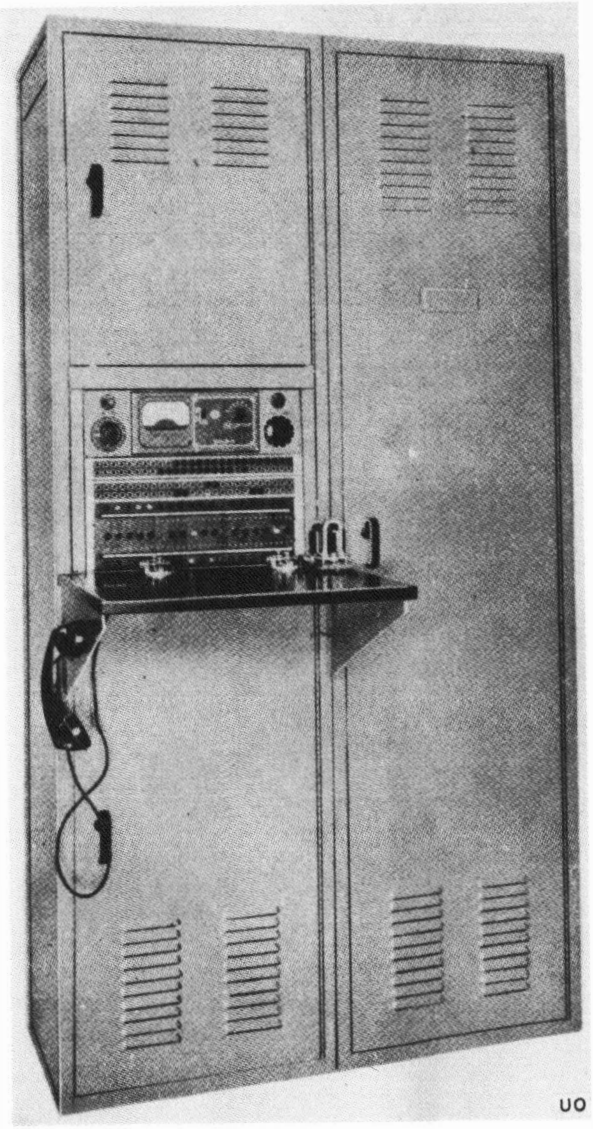
CONTROLS: 15 vernier and 10 on/off.

POWER REQUIREMENTS: 1.2 kw, 110/220 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:					
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 29 May 52	**AN/FRA-TYPE** SERVICE TYPE NUMBER: UO VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT



UO

Voice Control and Speech Privacy Equipment UO is terminal equipment used to connect four-wire radiotelephone transmitter and receiver circuits to normal two-wire telephone plant. It also provides speech scrambling and unscrambling to prevent unauthorized listening-in on radiotelephone circuits.

This equipment includes channel shifter and restorer circuits, which by shifting one voice channel of a single side band, twin-channel, radiotelephone circuit, provides a means of reducing crosstalk between the two channels.

Radio noise is effectively reduced by voice operated, gain-controlled amplifiers, which raise speech waves to all telephone stations to the same volume level, and by a noise reducer which attenuates noise signals during intervals between speech syllables or words.

It is housed in six 19-inch relay cabinets and provides for one-channel operation.

Several of the components will accommodate two- or four-channels and are not required on a one-for-one basis, for multichannel operation.

AN/FRA-TYPE	INSTRUCTION LITERATURE: W E Co. Nos. 1,114 through 1,121, 1,128 CLASSIFICATION OF EQUIPMENT: Unclassified
UO :SERVICE TYPE NUMBER	USING SERVICE : Navy
VOICE CONTROL AND SPEECH PRIVACY EQUIPMENT	DATE OF THIS SHEET : 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
*	Control Terminal CW-23532 (Control Bay)	84 x 22-1/4 x 17	Not Available
*	Control Terminal CW-23534 (Auxiliary Bay)	84 x 22-1/4 x 17	" "
***	Privacy System CW-50293 (Common Bay)	84 x 22-1/4 x 17	" "
*	Privacy System CW-50295 (Channel Bay)	84 x 22-1/4 x 17	" "
**	Channel Shifter Bay CW-50296	84 x 22-1/4 x 17	" "
**	Vogad Bay CW-50299	84 x 22-1/4 x 17	" "

* (1) per channel. ** (1) per twin channel. *** (1) per four channels.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This is auxiliary signal modifying apparatus used in conjunction with primary communication equipment.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE: 250 - 3,000 cps, or
2,250 - 5,000 cps (channel shifted).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: +7 to +12 volume units.

POWER REQUIREMENTS: 1,500 w, 105-125 v, 50/60 cyc, 1 phase, ac.

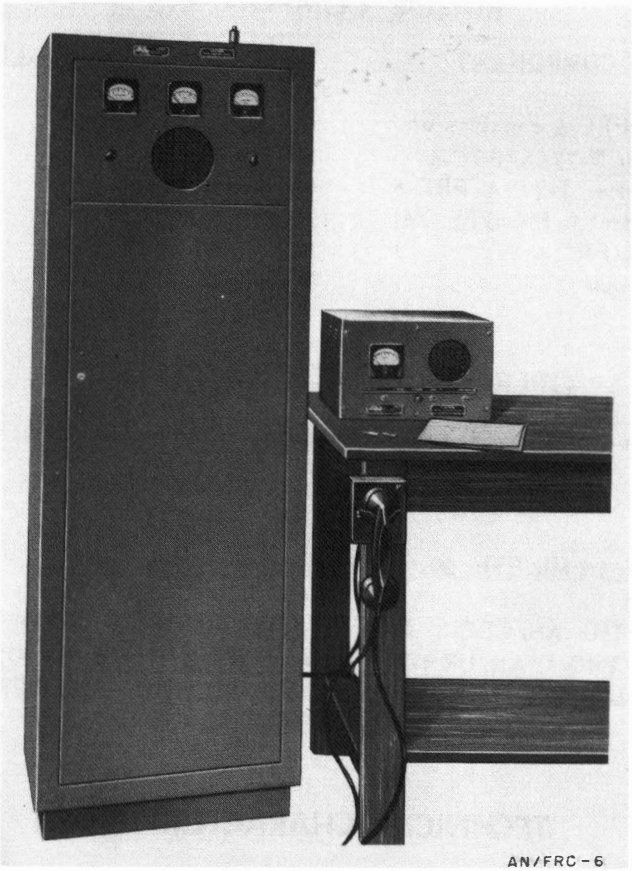
PHYSICAL CHARACTERISTICS

Voice Control and Speech Privacy Equipment UO measures 84 x 133-1/2 x 17 inches.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 20 Jan 52

AN/FRC-6

RADIO SET



Radio Set AN/FRC-6 is a two-way, crystal-controlled, f-m (voice) transmitting and receiving equipment used for communication in the h-f band by military police, security troops, and similar units.

The equipment consists of cabinet-inclosed, rack and panel-mounted equipment and includes a control console, handset, and associated accessories.

This set can be operated by remote control over a field telephone pair from a distance up to 10 miles and can communicate with fixed or vehicular stations, in open country, up to 20 miles away.

Requires approximately 325 w of 115v ac.

AN/FRC-6

RADIO SET

INSTRUCTION LITERATURE: TM 11-5506
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 20 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Rack MT-658A/FRC-6 consists of:	68-1/8 x 22-1/2 x 15	173
	Radio Receiver R-276A/FRC-6	9 x 9 x 18-1/2	21
	Radio Transmitter T-215A/FRC-6	9 x 9 x 18-1/2	38
	Radio Set Control C-560A/FRC-6	5-1/4 x 6 x 18-1/2	8
1	Console C-559A/FRC-6	8-3/4 x 12 x 13	33
1	Handset and hanger	9 x 4-3/8 x 4-1/8	3

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Counter Intelligence Corps detachments at division, army, and theater level.

INSTALLATION: Fixed Ground.

APPROXIMATE RANGE (IN MILES): 20.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Fm, voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 325 w, 115 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/FRC-6 measures 68-1/8 x 22-1/2 x 15 inches, net weight 213 pounds, volume 16.354 cu ft. Packed for domestic shipment: total weight 496 pounds, total volume 40.101 cu ft, 1.10 ship tons. Shipped in 2 packages.

STATUS: Std

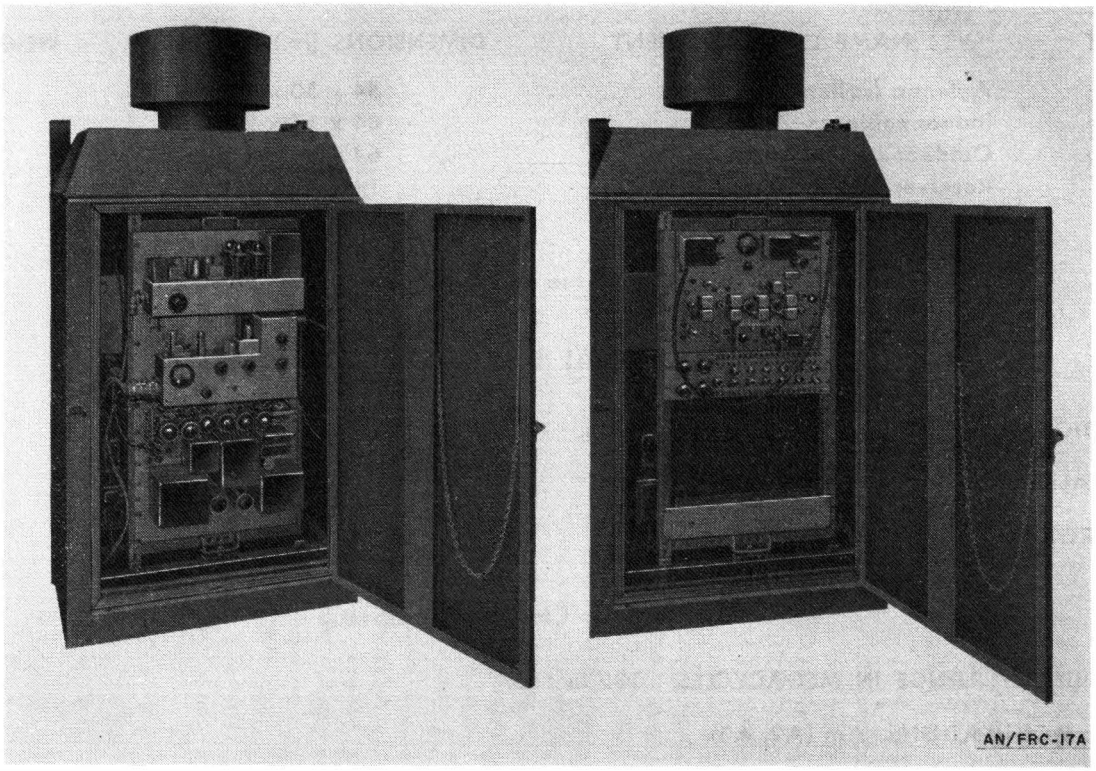
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–7A, –17A

RADIO SET



Radio Sets AN/FRC–7A and AN/FRC–17A are medium-power, vhf, am (voice and tone) receiving and transmitting equipment used for fixed plant radio relay applications. The AN/FRC–7A serves as an indoor installation; the AN/FRA–17A, as an outdoor installation.

Each set consists essentially of a receiver and transmitter, housed in ventilated steel cabinets, and includes auxiliary items. In radio relay service, this equipment, with appropriate carrier facilities, provides four two-way channels.

AN/FRC–7A, –17A

RADIO SET

INSTRUCTION LITERATURE: TM 11–292

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Antenna (collapsed)	54 x 50 x 12	40
2	Indoor cabinet (–7A)	84 x 17 x 26¼	265
2	Outdoor cabinet (–17A)	64½ x 18 x 32	290
1	Receiver	14 x 2½ x 19	20
1	Transmitter	19 7/32 x 8 11/16 x 19	14
1	Transmitter power supply	8¾ x 8¾ x 19	68

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Corps or higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 to 156.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Voice or tone.

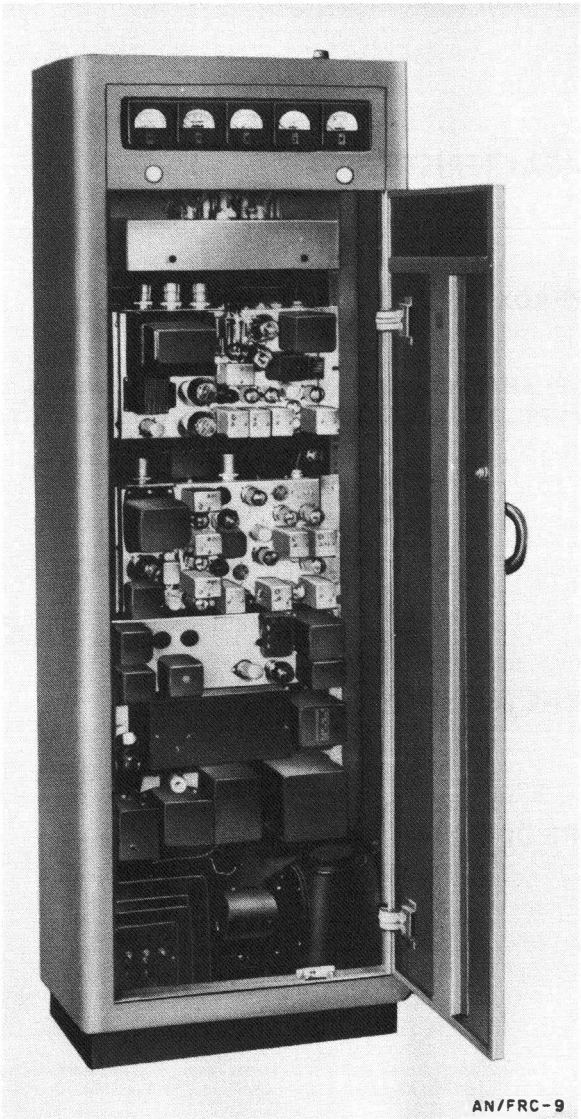
POWER OUTPUT: 25 w.

POWER REQUIREMENTS: 90 w (rcvr), 400 w (xmtr), 105 to 125 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:					
AN/FRC–7A	84 x 17 x 26¼ (ea cab.)	419.5	44.5	1.11	
AN/FRC–17A	64½ x 18 x 32 (ea cab.)	444.5	42.4	1.06	
DOMESTIC PACK:					
EXPORT PACK:					
AN/FRC–7A		1,149	134.75	3.4	7
AN/FRC–17A		1,269	140.57	3.5	7

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 8 Jan 52	**AN/FRC-9** RADIO SET



AN/FRC-9

Radio Set AN/FRC-9 is a medium-power, crystal-controlled, f-m (voice), radio transmitting and receiving equipment which operates in the v-h-f band and is used for fixed-station, point-to-point communication for traffic control by guard and security troops, military police units and similar organizations.

This equipment consists of a single-channel transmitter with associated receiver and power supply components inclosed in a floor-type metal cabinet. It has an automatic power overload reset, and includes a motor blower.

A coaxial whip-type or equivalent antenna is used.

AN/FRC-9	INSTRUCTION LITERATURE: None CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE : Army
RADIO SET	DATE OF THIS SHEET : 8 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: Fixed station, primary guard radio.

INSTALLATION: Ground, transportable. APPROXIMATE RANGE (IN MILES): 30.

CAN COMMUNICATE WITH: AN/CRC-3; AN/FRC-6, -9; AN/GRC-7, -8; AN/MRC-5, -16; AN/PRC-9, -10; AN/SRR-13; AN/TRQ-1; AN/URR-10, -12; AN/VRC-2, -3, -10, -15, -18, -22; AN/VRQ-2, -3; AN/VRR-4; BC-787; MAN; MN; R-137/GR; RBK; SCR-300, -607, -608, -609, -610, -619, -628, -678, -808, -828.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 - 40.

TYPE MODULATION: Fm. TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter - 250 w.

POWER REQUIREMENTS: 1,160 w, 115 v, 60 cyc, ac.

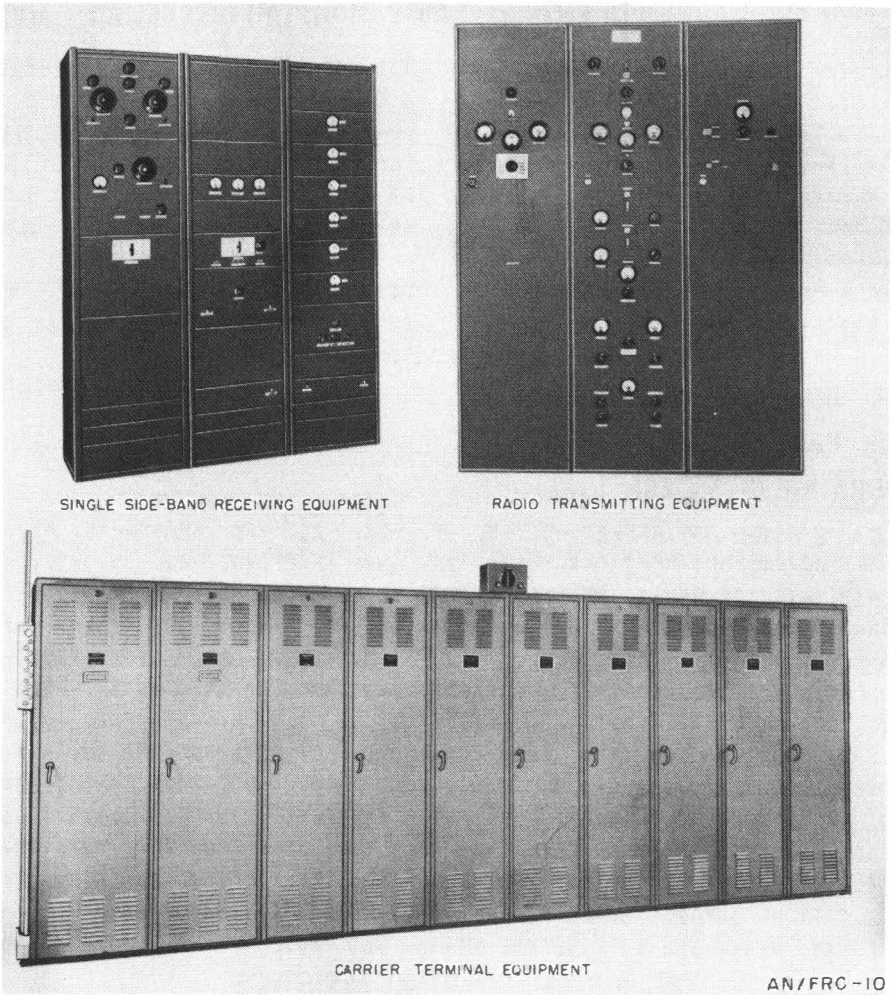
PHYSICAL CHARACTERISTICS

Radio Set AN/FRC-9 measures 22-1/2 x 15 x 68 inches, net weight 350 pounds.

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

AN/FRC-10

RADIO SET



Radio Set AN/FRC-10 is a high-power, h-f, long range, a-m (voice, and tone) radioteletype communication equipment used in long distance, fixed plant applications at army, and equivalent headquarters.

This equipment consists of a single sideband radio transmitter, receiving components, and carrier terminal facilities. It provides six full duplex radioteletype channels (plus a v-f order-wire facility) when operated in a system terminated by identical or equivalent equipment. It can be arranged for double modulation diversity operation when required to overcome fading or interference with long distance communication.

This set requires an elaborate rhombic antenna array, and power is provided by 5-kw field power units located at each of the sites of the operating components which are usually displaced a considerable distance from each other.

AN/FRC-10

RADIO SET

INSTRUCTION LITERATURE: TM 11-2132, TM 11-832, TM 11-884
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	Carrier Terminal OA-64/FRC-10 and	220-1/4 x 84 x 17	5,260
1	Carrier Terminal OA-63/FRC-10	220-1/4 x 84 x 17	5,260
1	Radio Transmitting Equipment TEF (Navy)	60-3/4 x 89 x 27	2,428
1	Transmitter T-265/FRC-10	84 x 84 x 42-1/2	5,260
f	SS-Band Radio Receiving Equipment REA (Navy)	64-3/4 x 84 x 15-1/4	1,436
1	Radio Receiver R-369/FRC-10	21-1/2 x 84 x 34	550
1	Distortion Measuring Bay	22 x 84 x 17	350

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army and higher headquarters.

INSTALLATION: Fixed ground.

APPROXIMATE RANGE (IN MILES): Long.

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, -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, -9, -12, -13; AN/SRT-4; AN/TRQ-1; AN/URR-10, -22, -23; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -312, -339, -342, -348, -401, -447, -610, -779, -794, -1004; MBS; 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; RDM; REA; SCR-177, -188, -193, -244, -274, -399, -499, -506, -536, -543, -585, -593, -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; TBW; TBX; TCB; TCC; TCE; TCH; TCK; 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: 4 - 23.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice and tone.

POWER OUTPUT: 2 to 4 kw.

POWER REQUIREMENTS: Distortion measuring bay: 250 w, 115 v, 50/60 cyc, 1 phase, ac.
Carrier terminal equipment: 3 kw, 115 v, 50/60 cyc, 1 phase, ac.
Receiver R-369/FRC-10: 600 w, 115 v, 50/60 cyc, 1 phase, ac.
Receiver (REA): 500 w, 115 v, 50/60 cyc, 1 phase, ac.
Transmitter T-265/FRC-10: 10 kw, 220 v, 50/60 cyc, 3 phase, ac.
Transmitter (TEF): 5 kw, 220 v, 50/60 cyc, 3 phase, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Set AN/FRC-10 not available.

STATUS: Std

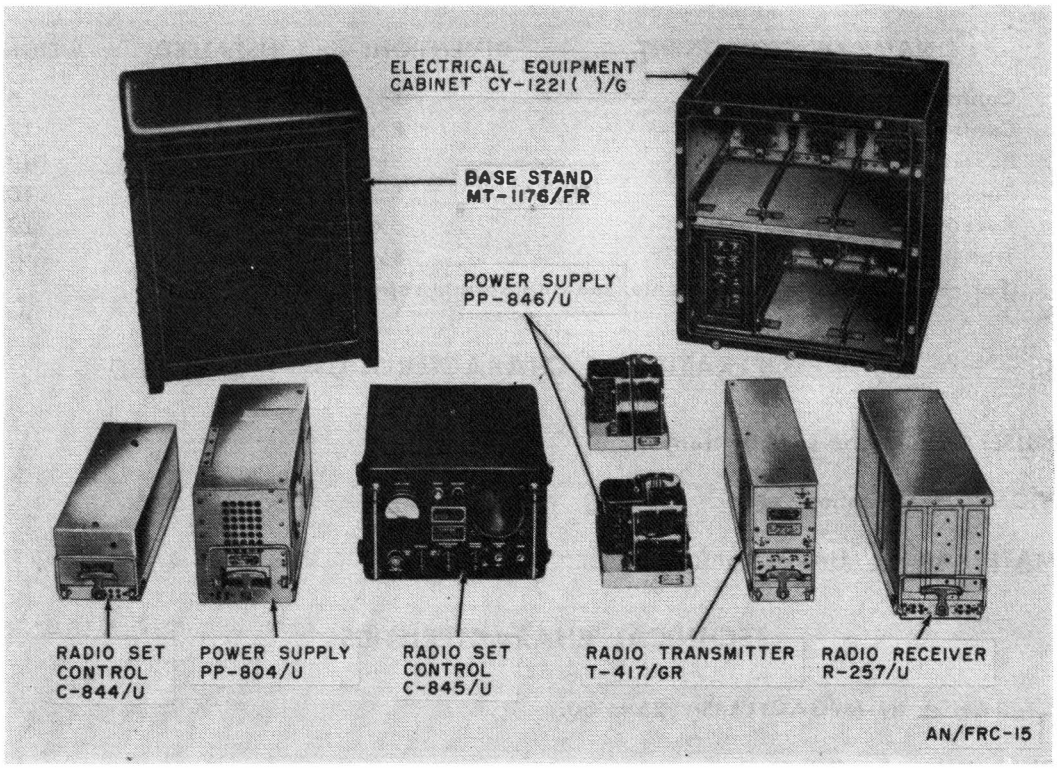
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 5 June 1956

AN/FRC–15

RADIO SET



Radio Set AN/FRC–15 is a vhf, fm, low-powered radio receiving and transmitting equipment used in tactical and nontactical communication applications.

This equipment consists of receiver and transmitter components, local and remote-control units, equipment cabinet and base, related power supplies, and accessories.

It can be operated in simplex, duplex, and retransmission applications. Push-to-talk operation over either of two preset frequencies is provided either locally or at a maximum distance of 10 miles from the transmitter site. Duplex operation requires an additional antenna and can be conducted from the local operating site only. The remote-control unit can be used to transmit tone signals for transmitter adjustment and signaling, to monitor reception, and to intercommunicate between the set and the remote point.

AN/FRC–15

RADIO SET

INSTRUCTION LITERATURE: TM 11–282

USING SERVICE: USA

DATE OF THIS SHEET: 5 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	8 7/16 x 13¾ x 13½	17.5
1	Power Supply PP–804/U	8⅝ x 7 x 14½	40
2	Power Supply PP–846/U	5⅛ x 6¼ x 7 1/16	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: Guard and security troops.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

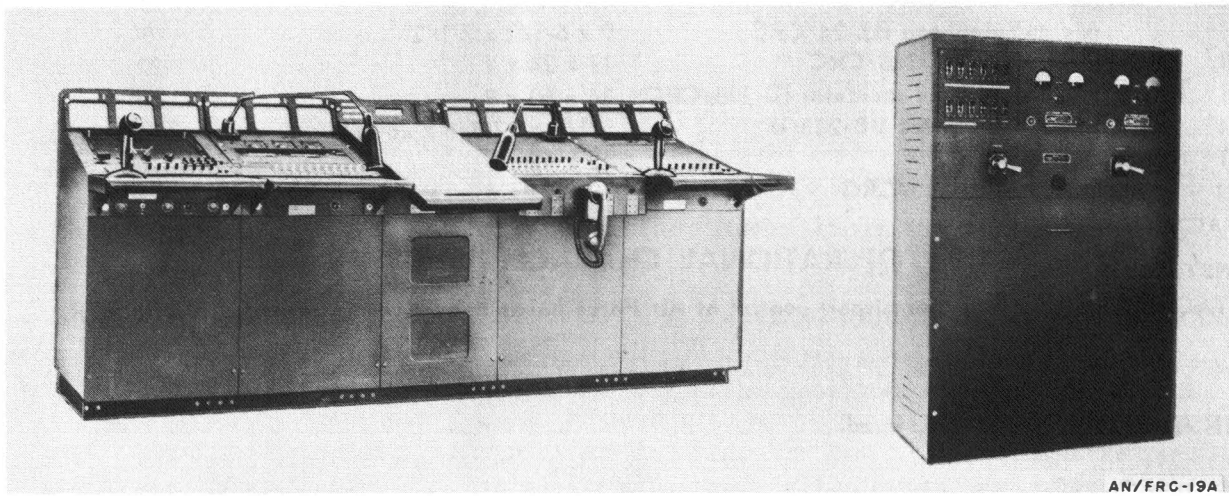
POWER OUTPUT: .5 w (rcvr) 45 w (xmtr).

POWER REQUIREMENTS:
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:		291.6	13.5		
DOMESTIC PACK:		384	23.8	.6	4
EXPORT PACK:		477	28.1	.7	3

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 10 Jun 52	**AN/FRC-19A** AIRPORT CONTROL TOWER CONSOLE



Airport Control Tower Console AN/FRC-19A is a ground, fixed station which provides the communication, signaling, and information facilities required for air traffic control at Air Force bases.

This equipment consists essentially of a control tower console, relay, alarm telephone, control unit, field condition indicator, four storage batteries, and a bell.

It provides meteorological information, control of remotely located voice-frequency recorders, local and remote indication of field flight conditions, intercommunication facilities for coordination of flight information, voice modulation and control of remote transmitters, control of output signal level of remote radio receivers, d-c power for microphones and control circuits, crash alarm system, lighting for console and tower, and mounting provisions for Airport Lighting Control Panel Type I, II, or III.

Four Storage Batteries BB-245/U are supplied for emergency operation of 5 to 6 hours of the d-c console components.

AN/FRC-19A

AIRPORT CONTROL TOWER CONSOLE

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

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Control Tower Console CY-888/CRC	94 x 40 x 36	960
1	Relay RE-82/CRC	4 x 8 x 4	3
1	Alarm-Telephone BZ-24/CRC	9 x 6-1/2 x 7-1/2	9
1	Control Unit C-388/CRC	19 x 24 x 4	22
1	Field Condition Indicator ID-298/CRC	84 x 50 x 9	22
4	Storage Batteries BB-245/U	5-1/2 x 12-3/4 x 26-3/8	312 (each)
1	Bell BZ-26/U	13 x 12 x 5	8
1	Indicator ID-203/CRC	19 x 24 x 4	24

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Used for airport control at Air Force bases and issued in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use at ground air installations.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice or signal light.

TYPE COMMUNICATION CIRCUITS: Radiotelephone, commercial landline telephone, voice recorders, and crash alarm emergency facilities.

CONTROL FACILITIES: 4 telephones, 2 recorders, 12 radio receivers, 8 radio transmitters, 10 crash alarm substations, and various lighting and intercommunication facilities.

POWER REQUIREMENTS: 500 w, 117/234 v, 60 cyc, 1 phase (3-wire) ac, or 500 w, 117 v, 60 cyc, 1 phase (2-wire) ac. In emergencies (5 to 6 hrs): Four 50-v,(60-amp)Storage Battery BB-245/U (nickel cadmium).

PHYSICAL CHARACTERISTICS

Airport Control Tower Console AN/FRC-19A measures 222 x 50 x 36 inches, net weight 2,296 pounds, volume 104.05 cu ft, 2.5 ship tons. Packed for domestic and export shipment: total weight 2,755 pounds, total volume 115 cu ft, 2.9 ship tons. Shipped in 30 packages.

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–23, –26

RADIO-TELEPHONE TERMINAL SET, RADIO REPEATER SET

NO PHOTOGRAPH AVAILABLE

Radio-Telephone Terminal Set AN/FRC–23 and Radio Repeater Set AN/FRC–26 are fixed plant, pm microwave radio transmitting and receiving sets that are the system transmitting and repeater elements, respectively, of a 24-channel, simultaneous two-way, point-to-point communications system.

Radio-Telephone Terminal Set AN/FRC–23 consists essentially of the normal transmitter and receiver components plus a standby or spare transmitter and a diversity receiver that can be used as a spare, and antenna, multiplexing, testing, and associated items.

Radio Repeater Set AN/FRC–26 is composed essentially of the same primary operating components arranged for operation at intermediate points of a system to extend its effective range.

These sets can be adjusted to operate in conjunction with Radio Repeater Set AN/FRC–34 and Radio Set AN/FRC–35, after rearrangement of components and interconnections.

AN/FRC–23, –26

**RADIO-TELEPHONE TERMINAL SET,
RADIO REPEATER SET**

INSTRUCTION LITERATURE: TM 11–222B

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

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

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,700 to 1,850.

TYPE MODULATION: Pulse (P2f, P3f).

TYPE OF SIGNAL: Tone, voice.

POWER OUTPUT: 10 w (xmtr).

POWER REQUIREMENTS: 1,500 w (at rep), 2,400 w (at term.), 117 v ±5%, 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

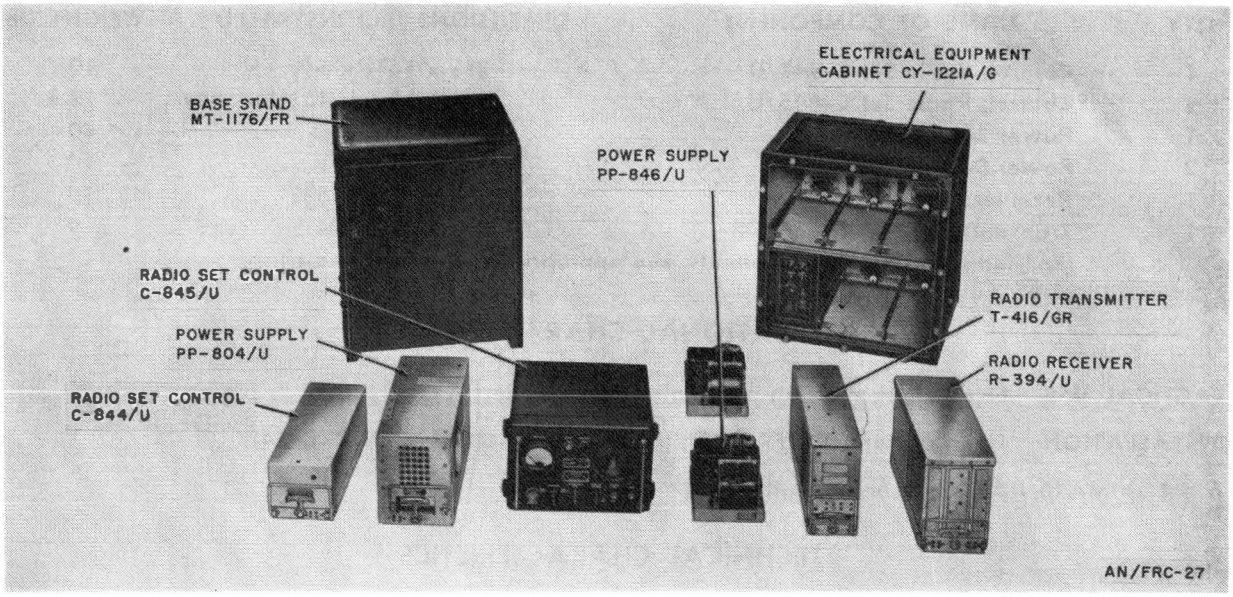
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC–27, TRC–34

RADIO SET



Radio Sets AN/FRC–27 and AN/TRC–34 are vhf, fm, low-powered radio receiving and transmitting equipment used in communication applications in the field.

This equipment consists of receiver and transmitter components, local and remote-control units, equipment cabinet and base, related power supplies, and accessories.

It can be operated in simplex, duplex, and retransmission applications. Push-to-talk operation over either of two preset frequency channels is provided either locally or at a maximum distance of 10 miles from the transmitter site. Duplex operation requires an additional antenna and can be conducted from the local operating site only. The remote-control unit can be used to transmit tone signals for signaling and for transmitter adjustment, to monitor reception, and to intercommunicate between the remote point and the set.

Radio Sets AN/FRC–27 and AN/TRC–34 are identical except that Base Stand MT–1176/FR is supplied only with the former.

AN/FRC-27, TRC-34

RADIO SET

INSTRUCTION LITERATURE: TM 11-226

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 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	10
1	Control, Radio Set C-845/U	8⅞₁₆ x 13¾ x 13½	17.5
1	Power Supply PP-804/U	8⅝ x 7 x 14½	40
2	Power Supply PP-846/U	5⅛ x 6¼ x 7₁₁₁₆	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; division and higher headquarters.

INSTALLATION: Fixed station (AN/FRC-27); ground, transportable (AN/TRC-34).

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F2, F3).

TYPE OF SIGNAL: Voice.

TRANSMITTER POWER OUTPUT: 20 w, 45 w.

POWER REQUIREMENTS:

PP-804/U: 115/230 v, 230 va, 50/60 cy ac.
PP-846/U: 115/230 v, 46 va, 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/FRC-27	21¼ x 16⅞ x 20½ (cab.)	311.6	13		
AN/TRC-34		237.6	9		
DOMESTIC PACK:					
AN/FRC-27		346	23	.58	5
AN/TRC-34		252	15		4
EXPORT PACK:					
AN/FRC-27		473	27.6	.69	4
AN/TRC-34		343	18.7		3

STATUS:

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 25 June 1956

AN/FRC-30

RADIO SET

NO PHOTOGRAPH AVAILABLE

Radio Set AN/FRC-30 is an am, hf, single-sideband, twin-channel radiotelephone equipment used to handle two-way telephone or six two-way radiotelegraph or radioteletype traffic in long-range, point-to-point communication. It can be operated in transoceanic radio communication circuits.

This equipment includes radio transmitting equipment (shown above) that provides operation over 10 pushbutton-selected preset frequency channels, and receiving, carrier terminal, and auxiliary components.

AN/FRC–30

RADIO SET

INSTRUCTION LITERATURE: TM 11–814, TM 11–870, TM 11–2132

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 25 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Carrier Terminal OA–63/FRC–10	91 x 36 x 180	6,780
1	Carrier Terminal OA–64/FRC–10	84 x 28 x 44	1,440
1	Radio Receiver R–369/FRC–10	84 x 22½ x 17	550
1	Transmitter, Radio T–409/FRC–30	48 x 42½ x 84	5,800

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long range.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE:

Carrier Terminals: 425 to 4,845 cy (26 carr freq).
Receiver: 4 to 28 mc.
Transmitter: 4 to 23 mc.

TYPE MODULATION: Am (A3a, A3b, A4, A9, A9c).

TYPE OF SIGNAL: Voice, facsimile, composite.

POWER OUTPUT: 1 kw (dsb); 4 kw (ssb).

POWER REQUIREMENTS:

Carrier Terminals: 3 kw, 115 v, 50/60 cy ac.
Receiver: 500 w, 115 v, 50/60 cy, 1 ph ac.
Transmitter: 10 kva (9 kw), 230 v, 50/60 cy, 3 ph ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	91 x 245 x 84	11,570	383.1	9.6	
DOMESTIC PACK:					
EXPORT PACK:		13,877	668.8	16.7	

STATUS: L/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRC-31

RADIO SET

Radio Set AN/FRC-31 is a general-purpose, vhf, fm (voice or tone) radio receiving and transmitting equipment used for nontactical, fixed plant communication applications in the field by military police, Transportation Corps, and similar operations. It is operated from a console, which can be set up at a maximum distance of 10 miles from the rest of the equipment.

This equipment consists essentially of an antenna used for both transmission and reception, the operating console, and an equipment cabinet that houses the transmitter, receiver, power supply, control unit, and ac panel.

This set has facilities for transmitting and receiving on either of two pairs of crystal-controlled frequencies to enable communication with groups of vehicles, in a typical application, over one pair of frequencies while communication is maintained over the other pair of frequencies with other fixed stations.

AN/FRC-31

RADIO SET

INSTRUCTION LITERATURE: TM 11-234

USING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AT-427/FRC-31	164 lg x 3 3/16 dia	73
1	Console C-559C/FRC-6	9 x 12 3/4 x 13	30
1	Power Supply PP-966/FRC-31	7 1/4 x 6 1/4 x 19	42
1	Receiver, Radio R-565/FRC-31	5 1/4 x 4 7/8 x 16 1/2	9
1	Transmitter, Radio T-413/FRC-31	5 1/4 x 4 7/8 x 16 1/2	6.5
1	Electrical equipment cabinet	54 5/16 x 18 x 20	128.5

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Nontactical (MP guard security troops, Transportation Corps, etc).

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight (25 to 50 mi, nom).

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174 (rcvr, 2 chan within 180 kc of ea other); 152 to 174 (xmtr, 2 chan within 240 kc of ea other); 162 to 174 (ant.).

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice or tone.

TRANSMITTER POWER OUTPUT: 50 w (167 to 174 mc); 60 w (152 to 167 mc).

POWER REQUIREMENTS: Console 50 w; pwr sup 115 w (standby), 480 w (transmit); 117 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:	54 5/16 x 18 x 20 (cab.)	305			
DOMESTIC PACK:					
EXPORT PACK:		583	33.2	.83	3

STATUS: Std

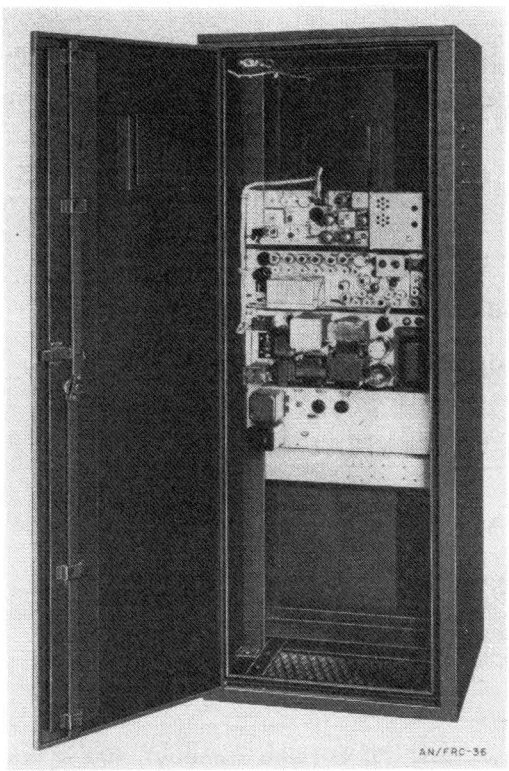
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRC-36

RADIO SET



Radio Set AN/FRC–36 is a commercial medium-power, fm (voice), fixed radio receiving and transmitting equipment used for two-way communication by guards and security police in internal security and industrial control operations.

This equipment consists of a remotely controlled, outdoor base station. A weatherproof cabinet houses the transmitter, receiver, power supply, and antenna. Remote-control facilities are furnished by a separate unit, Radio Set Control C–1624/FRC–36.

AN/FRC-36

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92758

USING SERVICE: USN

DATE OF THIS SHEET: 23 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: Guard and security police operations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): 20.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 50 w.

POWER REQUIREMENTS: 40 w (rcvr), 70 w (xmtr standby), 400 w (xmtr), 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:	54 5/16 x 20 x 18		11.5		
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: T/Std

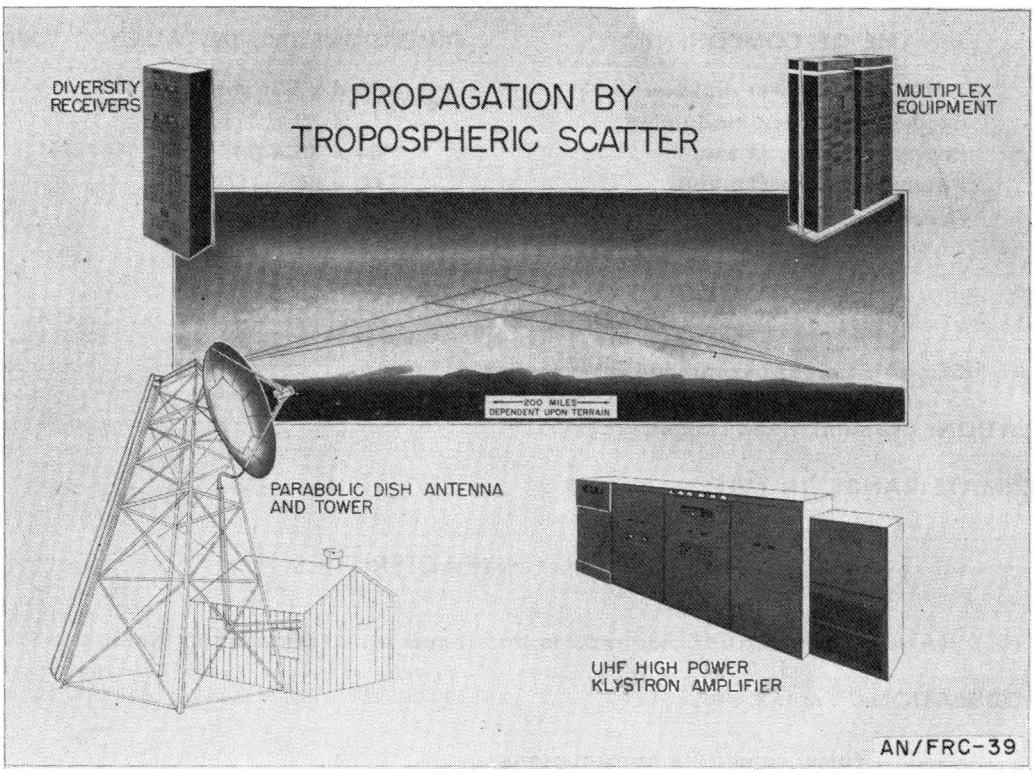
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 4 June 1956

AN/FRC–39

RADIO SET



Radio Set AN/FRC–39 is a multichannel equipment for voice and data signal transmission in point-to-point communication facilities serving filter centers of the Air Defense Command.

The number of operating components of this equipment that is required depends on its intended use as a terminal station (or in pairs as a repeater station) of a radio relay facility.

It normally is operated with such other equipment as Telephone Terminals AN/TCC–3 and AN/TCC–7 or Telegraph Terminal AN/TCC–20.

AN/FRC-39

RADIO SET

INSTRUCTION LITERATURE:

USING SERVICE: USAF (RADC)

DATE OF THIS SHEET: 4 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	Antenna w/power diplexer	96 d x 336 dia	1,800
	Exciter, frequency-modulated	17 x 19 x 31½	225
	Power amplifier (1 kw)	54 x 30 x 84	1,600
	Power amplifier (10 kw)	46 x 84 x 180	8,600
	Receiver	17 x 19 x 33½	200

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Air Defense Command filter centers.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): 200.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 755 to 985 (band A); 1,700 to 2,400 (band B).

TYPE MODULATION: Fm (F3, F9).

TYPE OF SIGNAL: Voice; composite transmissions.

POWER OUTPUT: 1 or 10 kw (depending on power ampl used).

POWER REQUIREMENTS:

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

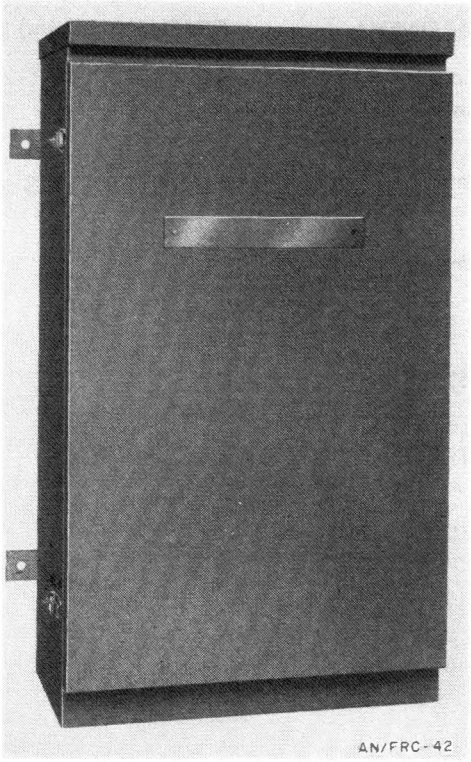
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRC–42

RADIO SET



Radio Set AN/FRC–42 is a pole-mounted, fixed station equipment used for two-way voice communication.

The pole-mounted cabinet is provided with straps for mounting it on crossarms between two telephone poles. This cabinet must be installed close to the antenna transmission line and a source of line voltage. Sufficient room should be available to open the cabinet for servicing.

This equipment is a militarized version of a commercial (General Electric Company Model PO–16W) pole-mounted radio set.

AN/FRC-42

RADIO SET

INSTRUCTION LITERATURE: NAVSHIPS 92653

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Electrical Equipment Cabinet CY-1907/FRC-42		
1	Radio Receiver Transmitter RT-368/FRC-42		

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore station communications.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 30 to 42.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Voice.

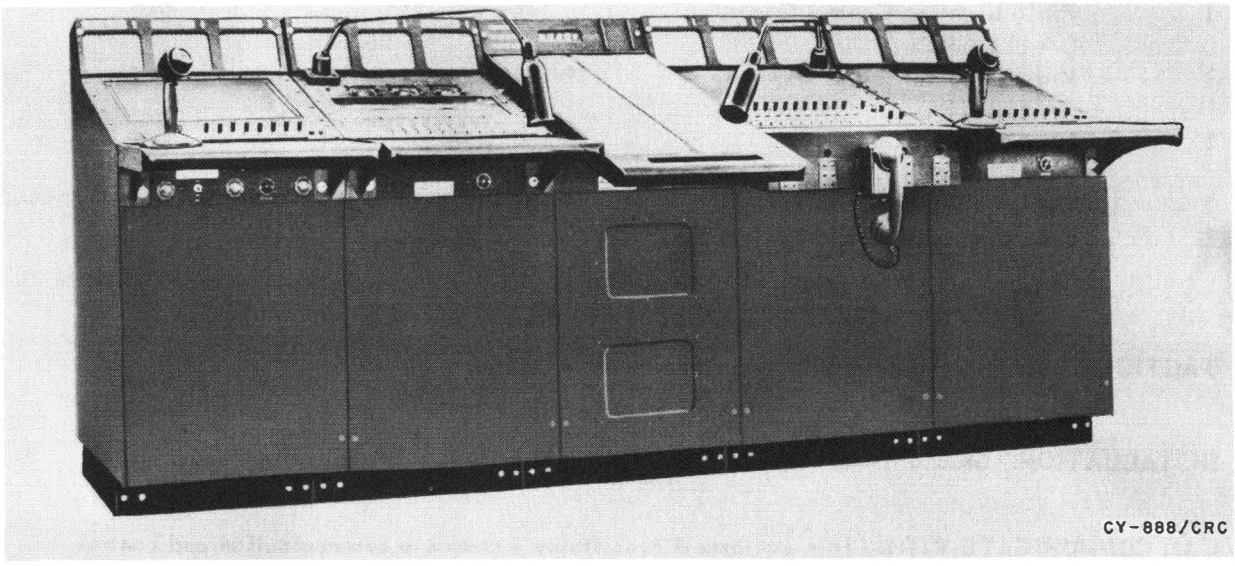
POWER OUTPUT: 75 w.

POWER REQUIREMENTS: 117 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:	27 x 12½ x 42				
DOMESTIC PACK:					
EXPORT PACK:					

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 26 May 52	**AN/FRC-TYPE** AN/COMP TYPE NUMBER: CY-888/CRC CONTROL TOWER CONSOLE



CY-888/CRC

Control Tower Console CY-888/CRC is used in air base operation. It normally forms a part of Airport Control Tower Console AN/FRC-19A and replaces Control Tower Console CY-442/CRC. It provides unified control of aircraft traffic operating either under visual CFR (contact flight rules) or under IFR (instrument flight regulations). This console is a centralized control point for all communication functions normally found in a control tower.

This equipment is comprised primarily of two local and one remote operating positions. Provisions are made for transmitter, receiver, field lighting, and recorder control.

Intercommunication, and crash alarm, commercial telephone connection, meteorological data presentation, range monitoring, and flight progress control facilities are also provided.

Two operator control positions are furnished. Each end section contains duplicate radio transmitter control facilities; the center sections are arranged so that either operator can manipulate the controls.

Storage Battery BB-245/U is supplied for emergency operation and permits normal operation of the equipment for 5 to 6 hours.

AN/FRC-TYPE

CY-888/CRC :AN/COMP TYPE NUMBER

CONTROL TOWER CONSOLE

INSTRUCTION LITERATURE: TO 16-35CY442-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET : 26 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Field Lighting Control Group OA-116/CRC	19-1/4 x 40 x 36	260
1	Meteorological Indicator Group OA-118/CRC	19-1/4 x 40 x 36	200
1	Flight Data Indicator Group OA-117/CRC	17 x 40 x 36	90
1	Communications Group OA-119/CRC	19-1/4 x 40 x 36	140
1	Control-Monitor Group OA-115/CRC	19-1/4 x 40 x 36	44

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control at Air Force bases.

INSTALLATION: Ground fixed.

CAN COMMUNICATE WITH: This equipment constitutes a complete communication and control facility for use at ground air installations.

TECHNICAL CHARACTERISTICS

TYPE OF SIGNAL: Voice or signal light.

TYPE COMMUNICATION CIRCUITS: Radiotelephone, commercial landline telephone, recorders, and crash alarm emergency facilities.

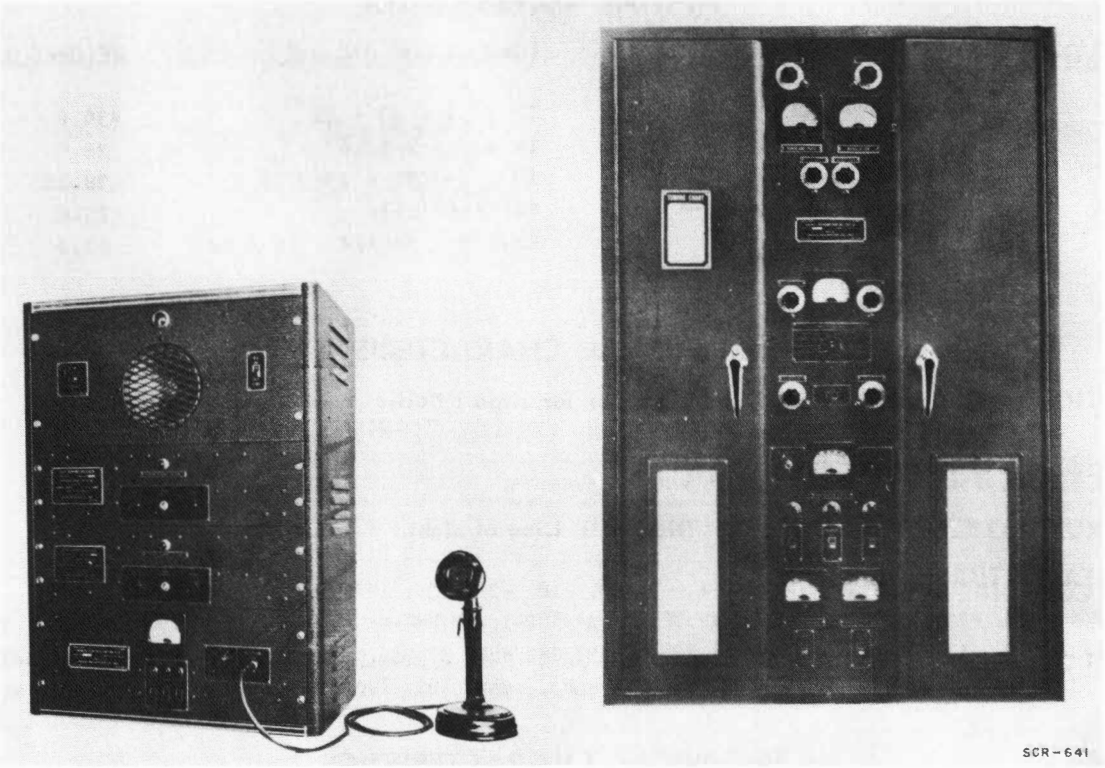
CONTROL FACILITIES: 4 telephones, 2 recorders, 12 radio receivers, 8 radio transmitters, 10 crash alarm substations, and various lighting and intercommunication facilities.

POWER REQUIREMENTS: 500 w, 117-234v, 60 cyc, 1 phase (3-wire) ac
or 500 w, 117 v, 60 cyc, 1 phase (2-wire) ac.
Emergency operation: (5 to 6 hrs): 50 v, (60 amp) dc from Storage Battery BB-245/U (nickel cadmium).

PHYSICAL CHARACTERISTICS

Control Tower Console CY-888/CRC measures 94 x 40 x 36 inches, net weight 960 pounds, volume 88.5 cu ft. Packed for domestic or export shipment: total weight 1,120 pounds, total volume 111.7 cu ft, 2.8 ship tons. Shipped in 24 packages.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	AN/FRC-TYPE SERVICE TYPE NUMBER: SCR-641 RADIO SET



Radio Set SCR-641 is normally used for two-way radiotelephone, ground-to-air and point-to-point communication. It is ground, fixed, station equipment operated at advanced air bases for aircraft traffic control.

This radio set consists of two separate units: Transmitter BC-797, complete with power supply and antenna which is designed to operate in the v-h-f range of 116 to 126.25 mc on a single preset, crystal-controlled channel; two receivers, one speaker, and one remote control unit.

Radio Receivers BC-1271 operate on a single preset, crystal-controlled channel in the v-h-f range 116 to 145 mc. The intermediate frequency is 6.125 mc which makes the receiver subject to interference from near-by transmitters operating on 6 mc.

Remote Control Unit RM-31 is normally located at the receiving position for ON/OFF control of the two receivers, and selection of one preset channel from either receiver. It also provides ON/OFF, and push-to-talk, single-channel operation of the transmitter. The transmitter may be operated up to a distance of 2-1/2 miles over 2 pairs of standard telephone lines.

Two Antenna Systems RC-254 are used; one connected to the transmitter, the other to the receivers with 72-ohm coaxial transmission line RG-11/U, or equal.

The power requirements are approximately 935 w of 115-v, ac.

AN/FRC-TYPE

SCR-641 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TM 11-650
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Transmitter BC-797	29-1/16 x 43 x 21	430.0
1	Remote Control Unit RM-31	19 x 7 x 9-3/16	28.0
2	Radio Receiver BC-1271-A	19 x 5-7/32 x 13-3/16	38.25
2	Antenna System RC-254-A	Not Available	175.0
1	Cabinet CH-205-A (includes speaker)	21-5/8 x 28-1/4 x 16-5/16	50.0

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued to advanced air bases for airport traffic control.

INSTALLATION: Ground, fixed.

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

CAN COMMUNICATE WITH: AN/ARC-1, -2, -5, -18, -28, -36; AN/CRT-2; AN/FRC-7; AN/GRC-30; AN/MRC-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; RC-256, -257; RCK; RCO; SCR-522, -542, -573, -574, -575, -607, -616, -624, -641, -643, -644; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES:
Transmitter: 116 - 126.25 crystal-controlled.
Receiver: One preset, crystal-controlled frequency, from 116 - 145 for each receiver.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: Transmitter: 45 w (unmodulated carrier).
Receiver: 1 w into a 600 ohm resistive load (Nominal).

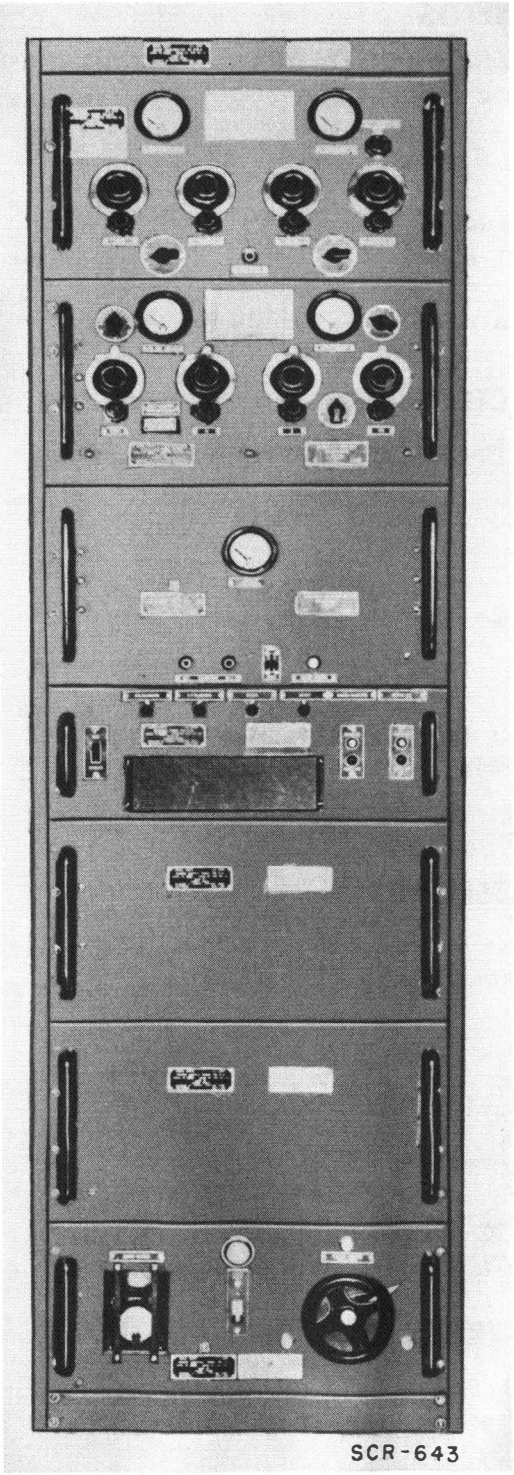
POWER REQUIREMENTS:

BC-797:	750 w
BC-1271 (2 each):	160 w
RM-31:	25 w
Total	935 w of 115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Set SCR-641 measures 50-11/16 x 43 x 21 inches, net weight 725 pounds, volume 29.75 cu ft, 0.6 ship ton. Packed for domestic or export shipment: total weight 870 pounds, total volume 32.73 cu ft, 0.9 ship ton. Shipped in 5 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 10 Jun 52	**AN/FRC-TYPE** SERVICE TYPE NUMBER: SCR-643 RADIO SET



SCR-643

Radio Set SCR-643 is a complete fixed station, ground, radio transmitting equipment for point-to-point, and ground-to-air operation. Twc Radio Transmitters BC-640 each provide one preset, crystal-controlled voice, or tone-modulated channel, in the v-h-f range 100 to 156 mc. This equipment is normally used to provide two transmitting channels for v-h-f Aircraft Control Net Systems.

This radio set consists of two radio transmitters (one of which is shown here) antenna equipment including masts, monitoring equipment, power unit, and shelter for the power unit.

Transmitters can be operated either locally, or from a remote point, by Control Unit RM-27.

Radio Set SCR-643 is normally operated in conjunction with Radio Set SCR-644, its companion receiving facility, from the operating site of which it may be controlled from distances up to two miles.

Such remote operation permits ON/OFF control, adjustment of audio input level, monitoring of audio input as well as monitoring the r-f output of the transmitter.

The transmitter input matches 72-ohm coaxial cable, such as RG-11/U, for operation of recommended Antenna Equipment RC-81.

Power requirements are supplied by Power Unit PE-99 or an equivalent source of 110 to 120 v, 50/60 cyc, 1 phase, ac.

AN/FRC-TYPE

SCR-643 :SERVICE TYPE NUMBER
RADIO SET

INSTRUCTION LITERATURE: TO 40SCR-643-2
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Air Force
DATE OF THIS SHEET: 10 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Transmitter BC-640-A	21-1/4 x 72-3/8 x 20	5 each
2	Antenna Equipment RC-81-A	28 x 12 x 39	4 "
1	Antenna AM-56-B or Antenna Mast MA-6	43-1/2 x 188 x 25-3/4	4,078
1	Monitoring Equipment RC-80-A	20-1/2 x 72 x 3	134
2	Power Unit PE-99-A (including one and one spare)	28 x 41 x 60	1,140 each
1	Shelter HO-3	49 x 66 x 60	2,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Designed for 19-inch relay rack.

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-20, -22; AN/PRC-17, -20; AN/TRC-7; AN/TRQ-1; AN/URC-4; AN/URR-10, -12, -21; AN/VRC-1; BC-639, -787; MAR; MBS; R-137/GR; RBK; RBO; RC-103, -256; RCK; RCO; SCR-522, -542, -574, -575, -607, -616, -624, -641, -644.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 to 156 simultaneous operation on two crystal-controlled preset channels, (one preset channel for each transmitter).

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice or tone.

POWER OUTPUT: 50 w (Nominal).

POWER REQUIREMENT: 5.5 kva with heaters) 110 - 120 v, 50/60 cyc, 1 phase, ac (supplied
2.5 kva without heaters) by PE-99, or equivalent power source).

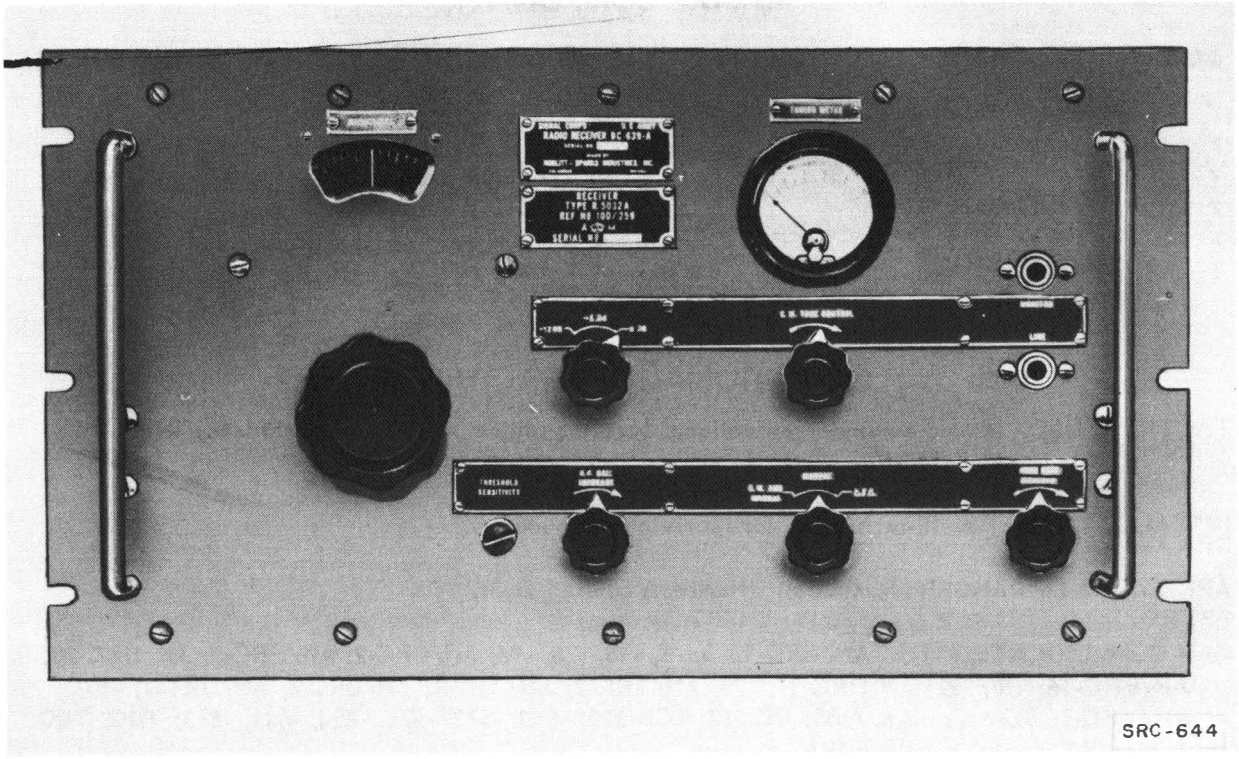
PHYSICAL CHARACTERISTICS

Radio Set SCR-643 measures 120 x 84 x 84 inches, net weight 9,699 pounds, volume 490 cu ft. Packed for domestic or export shipment: total weight 10,000 pounds, total volume 500 cu ft, 12.5 ship tons. Shipped in 16 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Air Force
DATE OF THIS SHEET: 9 Jun 52

AN/FRC-TYPE

SERVICE TYPE NUMBER: SCR-644
RADIO SET



Radio Set SCR-644 is a fixed, ground, v-h-f, a-m and c-w receiving station (one Radio Receiver BC-639 is shown above) providing simultaneous reception on two channels, and remote control operation of its companion transmitter equipment Radio Set SCR-643. It is normally used for ground-to-air and point-to-point communication.

Control and amplifier units allow received signals from aircraft to be passed on by wire to the flight control center.

This radio set is normally operated in conjunction with Radio Set SCR-643 (transmitting) over telephone lines, from distances of 1/4 to 1-1/2 miles. When cw is used, the distance must not exceed 500-feet.

These receivers are manually tuned, and are crystal monitored by means of Frequency Meter BC-638.

The antenna input circuit is designed to match 72-ohm coaxial cable. Recommended antenna is RC-81-C of which two are used. The nominal output impedance is 600 ohms but satisfactory operation can be had on 200 to 20,000 ohm resistive loads.

Power is supplied by Power Unit PE-99, or any equivalent source of 115 to 120 v, 50/60 cyc, 1 phase, ac.

No housing facilities are provided. It may be housed in any available building, preferably in one room.

AN/FRC-TYPE	INSTRUCTION LITERATURE: TO 16-40SCR644-2
SCR-644 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO SET	USING SERVICE : Air Force
	DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Radio Receivers, BC-639-A	19 x 10-15/32 x 13-9/16	38 each
2	Rectifier, RA-42-A	19 x 6-31/32 x 8-23/32	26 "
2	Control Unit, RM-18	19 x 5-7/32 x 8-31/32	15 "
2	Amplifier, BC-686-A	19 x 10-1/2 x 10-15/32	36 "
1	Power Unit, PE-99-A	28 x 41 x 60	1,140
1	Shelter, HO-3	48 x 66 x 60	2,000

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Two 19-inch racks for receiving components.

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/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, or tone.

POWER OUTPUT: 1 w into a 600 ohm resistive load for each receiver.

POWER REQUIREMENTS: 4.5 kva with heaters) 110-120 v, 50/60 cyc, 1 phase, ac
1.5 kva without heaters) (supplied by Power Unit PE-99 or equivalent power source).

PHYSICAL CHARACTERISTICS

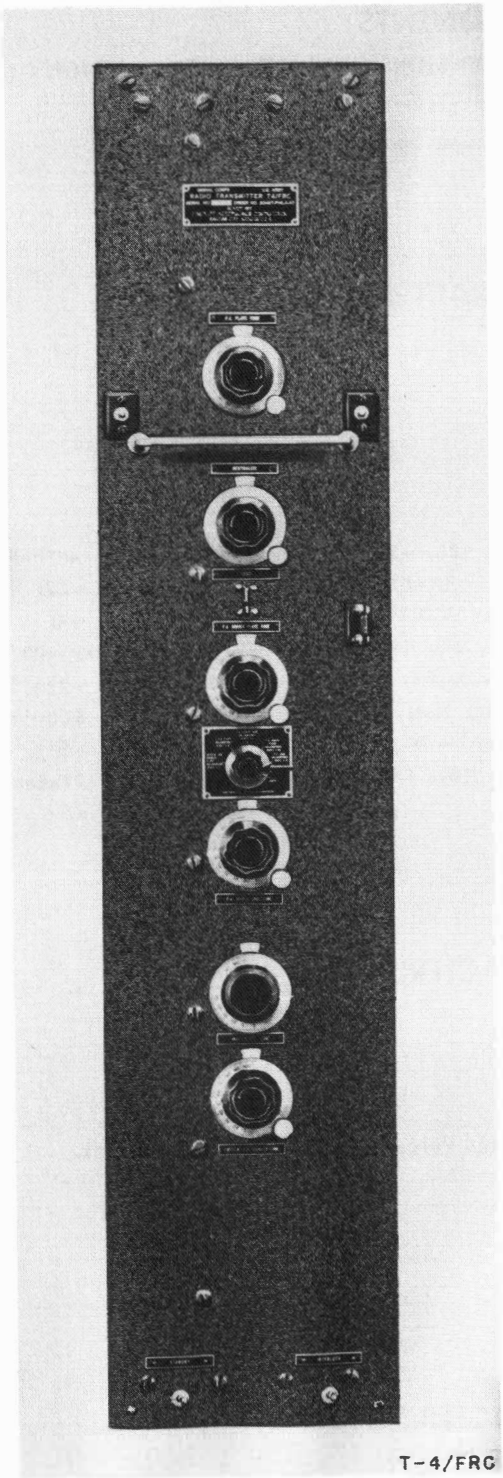
Radio Set SCR-644 measures 144 x 84 x 84 inches, net weight 9,099 pounds, volume 588 cu ft. Packed for either domestic or export shipment: total weight 9,500 pounds, total volume 590 cu ft, 14.75 ship tons. Shipped in 15 packages both domestic and export.

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army
DATE OF THIS SHEET: 31 Jan 52

AN/FRC-TYPE

AN/COMP TYPE NUMBER: T-4/FRC

RADIO TRANSMITTER



T-4/FRC

Radio Transmitter T-4/FRC is a crystal-controlled, medium frequency, a-m (voice, cw, mcw, and frequency-shift keying) Transmitting equipment, for point-to-point or ground-to-air communication in the medium frequency band, at air bases and similar fixed plant applications.

This equipment consists of a radio transmitter inclosed in a steel floor-type cabinet which also contains the low-voltage power supply unit. It can be operated from a distant location by means of appropriate remote-control equipment, and is provided with a selector switch for selection of crystal, or master oscillator control, or for radio-teletype communication.

For c-w transmission a power supply unit alone must be added; for voice communication a power supply unit and a modulator are required. It may be used with three other transmitters, a modulator, and suitable power supply equipment to constitute a multichannel station equipment.

Operates into a delta-matched doublet, or a rhombic, or equivalent antenna system, and requires a 400 - 600-ohm transmission line.

Requires 220-v ac.

AN/FRC-TYPE	INSTRUCTION LITERATURE: TM 11-820
T-4/FRC :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO TRANSMITTER	USING SERVICE : Army
	DATE OF THIS SHEET: 31 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: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN (MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ARR-15; AN/FRC-10; AN/FRR-3, -4, -7, -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/SRR-3, -8, -12, -13; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-1, -4; AN/VRR-2; BC-312, -342, -348, -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, -213/SR, -274/FRR, -320/FRC, -388/URR; RAL; RAO; RAS; RBB; RBC; RBG; RBH; RBM; RBO; RBP; RBS; RCF; RCG; RCH; RDE; RDM; REA: SCR-177, -188, -193, -244, -274, -281, -399, -499, -506, -536, -543, -585, -593, -694, -704; TBO; TBX; TCH; TCP; TCS; AR-88 (RCA); Collins 19S-4 (AF Model); Collins 75A-2; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 18.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, frequency shift keying, and voice with additional equipment.

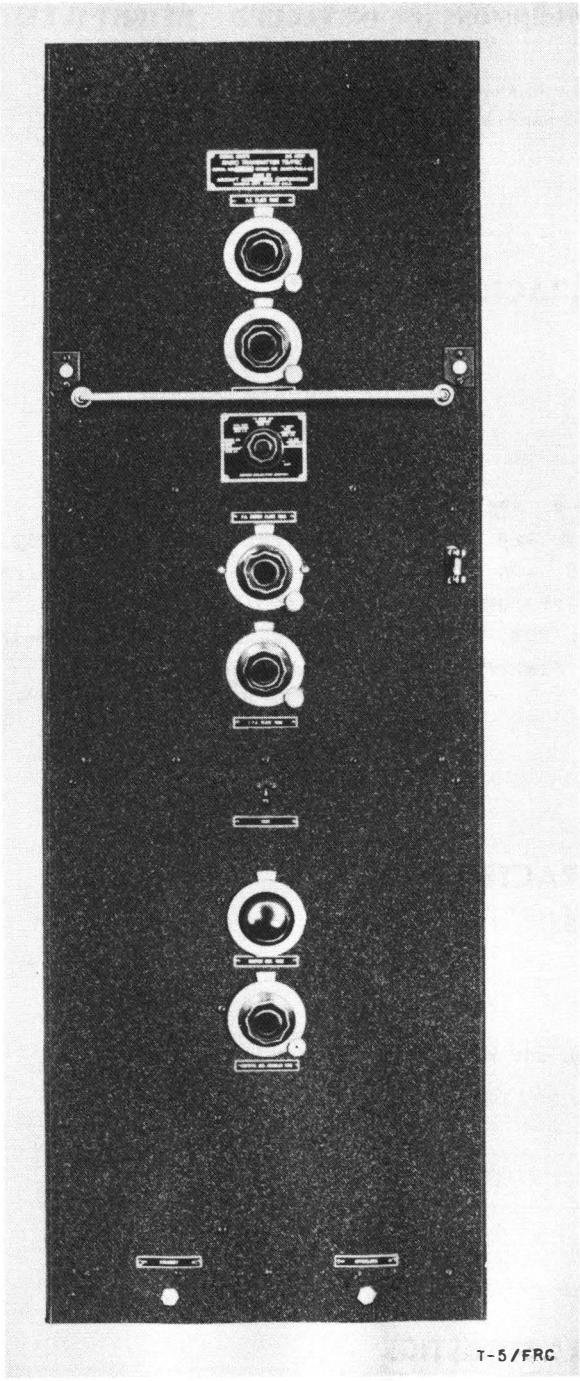
POWER OUTPUT: 400 w.

POWER REQUIREMENTS: 220 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Transmitter T-4/FRC weighs 330 pounds net.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRC-TYPE** AN/COMP TYPE NUMBER: T-5/FRC RADIO TRANSMITTER



T-5/FRC

Radio Transmitter T-5/FRC is a long-range, high-power, medium- and low-frequency, crystal-controlled, transmitting station equipment. Can be used for communication by a-m (voice using additional equipment cw, mcw, or frequency-shift keying) signals at fixed plant installations.

This equipment consists of a single transmitting unit and a tuning house, and it is used principally as the low-frequency r-f unit of a multichannel radio system.

It operates into a 600-ohm transmission line which feeds a vertical radiator, or a beveridge type antenna.

A low-voltage power supply unit is contained within the equipment cabinet and the high-voltage is furnished by an external source. It requires 220-v, a-c power.

AN/FRC-TYPE

T-5/FRC : AN/COMP TYPE NUMBER

RADIO TRANSMITTER

INSTRUCTION LITERATURE: TM 11-820
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 T-5/FRC	61 x 24 x 18	450
1	Antenna Tuning House	49-1/4 x 38-1/4 x 39-1/8	193

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Medium, long.

CAN COMMUNICATE WITH: AN/ARC-5, -8; AN/FRR-4, -28; AN/GRR-2, -3; AN/MRC-20; AN/SRC-3; AN/SRR-3, -11, -12; AN/TRQ-1; AN/URR-10, -22, -23; AN/VRC-4; BC-314; -344, -348, -453, -779, -1004; MBS; OA-58/FRC; R-52/PR, -80/PR, -96/SR, -129/U, -203/SR, -205/U, -206/PR, -210/U, -211/U, -212/SR, -213/SR, -215/SR, -247/URR, -274/FRR, -320/FRC, -388/URR; RAK; RAL; RAO; RAS; RBA; RBB; RBG; RBH; RBL; RBM; RBO; RCF; RCG; RCH; RDF; RDM; SCR-177, -244, -274, -614; AR-88 (RCA); ARC Type 12; Fisher TS 25-3; Hammarlund SP-600-JX; National HRO-50.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.15 - 0.55.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, frequency shift keying, and voice with additional equipment.

POWER OUTPUT: 600 w.

POWER REQUIREMENTS: 220 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Information on Radio Transmitter T-5/FRC not available.

AN/FRC—TYPE

STATUS: Std

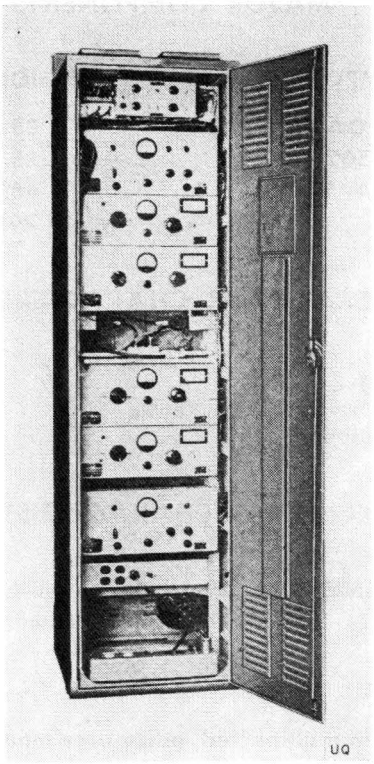
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

SERVICE TYPE NUMBER: UQ

RADIO RELAY LINK



Radio Relay Link UQ is uhf relay equipment providing either 8- or 23-channel communication over a single radio beam by time multiplexing. Each of the 23 channels is primarily designed for voice communication but also can be used to provide many other types of communication within the limit of its bandwidth.

Using this equipment as a basis, radio relay links can be built up or expanded to meet actual traffic demands. Starting with any desired number of channels, more channels can be added, up to a maximum of 23, by merely inserting two additional plug-in units (one for transmitting and one for receiving) into the existing facilities.

A typical installation consists of rf multiplexing, patch and test, and terminating equipment.

AN/FRC–TYPE

INSTRUCTION LITERATURE: NAVSHIPS 91845

USING SERVICE: USN

DATE OF THIS SHEET: 28 June 1956

UQ: SERVICE TYPE NUMBER

RADIO RELAY LINK

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Radio Terminal Group OA–501/FRC	88 x 24 x 23⅜	596
1	Modulator Group OA–502/FRC	88 x 24 x 23⅜	555
1	Demodulator Group OA–504/FRC	88 x 24 x 23⅜	615
1	Terminal service group	20 x 20 x 110	57

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FACILITIES REQUIRED FOR TRANSMISSION: Four-wire to two-wire terminating equip.; rf transmission line for ant. connection.

FREQUENCY: 1,700 to 1,850 mc.

TYPE MODULATION: Time-division multiplexed, pulse-time modulation.

POWER REQUIREMENTS: 115/230 v ac, 50/60 cy, 1 ph ac.

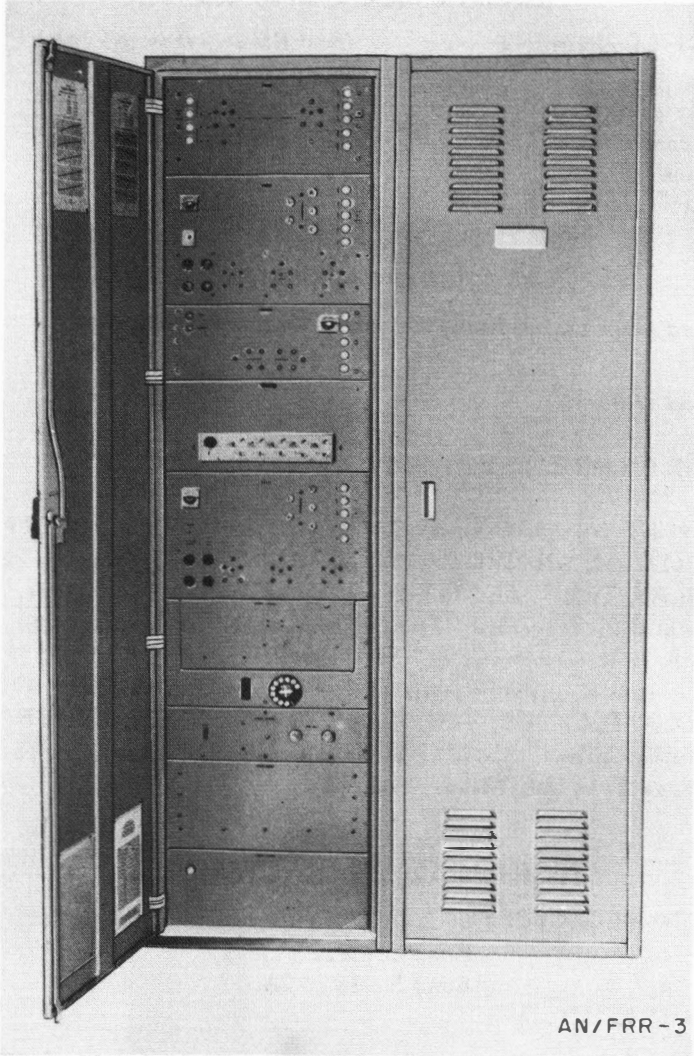
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	88 x 72 x 22⅜	3,200	100	2.5	
DOMESTIC PACK:		11,400	1,100	27.5	32
EXPORT PACK:					

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

AN/FRR-3

DIVERSITY RECEIVING EQUIPMENT



Diversity Receiving Equipment AN/FRR-3 is an h-f, a-m (voice and frequency-shift-keying) radio receiving equipment used in long-range, point-to-point communication to overcome the effects of radio fading. It is used as fixed plant equipment at Air Force weather stations and for similar applications.

This equipment consists essentially of two identical superheterodyne radio receivers, which operate from separate antennas, and an h-f oscillator common to both receivers. Its output can be fed to Radioteletype Terminal Equipment AN/FGC-1.

It is equipped with a telephone dial which may be used to turn the equipment on or off and to select any of five preset frequency channels or any combination of four antennas.

AN/FRR-3

DIVERSITY RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: TM 11-872
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Army, Navy
DATE OF THIS SHEET: 2 Jan 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Power supply unit	7-1/2 x 13-5/8 x 18-3/4	61.75
1	Receiver B unit	12-1/4 x 13-3/4 x 18-3/4	46.00
1	Receiver A unit	12-1/4 x 13-3/4 x 18-3/4	46.00
1	Antenna unit	8-3/4 x 13-5/8 x 18-3/4	35.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant installation, Air Force weather stations.

INSTALLATION: Fixed station.

APPROXIMATE RANGE (IN MILES): Extended.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -83/SR, -158/FRT, -159/FRT, -171/FR, -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; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 2.4 - 23.0, in 5 bands.

Band 1: 2.4 – 4.2.
Band 2: 4.2 – 6.9.
Band 3: 6.9 – 11.2.
Band 4: 11.2 – 17.5.
Band 5: 15 – 23.

TYPE MODULATION: Am.

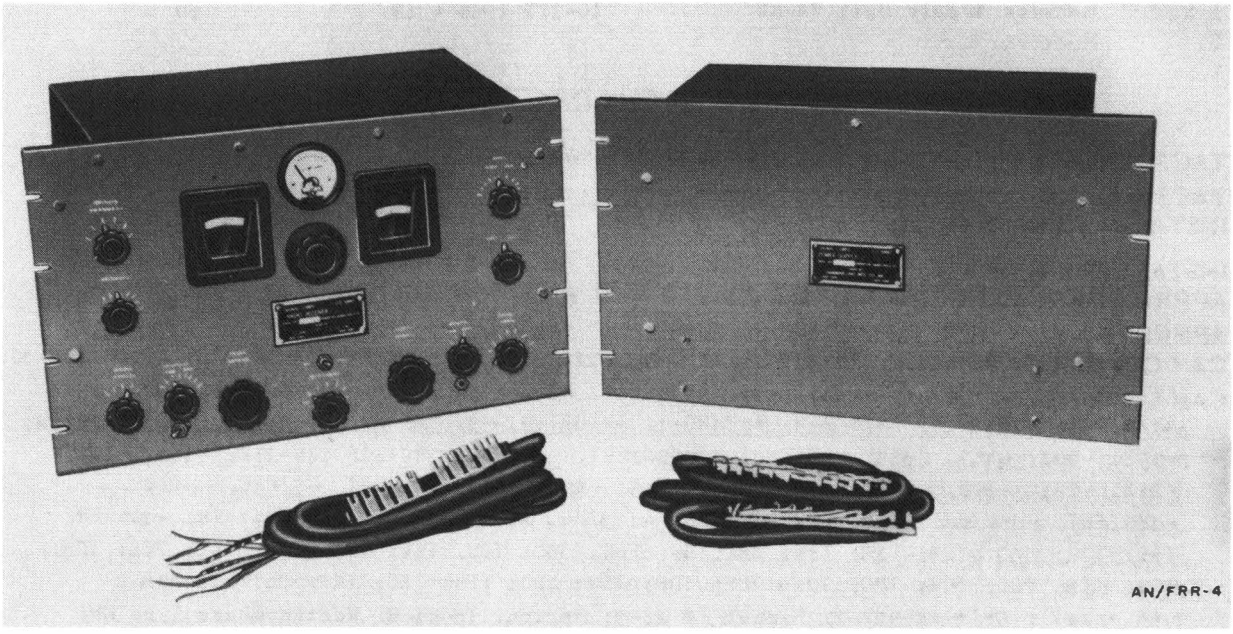
TYPE OF SIGNAL: Voice and frequency shift (radioteletype).

POWER REQUIREMENTS: 100-130 v, 50/60 cyc or 400 w, 200-260 v, 50/60 cyc ac.

PHYSICAL CHARACTERISTICS

Diversity Receiving Equipment AN/FRR-3 measures 85 x 22-1/2 x 17 inches, net weight 366.5 pounds, volume 29.19 cu ft. Packed for domestic shipment: total weight 800 pounds, total volume 53.8 cu ft, 1.35 ship tons. Shipped in 3 packages. Packed for export shipment: total weight 1,146 pounds.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 20 Dec 51	AN/FRR-4 RADIO SET



Radio Set AN/FRR-4 is a medium-frequency, a-m (voice, tone, and cw), long-range receiving equipment used for fixed station or mobile and vehicular installation (with appropriate shock mountings), and for intercept team applications.

This equipment consists of a commercial (Hammarlund Super-Pro) communications receiver which may be cabinet-inclosed or rack and panel mounted, plus a power supply unit.

It can be operated, in emergencies, by battery supply.

AN/FRR-4

RADIO SET

INSTRUCTION LITERATURE: TM 11-866
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	Radio Receiver BC-1004	10-1/2 x 15-3/8 x 19	55
1	Power Supply Unit RA-84	10-1/2 x 10 x 19	60

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant; also used by radio intercept teams.

INSTALLATION: Fixed stations.

APPROXIMATE RANGE (IN MILES): 100.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -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; TCZ; TDD; TDE; TDF; TDH; 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: 0.54 - 20 in 5 bands.

Band 1: 0.54 — 1.16
Band 2: 1.16 — 2.5
Band 3: 2.5 — 5
Band 4: 5 — 10
Band 5: 10 — 20

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, tone, and voice.

POWER REQUIREMENTS: 180 w, 105 — 125 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Set AN/FRR-4 measures 21 x 25-3/8 x 38 inches; net weight 115 pounds, volume 3 cu ft. Packed for domestic shipment: total weight 116 pounds, total volume 4.3 cu ft. Packed for export shipment: total weight 175 pounds, total volume 7.4 cu ft. Shipped in 2 packages both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 9 Jan 52	**AN/FRR-7** RADIO RECEIVING SET

Radio Receiving Set AN/FRR-7 is a crystal-controlled, fixed-frequency, a-m (voice and tone) receiving equipment operating in the medium frequency band. It is used at army and higher headquarters.

Equipment consists of lightweight radio receiver with built-in power supply and loudspeaker. It provides for break-in operation when operated in conjunction with a transmitter using the same or an adjacent frequency.

This set has squelch control for reducing background noise, volume control, and provision for operation of an external loudspeaker. It uses a conventional type antenna system.

AN/FRR-7

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-883
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)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Army or higher headquarters.

INSTALLATION: Ground; fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/FRT-15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-4; BC-191, -401, -447, -610; MBS; MQ; RC-52; SCR-177, -188, -193, -281, -399, -499, -506, -543; T-4/FRC, -83/SR, -158/FRT, -159/FRT, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBK; TBL; TBM; TBO; TBU; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; Collins 18S-4 (AF Model); Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1.6 - 2.9.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Tone and voice.

POWER REQUIREMENTS: 40 w, 115 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/FRR-7 measures 9 x 12 x 15-9/16 inches, net weight 30 pounds, volume 2.15 cu ft. Packed for domestic shipment: total weight 47 pounds, total volume 3.40 cu ft. Shipped in 1 package.

STATUS: Std

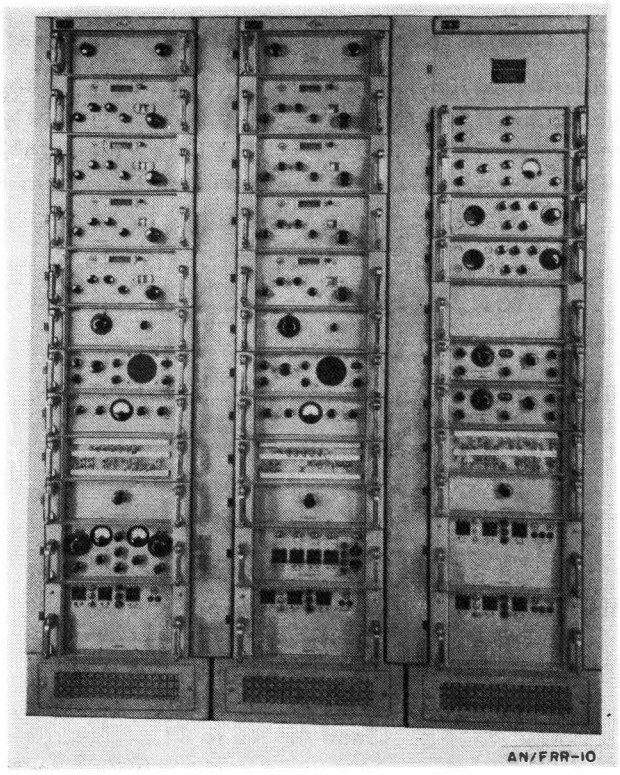
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRR–10

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–10 is a double-conversion, superheterodyne diversity receiver used at shore stations in point-to-point communication.

The complete equipment consists of two receivers and the necessary switching-comparing and filtering facilities required to receive signals in signal- or space-dual-diversity operation, such as double-sideband radiotelephone, single-sideband radiotelephone or radioteletype, and single-sideband suppressed carrier radiotelephone or radioteletype.

Basically, the AN/FRR–10 performs the same function as Radio Receiving Sets AN/FRR–24 and AN/FRR–37 except that it receives single-sideband suppressed carrier signals but not frequency-shift telegraph signals.

AN/FRR–10

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92144

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Amplifier-Converter AM–450B/FRR–24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM–451B/FRR–24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM–452B/FRR–24	13½ x 21⅛ x 24⅜	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE: Long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:
- Band 1: 2 to 4
- Band 2: 4 to 8
- Band 3: 8 to 16
- Band 4: 16 to 32

TYPE MODULATION: Am (A2, A3, A3a, A3b).

TYPE OF SIGNAL: Radiotelephone and radioteletype.

POWER OUTPUT:

POWER REQUIREMENTS: 1,392 w, 105/115/125 v, 50/60 cy ac.

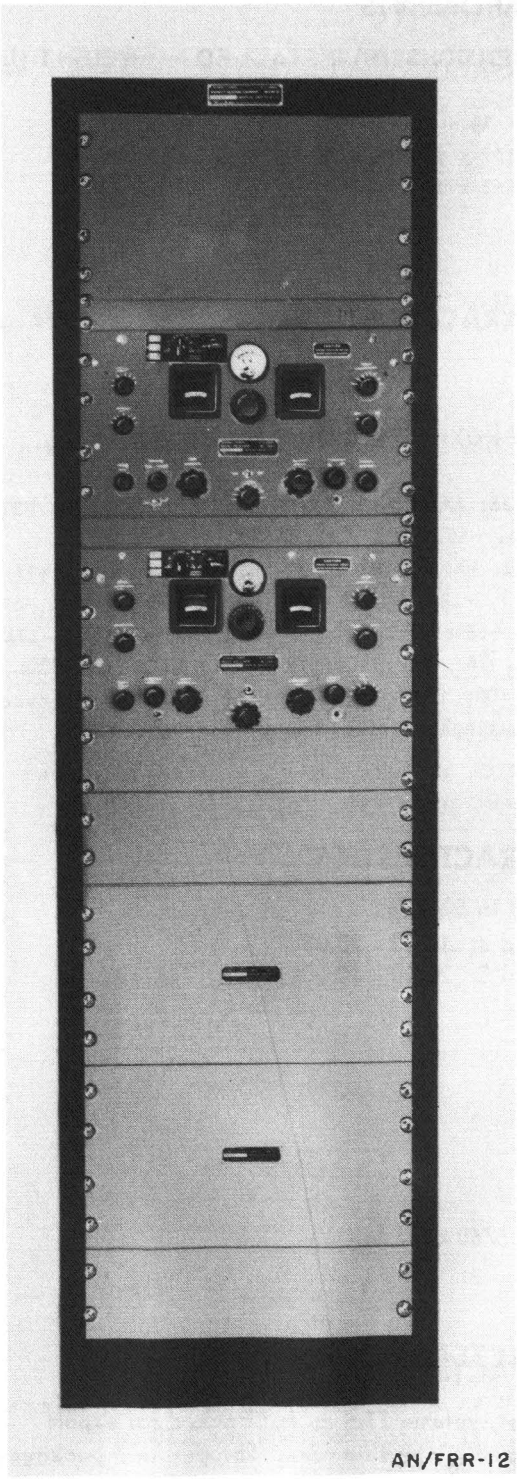
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	81 x 32¾ x 87	1,240			
DOMESTIC PACK:		2,900	200	5	35
EXPORT PACK:					

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

AN/FRR-12

RADIO RECEIVING SET



AN/FRR-12

Radio Receiving Set AN/FRR-12 is a dual-diversity radio receiving station equipment used for the reception of frequency-shift radioteletype and a-m (voice, tone, cw, or mcw) signals in the medium-high- and very-high-frequency bands in point-to-point, and fixed-station applications at division and higher headquarters.

This equipment consists of two rack- and panel-mounted receivers and associated power supply equipment inclosed as a single unit in a steel floor-type cabinet.

Receivers have noise-limiter, bandspread, phasing, volume, beat-frequency oscillator controls, and are crystal-controlled.

AN/FRR-12

RADIO RECEIVING SET

INSTRUCTION LITERATURE: TM 11-896
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	Rack MT-660/FRR-12	76 x 19 x 22	230.0
2	Radio Receiver R-270/FRR	10-1/2 x 16-3/4 x 19	60.5
2	Power Supply Unit RA-74-D	10-1/2 x 10-1/4 x 19	60.5

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Ground, fixed station. APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5 -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -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, -83/SR, -158/FRT, -159/FRT, -171/FR, -172/FR, -173/FR, -174/FR, -175/FR, -177/FR, -180/FR; TBA; TBC; TBK; TBL; TBM; TBN; TBO; TBU; TBW; TBX; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 1.25 - 40.00 in 5 bands.

Band 1: 1.25 - 2.50
Band 2: 2.50 - 5.00
Band 3: 5.00 - 10.00
Band 4: 10.00 - 20.00
Band 5: 20.00 - 40.00.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Am: voice, cw, icw, mcw.
Frequency shift teletypewriter.

POWER REQUIREMENTS: 400 w, 95-130/190-260 v, 25/60 cyc, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Set AN/FRR-12 weighs 472 pounds net, volume 17.5 cu ft. Packed for export shipment: total weight 934 pounds, total volume 34.7 cu ft, 1.12 ship tons. Shipped in 5 packages.

STATUS: Std

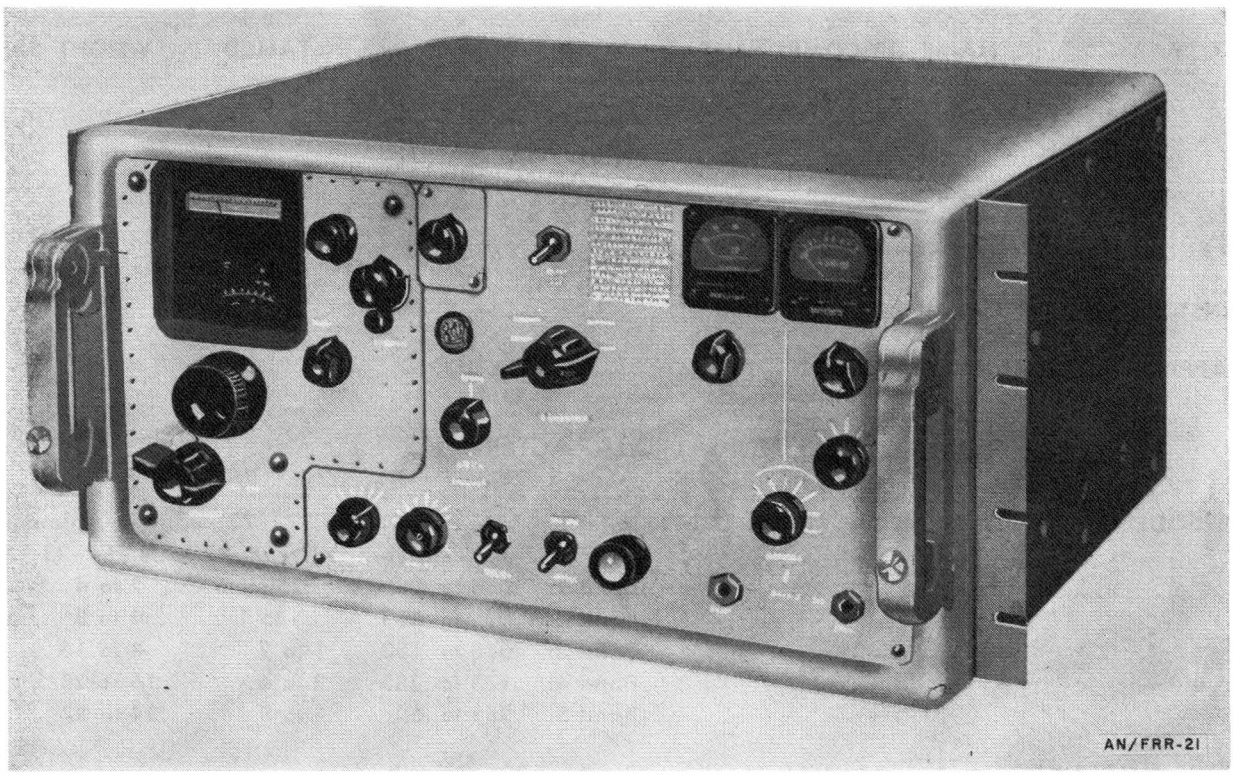
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRR–21, –22, –23

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–21, AN/FRR–22, and AN/FRR–23 are used for fixed station operation in the low-, medium-, and high-frequency bands, respectively.

The frequency range of each receiver is divided into five bands with continuous tuning throughout each band.

The AN/FRR–21 has provision for receiving three types of emission (A1, A2, and F1), and the AN/FRR–22 and AN/FRR–23, for receiving four types of emission (A1, A2, A3, and F1).

The AN/FRR–21, AN/FRR–22, and AN/FRR–23 are basically similar to Radio Receiving Sets AN/SRR–11, AN/SRR–12, and AN/SRR–13, respectively.

AN/FRR–21, –22, –23

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92211

USING SERVICE: USN, USAF

DATE OF THIS SHEET: 8 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: Shore communication.

INSTALLATION: Ground, based.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .014 to .6 (–21); .25 to 8 (–22); 2 to 32 (–23); ea in five bands:

	AN/FRR–21	*AN/FRR–22*	*AN/FRR–23*
Band 1:	.014 to .03	.25 to .5	2 to 4
Band 2:	.03 to .063	.5 to 1	4 to 8
Band 3:	.063 to .133	1 to 2	8 to 16
Band 4:	.133 to .283	2 to 4	16 to 24
Band 5:	.283 to .6	4 to 8	24 to 32

TYPE MODULATION: Am (A1, A2 (–21, –22, –23); A3 (–22, –23)); fm (F1).

TYPE OF SIGNAL: Cw, voice, fsk.

POWER REQUIREMENTS: 105/115/125 v, 50/60 or 400 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:	8¾ x 17½ x 18½	75	1.5		
DOMESTIC PACK:		130	4.9		1
EXPORT PACK:					

STATUS: S/Std

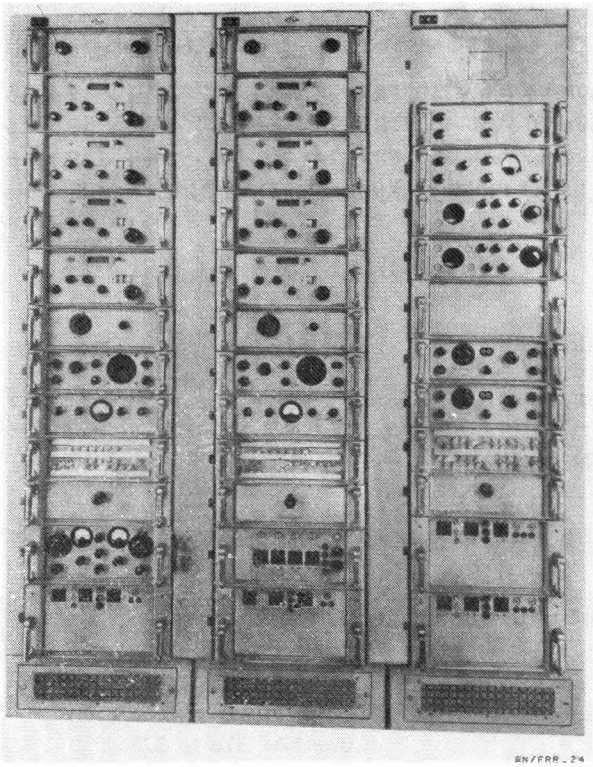
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

AN/FRR–24

RADIO RECEIVING SET



Radio Receiving Set AN/FRR–24 is a diversity receiver for use at shore stations in point-to-point communication. It can receive signals in single-channel, space- or frequency-dual- or triple-diversity operations, such as double-sideband radiotelephone, on-off keyed radiotelegraph, and frequency-shift-keyed telegraph to operate single-channel teletypewriters at 24.5 dot cycles and/or up to four channel multiplex at 98 dot cycles.

The functions and performance of the AN/FRR–24 are similar to those of Radio Receiving Sets AN/FRR–10 and AN/FRR–37, except that the AN/FRR–24 uses both dual- or triple-diversity operation and cannot receive single-sideband suppressed signals.

The complete equipment is contained in four rack cabinets permanently connected together.

AN/FRR-24

RADIO RECEIVING SET

INSTRUCTION LITERATURE: NAVSHIPS 95180

USING SERVICE: USN

DATE OF THIS SHEET: 8 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
3	Amplifier-Converter AM-450/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58
3	Amplifier-Converter AM-451/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58
3	Amplifier-Converter AM-452/FRR-24	$6\frac{31}{32} \times 19 \times 16\frac{15}{16}$	58

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:

Band 1: 2 to 4
Band 2: 4 to 8
Band 3: 8 to 16
Band 4: 16 to 32

TYPE MODULATION: Am (A1, A2, A3); fm (F1, F4).

TYPE OF SIGNAL: Cw, mcw, voice, fsk, facsimile.

POWER OUTPUT: 60 w into 600-ohm load.

POWER REQUIREMENTS: 1.5 kw, 105/115/125 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:	84 x 17 x 76	1,400	42	1	
DOMESTIC PACK:		7,000	258	6.5	55
EXPORT PACK:					

STATUS: Std

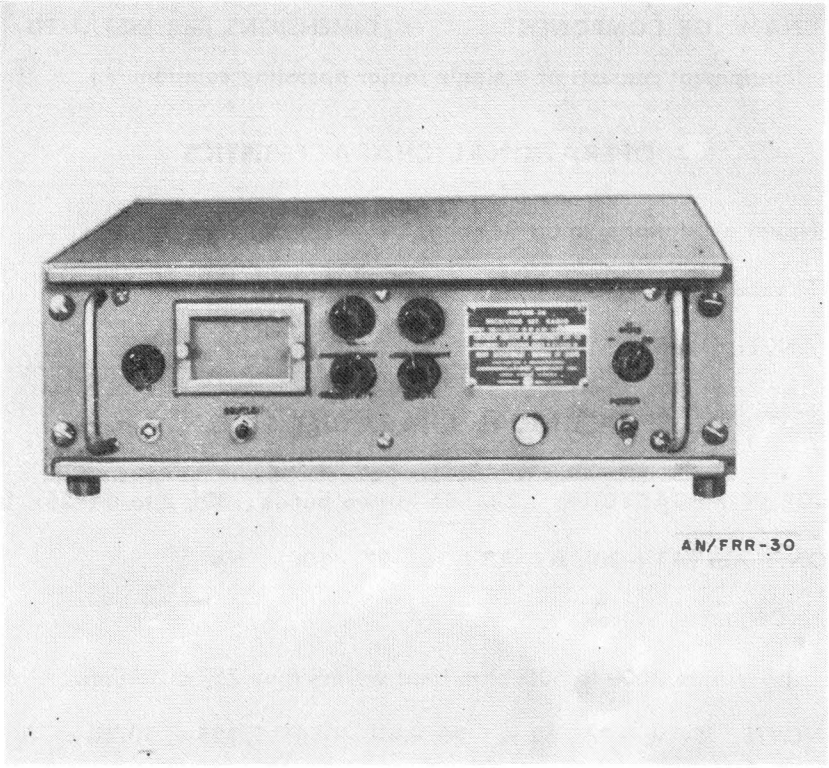
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRR–26, –27, –30

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–26, AN/FRR–27, and AN/FRR–30 are used in air-traffic control towers at naval air stations. They can also be used at naval shore stations or advanced bases in point-to-point communication applications.

This equipment, capable of continuous operation over a long period of time, can be used for both local and limited remote control operations.

Each set is similar in design and construction, differing only in frequency range.

AN/FRR–26, –27, –30

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 92679

USING SERVICE: USN

DATE OF THIS SHEET: 23 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: Naval air stations; in traffic control.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE: Medium.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .2 to .56 in two bands (–30); 2 to 8 (–26); 100 to 156 (–27).

TYPE MODULATION: Am (A1 (–30); A2, A3 (–26, –27, –30)).

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 1.5 w into 200– to 600–ohm load w/less than 7% distortion.

POWER REQUIREMENTS: 54 w (–27), 62 w (–26, –30), 105/115/125 v, 50/60 cy, 1 ph ac.

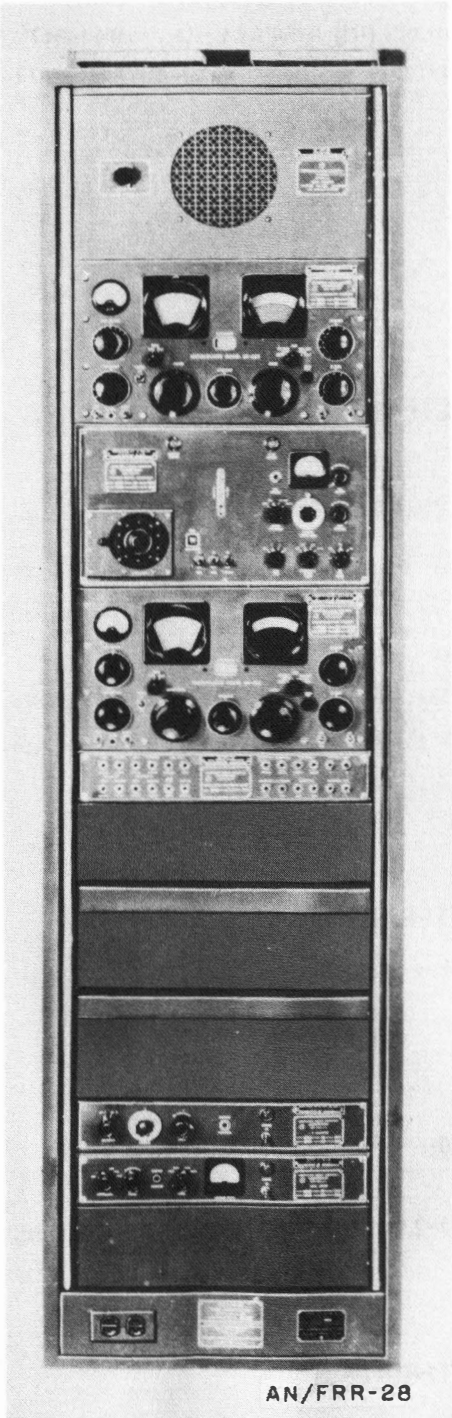
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	6 x 17 x 18¾	36 (–27) 40 (–26, –30)			
DOMESTIC PACK:		84 (–27) 88 (–26, –30)	4.2		1 (–26, –30) 2 (–27)
EXPORT PACK:					

STATUS: Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

AN/FRR-28

RECEIVING SET, RADIO



AN/FRR-28

Receiving Set, Radio AN/FRR-28 is an a-m (cw, mcw, voice, frequency shift keying) receiver for diversity radio reception with a frequency-shift converter-comparator group to provide two-channel space or frequency-diversity reception, of radio signals.

This equipment employs two commercial standard (Hammarlund Model SP-600-MX) receivers modified for diversity operation.

Continuous variable tuning or crystal control is provided.

These receivers feature beat-frequency oscillator, and noise-limiter circuits, and have provision for visual indication of the output.

AN/FRR-28

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Receiver, Radio R-450/FRR-28	Not Available	Not Available
1	Oscillator, Radio Frequency O-165/UR	" "	" "
1	Amplifier-Detector AM-615/UR	" "	" "
1	Keyer KY-79/UR	" "	" "
1	Panel, Patching, Communication SB-224/UR	" "	" "
1	Loudspeaker, Magnetic LS-187/UR	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; 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: 0.54 - 54.0 in 6 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying.

POWER REQUIREMENTS: 400 w, 95-105-117-130/190-210-234-260 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Receiving Set, Radio AN/FRR-28 measures 84 x 22-3/8 x 24 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Confidential USING SERVICE: Navy DATE OF THIS SHEET: 9 Jun 52	**AN/FRR-32** RECEIVING SET, RADIO

NO PHOTOGRAPH AVAILABLE

Receiving Set, Radio AN/FRR-32 is a-m (cw, mcw, and voice) receiving equipment for use with a frequency shift converter-comparator group to provide two-channel space or frequency diversity reception of radio signals.

A built-in monitoring unit permits local monitoring and tuning of the two component receivers. Both are controlled by a separate master oscillator to improve stability.

AN/FRR-32

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Confidential
USING SERVICE : Navy
DATE OF THIS SHEET : 9 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Cabinet, containing:	84 x 22 x 24	Not Available
2	Radio Receiver	Not Available	" "
1	Master Oscillator	" "	" "
1	Monitoring Unit	" "	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1; AN/VRT-1; BC-191, -339, -401, -447, -610; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -188, -193, -274, -281, -399. -499, -506, -536, -543, -585, -694; 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; TBW; TBX; TBY; TCB; TCC; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model), Collins 32V-2; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 - 32 in 5 bands.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice, frequency shift keying.

POWER REQUIREMENTS: 105 - 125 v, 50/60/400 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Receiving Set, Radio AN/FRR-32 measures 84 x 22 x 24 inches.

STATUS: Std

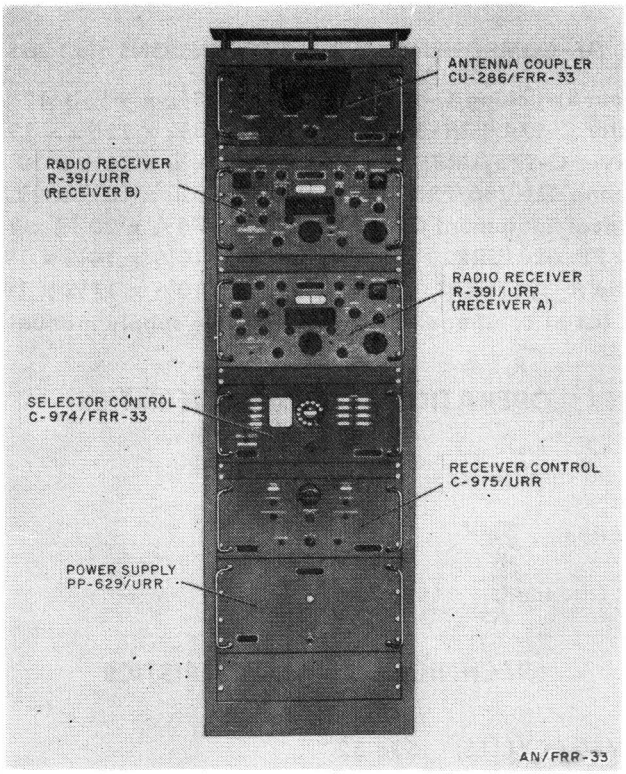
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 11 June 1956

AN/FRR–33

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–33 is a dual-diversity equipment used for minimizing the effects of fading in radioteletype signals. It is operated in conjunction with Radioteletype Terminal Equipment AN/FGC–1 in fixed plant military communication applications at higher headquarters.

This equipment includes two identical radio receivers, an antenna coupler, a selector control, a receiver control, a remote switching control, and a power supply, all of which are rack-mounted in a steel cabinet. A complete diversity antenna system, providing two rhombic antennas for each receiver, is required but not supplied with this equipment.

As many as three AN/FRR–33 systems can be controlled by the remote switching control.

AN/FRR–33

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–871

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 11 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Remote Switching C–973/FRR–33	$8\frac{7}{32} \times 9\frac{31}{32} \times 12\frac{51}{64}$	22
1	Control, Selector C–974/FRR–33	$8\frac{3}{4} \times 15\frac{15}{16} \times 19$	45
1	Control, Receiver C–975/URR	$8\frac{3}{4} \times 16\frac{1}{2} \times 19$	48
1	Coupler, Antenna CU–286/FRR–33	$8\frac{3}{4} \times 16\frac{1}{2} \times 19$	36
1	Cabinet, Electrical Equipment CY–1119/U	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	165
1	Power Supply PP–629/URR	$10\frac{1}{2} \times 14\frac{5}{8} \times 19$	50
2	Receiver, Radio R–391/URR	$10\frac{1}{2} \times 17\frac{1}{4} \times 19$	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A2, A3).

TYPE OF SIGNAL: Cw, voice, fsk radio tty (850 cy).

POWER OUTPUT:

POWER REQUIREMENTS: 1,475 w, 115/230 v, 48/62 cy ac.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	446	29.7	.74	
DOMESTIC PACK:					
EXPORT PACK:		1,099	65.6	1.64	9

STATUS: Std

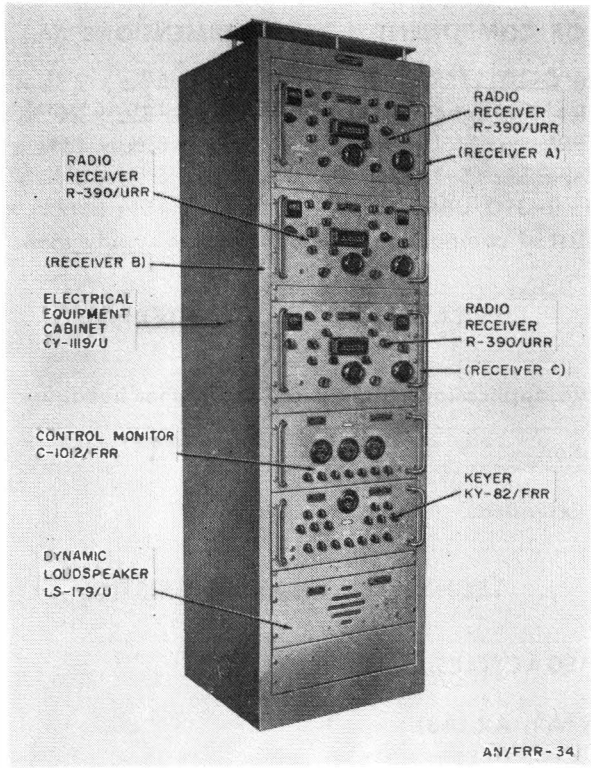
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 19 June 1956

AN/FRR-34

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR-34 is a triple-diversity equipment used for the reception of radiotelephone, radiotelegraph, and radioteletype signals.

This equipment consists essentially of three receivers, a control monitor, a keyer, and a loudspeaker, all mounted in an equipment cabinet.

By means of switching circuits in the keyer, the following modes of operation can be selected: each receiver separately; two in dual diversity or three in triple diversity, to minimize fading; or two in dual diversity while the third is operated as a search receiver on other frequencies.

AN/FRR-34

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11-864

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 19 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control-Monitor C-1012/FRR	$8\frac{23}{32} \times 9\frac{13}{16} \times 19$	22.5
1	Cabinet, Electrical Equipment CY-1119/U	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$	165
1	Keyer KY-82/FRR	$8\frac{23}{32} \times 15\frac{3}{16} \times 19$	40
1	Dynamic Loudspeaker LS-179/U	$6\frac{31}{32} \times 3\frac{13}{16} \times 19$	6.5
3	Receiver, Radio R-390/URR	$10\frac{1}{2} \times 17\frac{1}{4} \times 19$	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications at division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

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

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 5 mw (phones); 10 mw (600-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 980 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:	$78\frac{1}{2} \times 20\frac{13}{16} \times 21\frac{7}{8}$ (cab.)	474	29.4	.74	
DOMESTIC PACK:					
EXPORT PACK:		922	122	3.1	5

STATUS: Std

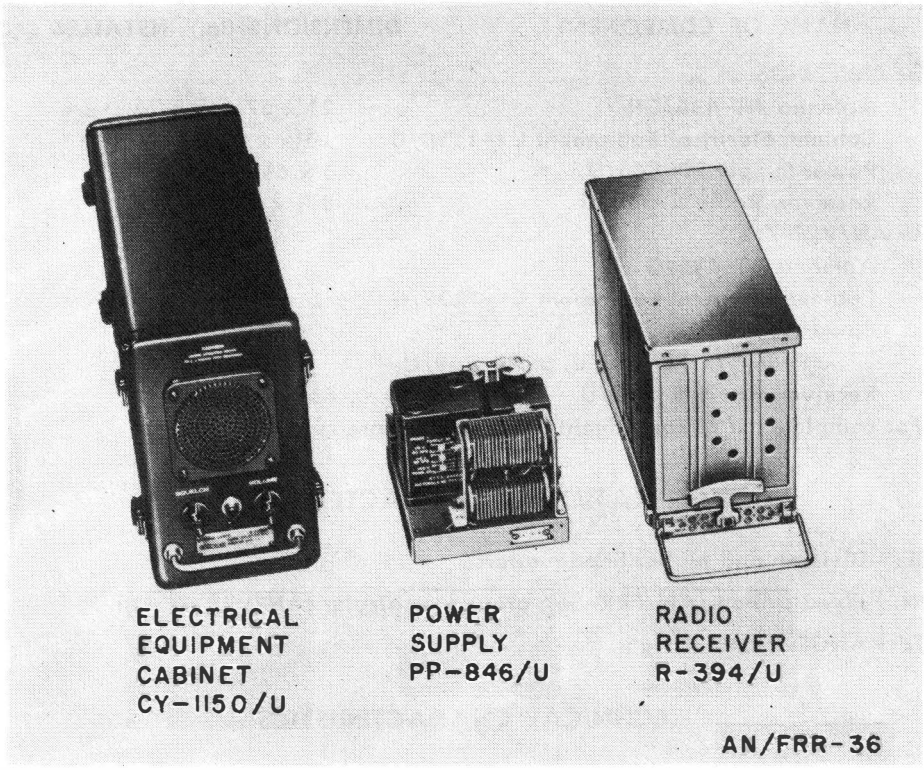
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–36, VRR–7( )

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–36 and AN/VRR–7( ) are similar uhf (fm-voice) equipments used for monitoring and radio communication applications.

Each of these sets consists essentially of a radio receiver with its power supply, housed in a metal equipment cabinet, and includes appropriate antennas and accessory items.

The AN/FRR–36 is a fixed-station equipment that uses a half-wave folded dipole-type vertical antenna; the AN/VRR–7( ) uses a whip-type array for metal-top vehicles or a bumper-type antenna for smaller vehicles.

The AN/FRR–36 is powered from conventional 115- or 230-volt sources; the AN/VRR–7, –7X, and –7Y are operated in vehicles equipped with 24-, 12-, or 6-volt batteries, respectively.

AN/FRR–36, VRR–7( )

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–229

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRR–36:		
1	Antenna AT–438/GR	21 x 57¼ x 57¼	7.5
1	Cabinet, Electrical Equipment CY–1150/U	10⅝ x 21¼ x 7½	14.5
1	Power Supply PP–846/U	5 x 6¼ x 7 1/16	9.5
1	Receiver, Radio R–394/U	8½ x 14½ x 5¾	17
	For AN/VRR–7( ):		
1	Antenna AT–496/G		
1	Cabinet, Electrical Equipment CY–1223/G		
1	Power Supply PP–867/U, PP–868/U, or PP–869/U		
1	Receiver, Radio R–394/U	8½ x 14½ x 5¾	17

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station (AN/FRR–36); ground, vehicular (AN/VRR–7( )).

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 152 to 174.

TYPE MODULATION: Fm (F3).

TYPE OF SIGNAL: Fm.

POWER OUTPUT: .5 w.

POWER REQUIREMENTS:

PP–846/U: 46 va, 115/230 v, 50/65 cy ac.
PP–867/U: 24 v, 1.1 amp dc.
PP–868/U: 12 v, 2 amp dc.
PP–869/U: 6 v, 3.7 amp dc.

PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET: AN/FRR–36	10⅝ x 21¼ x 7½	51.5	2.3		
DOMESTIC PACK:		127.5	2.9		2
EXPORT PACK:		176	7.25		2

STATUS: Std

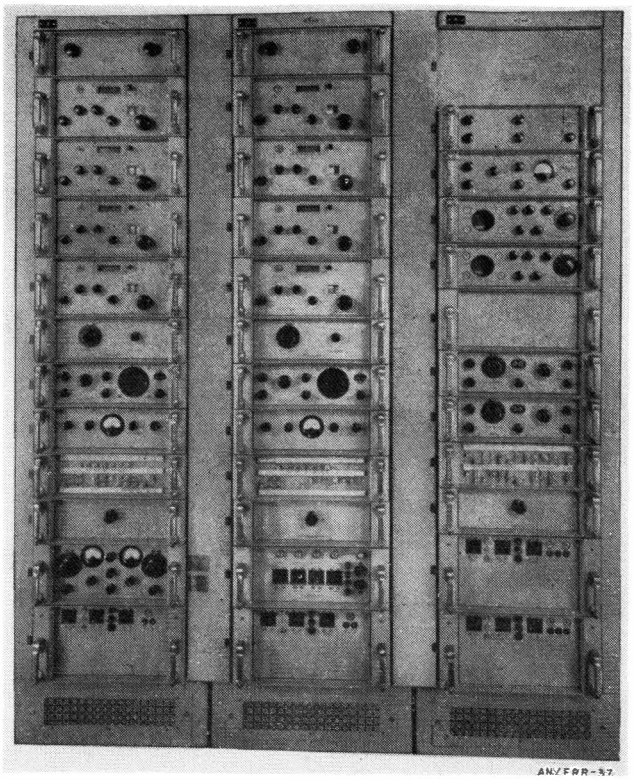
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

AN/FRR–37

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–37 is a double-conversion superheterodyne-type diversity receiver for use at shore stations. It can receive signals in single-channel, space- or frequency-dual-diversity operation, such as double-sideband radiotelephone, on-off-keyed radiotelegraph, and frequency-shift-keyed telegraph to operate single-channel radioteletype point-to-point communication.

This equipment performs the same function as Radio Receiving Set AN/FRR–24 except that it provides dual-diversity operation only. Auxiliary items necessary to operate the equipment include a 70-ohm antenna system, headphones, power source, and teletypewriter.

AN/FRR-37

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 91896

USING SERVICE: USN

DATE OF THIS SHEET: 30 April 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
2	Amplifier-Converter AM-450A/FRR-24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM-451A/FRR-24	13½ x 21⅛ x 24⅜	80
2	Amplifier-Converter AM-452A/FRR-24	13½ x 21⅛ x 24⅜	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore installations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES):

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 2 to 32 in four bands:

Band 1: 2 to 4
Band 2: 4 to 8
Band 3: 8 to 16
Band 4: 16 to 32

TYPE MODULATION: Am (A1, A2, A3), fm (F1, F4).

TYPE OF SIGNAL: Radiotelephone, radioteletype.

POWER OUTPUT:

POWER REQUIREMENTS: 1,825 w, 105/115/125 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:	67⅛ x 24 x 85	1,249			
DOMESTIC PACK:			212.5	5.3	39
EXPORT PACK:					

AN/FRR–38

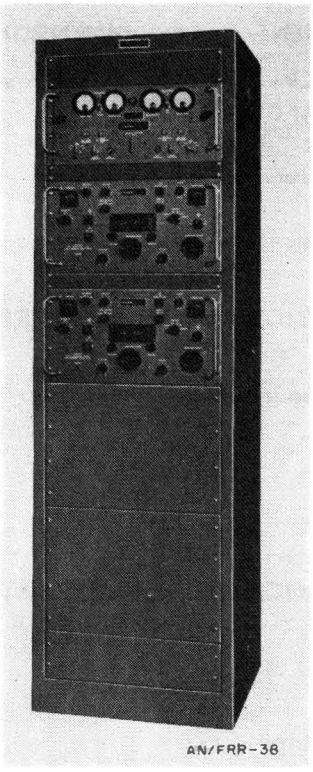
RECEIVING SET, RADIO

STATUS: Std

CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956



Radio Receiving Set AN/FRR–38 is a dual-diversity equipment that receives frequency-shift-keyed, single-channel, or time-division multiplex radioteletype signals. It is used as a radio receiving link in a space-diversity radioteletype communications system.

This equipment consists of two receivers and a frequency-shift converter mounted in an equipment cabinet and includes an installation kit.

AN/FRR–38

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–647

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Converter, Frequency Shift CV–116/URR	8¾ x 17 x 19	65
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
2	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80
1	Installation kit for Radio Receiving Set AN/FRR–38		40

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Cw (A1), mcw (A2), voice (A3), fsk (F1).

POWER OUTPUT: 5 mw (phones); 10 mw (600-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 270 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:	76 x 20½ x 21 27/32 (cab.)	490	25.3	.63	
DOMESTIC PACK:					
EXPORT PACK:		875	64.3	16.1	5

STATUS: Std

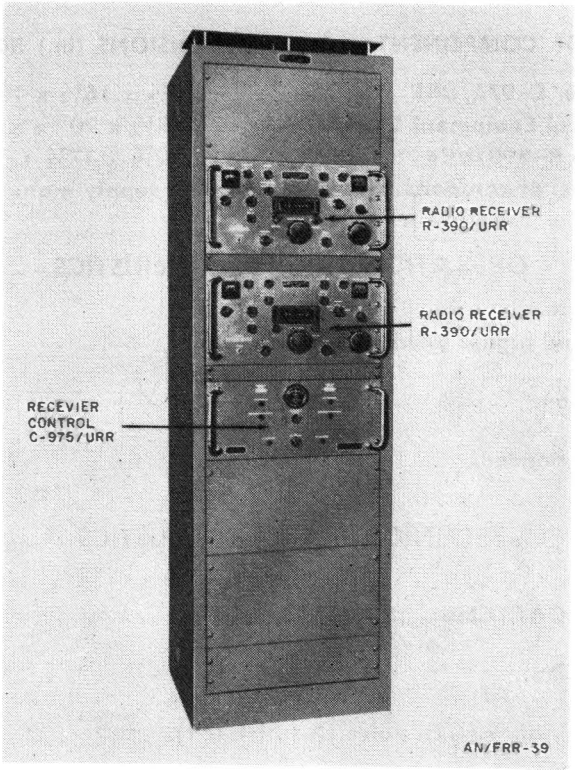
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–39

RECEIVING SET, RADIO



Radio Receiving Set AN/FRR–39 is a diversity equipment used at a terminal of a system to receive frequency-shift-keyed, single-channel, or time-division multiplex teletypewriter signals.

It consists of two receivers and a receiver control mounted in an equipment cabinet and includes an installation kit.

This equipment is operated in conjunction with Radioteletype Terminal Equipment AN/FGC–1( ).

AN/URR-39

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11-648

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Control, Receiver C-975/URR	8¾ x 16½ x 19	48
1	Cabinet, Electrical Equipment CY-1119/U	78½ x 20 13/16 x 21⅞	165
2	Receiver, Radio R-390/URR	10½ x 17¼ x 19	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Cw (A1), mcw (A2), voice (A3), fsk (F1).

POWER OUTPUT: 5 mw (phones); 10 mw (60-ohm bal line); 500 mw (600-ohm unbal line).

POWER REQUIREMENTS: 270 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:	78½ x 20 13/16 x 21⅞ (cab.)	373	26.3	.66	
DOMESTIC PACK:					
EXPORT PACK:			53.4	1.34	3

STATUS:

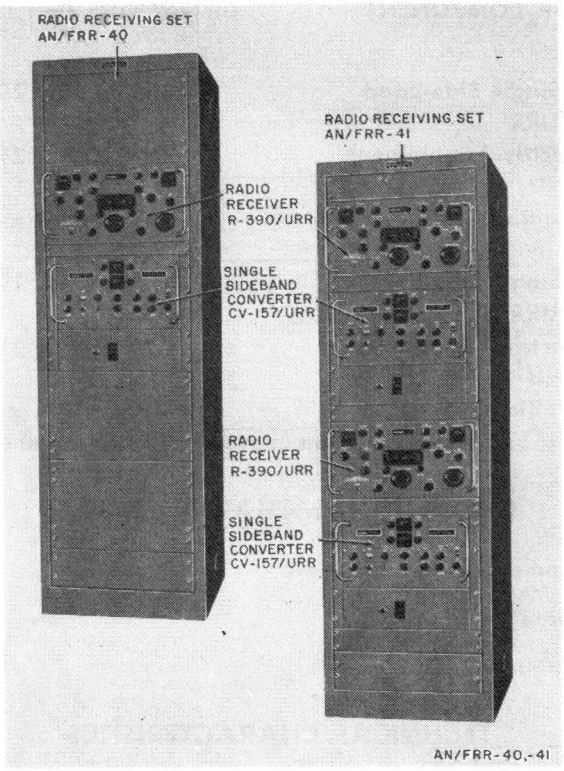
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR–40, -41

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–40 and AN/FRR–41 are used for the reception of single-sideband or twin single-sideband radio signals that carry multiplex teletypewriter, facsimile, and/or voice intelligence.

The AN/FRR–40 consists of one receiver and a single-sideband converter housed in a metal equipment cabinet. The AN/FRR–41, composed of two receivers and two converters housed in a metal equipment cabinet, is used for dual-diversity reception.

Both equipments are used in long-range applications between installations that have a heavy flow of message traffic. The audio output of either of these sets is capable of operating voice-reproducing equipment directly, or of feeding carrier terminal equipment that provides several teletypewriter or facsimile channels.

AN/FRR–40, –41

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–649

USING SERVICE: USA, USAF

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
	For AN/FRR–40:		
1	Converter, Single Side-band CV–157/URR	15¾ x 15 x 19	104
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
1	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80
	For AN/FRR–41:		
2	Converter, Single Side-band CV–157/URR	15¾ x 15 x 19	104
1	Cabinet, Electrical Equipment CY–1119/U	76 x 20½ x 21 27/32	225
2	Receiver, Radio R–390/URR	10½ x 17¼ x 19	80

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Extended.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .5 to 32.

TYPE MODULATION: Am (A9).

TYPE OF SIGNAL: Am, voice.

POWER REQUIREMENTS: 520 w (–40), 1,040 w (–41), 105/125 or 210/250 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:					
AN/FRR–40	76 x 20½ x 21 27/32 (ea cab.)	445	24.3	.61	
DOMESTIC PACK:					
AN/FRR–41		646	28.9	.72	
EXPORT PACK:					
AN/FRR–40		642	55.3	1.38	4
AN/FRR–41		909	75.3	1.88	6

STATUS: S/Std

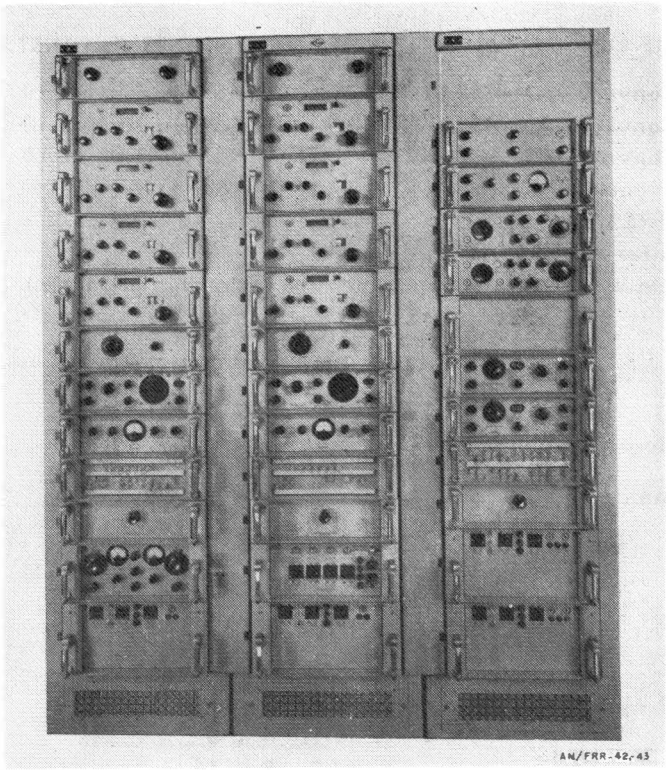
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

AN/FRR–42, –43

RECEIVING SET, RADIO



Radio Receiving Sets AN/FRR–42 and AN/FRR–43 are double-conversion, superheterodyne-type receivers used at shore stations for point-to-point communication.

The AN/FRR–42 includes a single-channel receiver and provides single-channel reception only. The AN/FRR–43 has three radio receivers mounted in a three-rack cabinet and can provide single reception and dual or triple space-diversity or frequency-diversity reception.

Diversity combining facilities and detection are supplied by auxiliary apparatus not part of the AN/FRR–43.

AN/FRR–42, –43

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: NAVSHIPS 91891(A)

USING SERVICE: USN

DATE OF THIS SHEET: 23 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Amplifier-Converter AM–452A/FRR–24[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Amplifier-Converter AM–453A/FRR–24[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Amplifier-Converter AM–898/FRR[a]	$6\frac{31}{32} \times 16\frac{15}{16} \times 19$	58
1	Converter, Frequency, Electronic CV–277/FRR[a]	$5\frac{7}{32} \times 16\frac{15}{16} \times 19$	33

[a]Three each for AN/FRR–43.

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Point-to-point communications.

INSTALLATION: Shipboard.

APPROXIMATE RANGE: Medium to long.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 4 to 32 in three bands:
Band 1: 4 to 8
Band 2: 8 to 16
Band 3: 16 to 32

TYPE MODULATION: Am (A2, A3); fm (F1, F4).

TYPE OF SIGNAL: Mcw, voice, fsk, facsimile.

POWER OUTPUT: 15 mw into 600-ohm load (line, phone); 1 w (to loudspeaker).

POWER REQUIREMENTS: 453 w, 105/115/125 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:	$23\frac{3}{8} \times 24 \times 85$	874			
DOMESTIC PACK:		1,728	107.25	2.68	18
EXPORT PACK:					

STATUS: Std

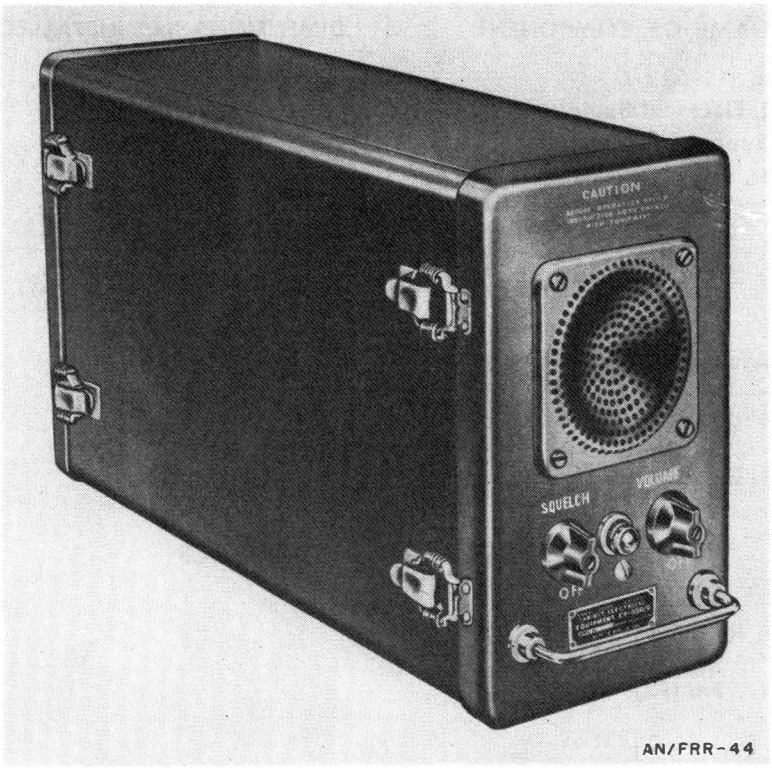
CLASSIFICATION OF EQUIPMENT: Unclassified

PREPARING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

AN/FRR-4

RECEIVING SET, AD



Radio Receiving Set AN/FRR–44 is a vhf (fm-voice) fixed station equipment used primarily for monitoring and radio communication applications.

This equipment consists essentially of a radio receiver and its power supply, housed in an equipment cabinet, and includes antenna and accessory components.

The primary operating component, Radio Receiver R–257/U, is also used as the receiving component of such radio equipments as Radio Sets AN/FRC–15, AN/TRC–22, and AN/VRC–6( ).

AN/FRR–44

RECEIVING SET, RADIO

INSTRUCTION LITERATURE: TM 11–225

USING SERVICE: USA

DATE OF THIS SHEET: 14 June 1956

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Antenna AS–612/U	11½ x 5¼ x 41	30.0
1	Cabinet, Electrical Equipment CY–1150/U	10⅝ x 21¼ x 7½	14.5
1	Power Supply PP–846/U	5 x 6¼ x 7 1/16	9.5
1	Receiver, Radio R–257/U	8½ x 14½ x 5¾	17.0

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Division and higher headquarters.

INSTALLATION: Fixed station.

APPROXIMATE RANGE: Line of sight.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 25 to 50.

TYPE MODULATION: Fm (F3).

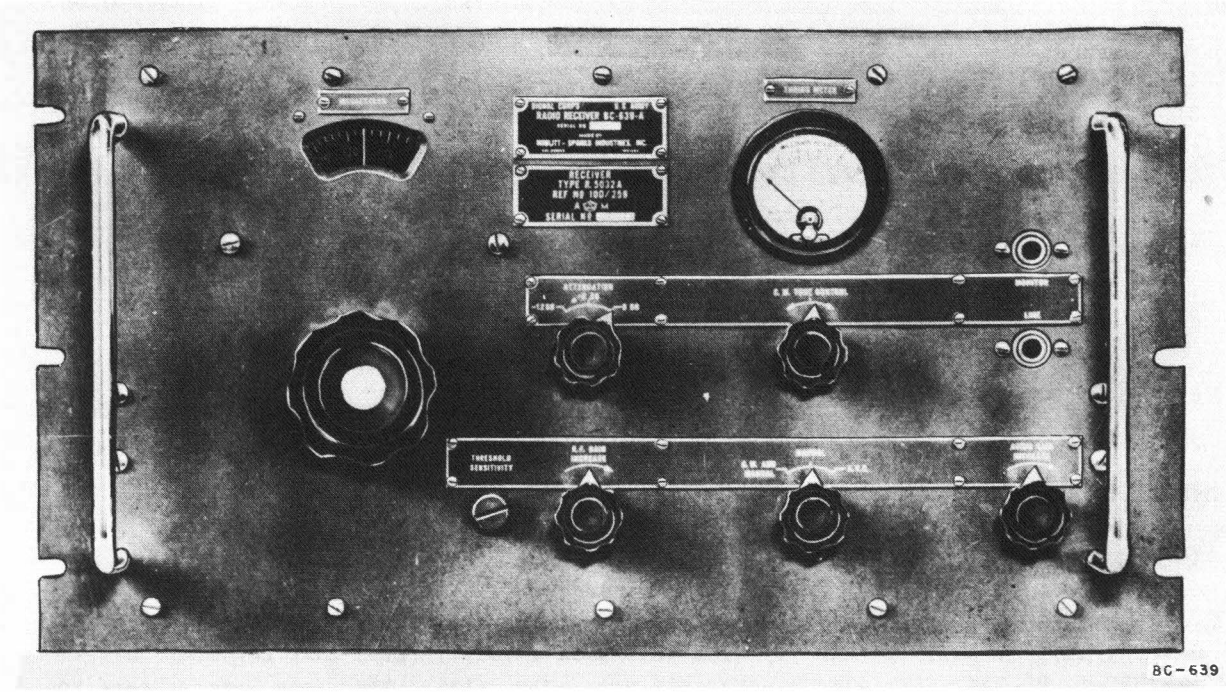
TYPE OF SIGNAL: Fm.

POWER REQUIREMENTS: 115 v, .4 amp, 50/65 cy ac; 230 v, .2 amp, 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:	10⅝ x 21¼ x 7½	71			
DOMESTIC PACK:		113	4.29		2
EXPORT PACK:		140	5.60		2

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force, Navy DATE OF THIS SHEET: 7 Jun 52	AN/FRR-TYPE SERVICE TYPE NUMBER: BC-639 RADIO RECEIVER



Radio Receiver BC-639 is a-m (tone, cw, and icw) receiving equipment used for ground-to-air and point-to-point communication, and in direction finding applications.

Radio Receivers BC-639, BC-639-A, -B and -D are all similar. BC-639, and BC-639-A are operationally identical; BC-639-D is the same as BC-639-B except for a wider audio band width and built-in noise suppression circuit. Noise suppression Modification Kit MC-633 is available for modification of BC-639-A and -B.

The antenna input circuit is designed to match 70-mm coaxial cable. Antenna Equipment RC-81 is recommended (wide band dipole).

Normal output impedance is 600 ohms, but satisfactory operation can be had from 200 to 20,000 ohms.

Power supplies must be requisitioned separately. Rectifier RA-42-A or RA-42-B is used for operation from 90-140/200-250 v, ac; Dynamotor Unit PE-100-A is used for operation from a 6-v, d-c source; and an 80-ampere-hour battery will operate this equipment for approximately 12 hours.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-40BC639-2, 21, 22
BC-639 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Air Force, Navy
	DATE OF THIS SHEET: 7 Jun 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-639	19 x 10-15/32 x 13-9/16	38
1*	Rectifier RA-42-A	19 x 6-31/32 x 8-23/32	26
	or		
1*	Rectifier RA-42-B	19 x 6-31/32 x 8-23/32	26
	or		
1*	Dynamotor Unit PE-100A	19 x 10-15/32 x 8-11/16	24

*Required but not supplied with BC-639.

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project equipment in accordance with AFR 100-17.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): 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/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156 continuous tuning.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw and icw.

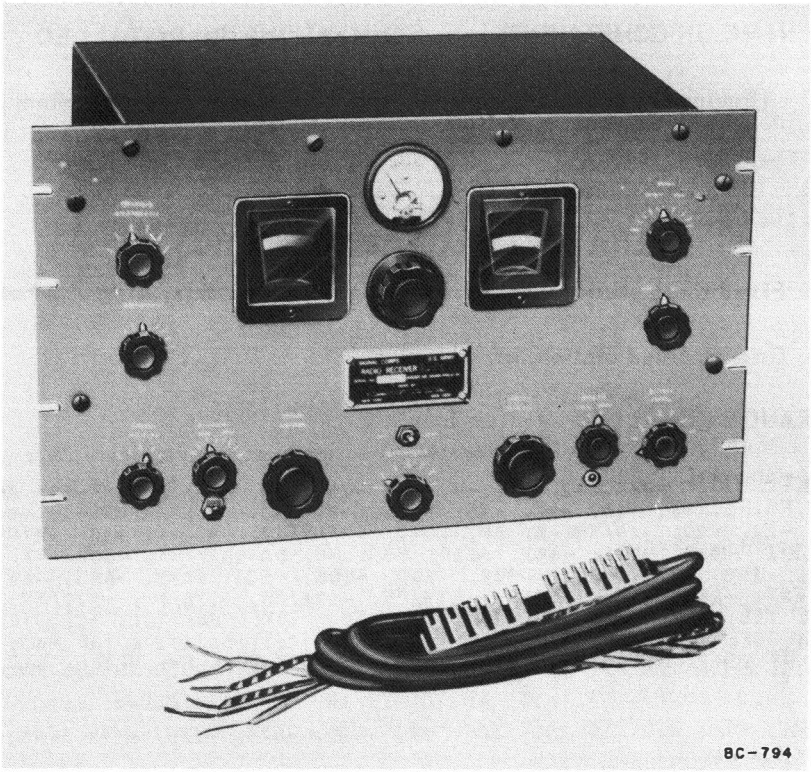
POWER OUTPUT: 1 w into 600 ohm impedance.

POWER REQUIREMENTS: General: Plate Supply 210 v, (60 ma) dc; Filament 6.3 v, (3.5 amp) ac or dc.
From an ac source: Using Rectifier RA-42-A or RA-42-B; 60 w, 90-140/200-250 v, 60 cyc, 1 phase, ac.
From a dc source: Using Dynamotor PE-100-A; 60 w, 6 v, (10 amp) dc.

PHYSICAL CHARACTERISTICS

Radio Receivers BC-639, -639-A, -B, -D measure 19 x 10-15/32 x 13-9/16 inches, net weight 38 pounds, volume 2 cu ft. Packed for either domestic or export shipment: total weight 50 pounds, total volume 2.8 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 11 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: BC-794 RADIO RECEIVER



Radio Receiver BC-794 is a general purpose, a-m (voice, tone and cw), receiving equipment which operates in the medium- and high-frequency bands, and is used as fixed station equipment for communication, monitoring, or similar applications at corps and higher levels.

This equipment consists essentially of a commercial (Hammarlund Super-Pro) communications-type radio receiver and includes accessories. It may be installed in a vehicle by means of appropriate shock mounts.

It uses a doublet antenna with balanced transmission line, a straight wire and ground, or equivalent antenna systems.

Can be operated from batteries, or from 95 to 230-v ac through appropriate power-modifying units (Power Supply Units RA-74, RA-84, or RA-94).

AN/FRR-TYPE	INSTRUCTION LITERATURE: TM 11-866
BC-794 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 11 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: Fixed radio stations at corps or higher headquarters, Army Air Force squadrons.

INSTALLATION: Ground, fixed station, or vehicular.

APPROXIMATE RANGE (IN MILES): Medium-long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, 22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/FRT; RC-52; SCR-177, -198, -193, -274, -281, -399, -499, -506, -536, -543, -585, -694; T-4/FRC, -93/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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 1.25 - 40 in 5 bands.

Band 1: 1.25 - 2.5
Band 2: 2.5 - 5.0
Band 3: 5 - 10
Band 4: 10 - 20
Band 5: 20 - 40.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone, cw.

POWER REQUIREMENTS: 180 w from Power Supply Unit RA-74: 95 - 260 v, 25/60 cyc, ac, RA-84: 105 125 v, 50/60 cyc, ac, RA-94: 115 or 230 v, 50/60 cyc, ac; or one 6-v storage battery, five 45-v B batteries, one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-794 measures 24-1/8 x 20-1/2 x 15-1/8 inches. Packed for domestic shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy, Air Force DATE OF THIS SHEET: 11 Jan 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: BC-1004 RADIO RECEIVER

Radio Receiver BC-1004 is a crystal-controlled, general purpose, a-m (voice, tone, and cw) receiving equipment used in fixed plant or vehicular applications for monitoring, intercept, or communication in the l-f and m-f ranges, at corps and higher headquarters.

This equipment consists essentially of a commercial (Hammarlund Super Pro) communications type receiver which can be removed from its cabinet and mounted on a standard rack panel. For vehicular use, a shock mount is available.

Operates with a conventional straight wire antenna and ground or a doublet type antenna system.

Can be operated on 95-230 v a-c power through use of appropriate Power Supply Units RA-74, -84, and -94 or from a 6-v storage battery and appropriate dry batteries.

AN/FRR-TYPE

BC-1004 : SERVICE TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM-866

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army, Navy, Air Force

DATE OF THIS SHEET : 11 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: Fixed radio station at corps or higher headquarters.

INSTALLATION: Ground, fixed station or vehicular.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -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; TCZ; TDD; TDE; TDF; TDH; 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: 0.54 - 1.16, 1.16 - 2.5, 5.0 - 10.0, 10.0 - 20.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, tone.

POWER REQUIREMENTS: 180 w from Power Supply Unit RA-74; 95-260 v, 25/60 cyc
RA-84; 105-125 v, 50/60 cyc
RA-94; 115 or 230 v, 50/60 cyc

or

One 6-v storage battery, five 45-v B batteries, one 45-v C battery.

PHYSICAL CHARACTERISTICS

Radio Receiver BC-1004 measures 24-1/8 x 20-1/2 x 15-1/8 inches. Packed for domestic shipment: total weight 90 pounds, total volume 4.3 cu ft. Shipped in 1 package.

STATUS: T/Std

CLASSIFICATION OF EQUIPMENT: Unclassified

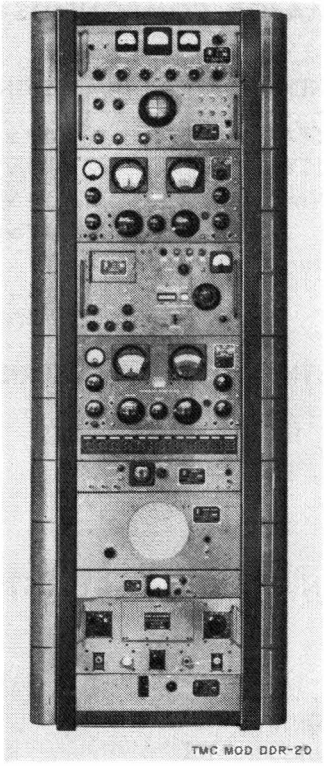
PREPARING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

AN/FRR–TYPE

COMMERCIAL TYPE NUMBER: TECHNICAL MATERIEL CORPORATION MODEL DDR–2D

DUAL DIVERSITY RECEIVER



Technical Materiel Corporation Dual Diversity Receiver Model DDR–2D is designed to receive am (cw, mcw, voice) and fsk signals in point-to-point communication applications.

This equipment is a multipurpose, dual-diversity receiving equipment consisting of two receivers with a common oscillator and a diversity-combining unit providing a common output for both receivers.

Both visual and audio monitoring of receiver tuning is provided.

Radio printer reproduction is effected by the frequency-shift converter, which provides electronic neutral keying.

AN/FRR–TYPE

INSTRUCTION LITERATURE: Commercial Instruction Book

USING SERVICE: USAF

DATE OF THIS SHEET: 12 June 1956

TECHNICAL: COMMERCIAL TYPE NUMBER MATERIEL CORPORATION MODEL DDR–2D

DUAL DIVERSITY RECEIVER

MAJOR COMPONENTS

QTY	NAME OF COMPONENT	DIMENSIONS (in.) INSTALLED	WEIGHT (lb)
1	Frequency Shift Converter CFA	19 x 3½ x 16	
1	Diversity Combining Unit DCV	19 x 7 x 14	25.5
1	Diversity Visual Monitor DVM	19 x 7 x 14	30
1	Monitor Speaker LSP	19 x 8¾ x 5	
1	Variable Frequency Oscillator VOX	19 x 10½ x 16	67
2	Receiver 600 DMK	19 x 18½ x 16½	66

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: .54 to 54.

TYPE MODULATION: Am (A1, A2, A3); fm (F1).

TYPE OF SIGNAL: Cw, mcw, tone, voice, fsk.

POWER OUTPUT: 2.5 w (audio).

POWER REQUIREMENTS: 800 w, 110/220 v, 50/60 cy ac.

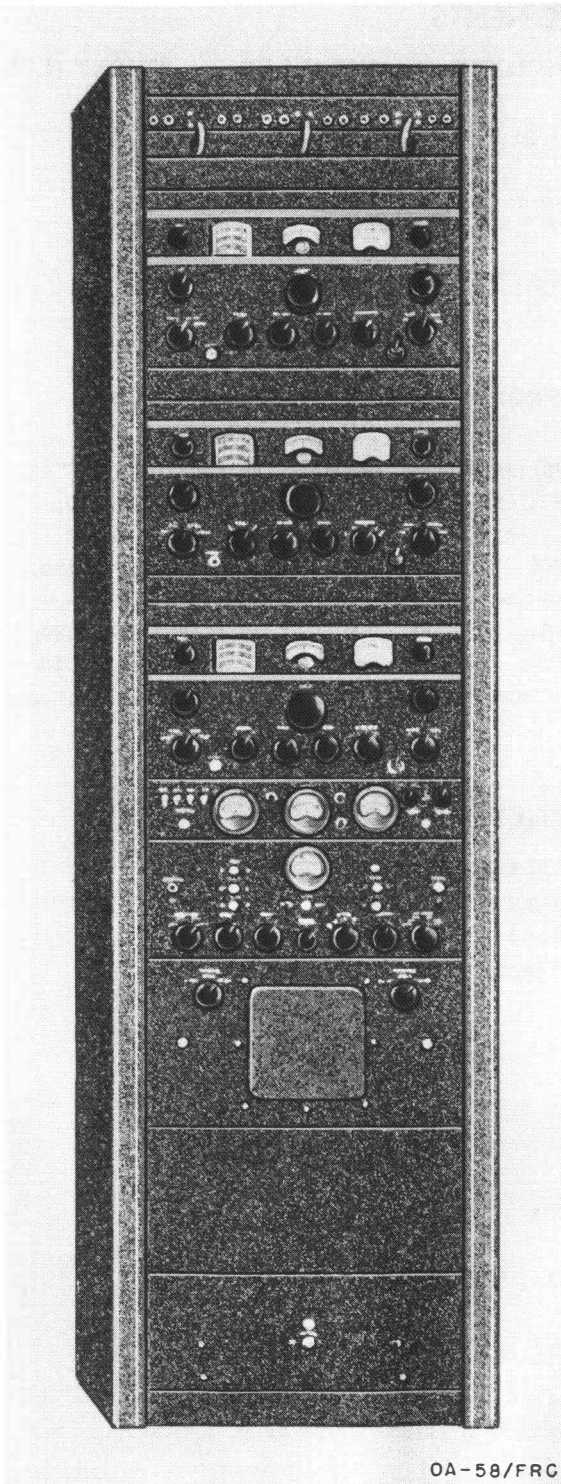
PHYSICAL CHARACTERISTICS

	DIMENSIONS (IN INCHES) OF EQUIPMENT (INSTALLED)	TOTAL WEIGHT (lb)	TOTAL VOLUME (cu ft)	SHIP TONS	TOTAL NO. PACKAGES
NET:	86 x 28 x 20	550	42	1.1	
DOMESTIC PACK:					5
EXPORT PACK:		1,350	120	3	5

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

AN/FRR-TYPE

AN/COMP TYPE NUMBER: OA-58/FRC
RADIO RECEIVER ASSEMBLY



OA-58/FRC

Radio Receiver Assembly OA-58/FRC is a long-range, medium-and high-frequency, triple-diversity, a-m (voice, cw, and mcw) fixed-station radio receiving equipment, designed to minimize the effects of fading.

This equipment consists of three superheterodyne radio receivers, each with an individual power supply, a tone keyer, a monitoring unit, loudspeaker, and accessories assembled to a standard relay rack, and inclosed in a steel floor-type cabinet.

Each of the receivers can be operated separately from its own doublet or rhombic antenna. The monitoring unit is common to all receivers and operates on its own power supply unit. The loudspeaker can be switched to any one, or all, of the radio receiver outputs.

Operates on 108-126-150 or 230-v ac.

AN/FRR-TYPE

OA-58/FRC :AN/COMP TYPE NUMBER

RADIO RECEIVER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-889A

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE : Army

DATE OF THIS SHEET: 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
3	Radio Receiver (RCA Model AR-88F)	10-1/2 x 19 x 19 (each)	235.50
1	Cabinet	84 x 21 x 22	275.0
1	Monitoring Unit	3-1/2 x 7-1/2 x 19	10.50
1	Tone Keyer Unit	7 x 11 x 19	26.50
1	Monitoring Unit Power Supply	7 x 7 x 19	17.50
1	Loudspeaker Assembly	10-1/2 x 4-1/2 x 19	26.50

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Fixed ground station. **APPROXIMATE RANGE (IN MILES):** Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -9, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -339, -365, -401, -447, -610; MBS; MQ; OA-60A/FRT, -608/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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; 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: 0.54 - 32.0 in 6 bands.

Band 1: 0.54 - 1.6
Band 2: 1.57 - 4.55
Band 3: 4.45 - 12.15
Band 4: 11.9 - 16.6
Band 5: 16.1 - 22.7
Band 6: 22.0 - 32.0

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, voice, and mcw.

POWER OUTPUT: 12 mw, 2.5 w with receiver amplifier.

POWER REQUIREMENTS: 450 w, 108-126-150, or 230 v, 50/60 cyc, ac.

PHYSICAL CHARACTERISTICS

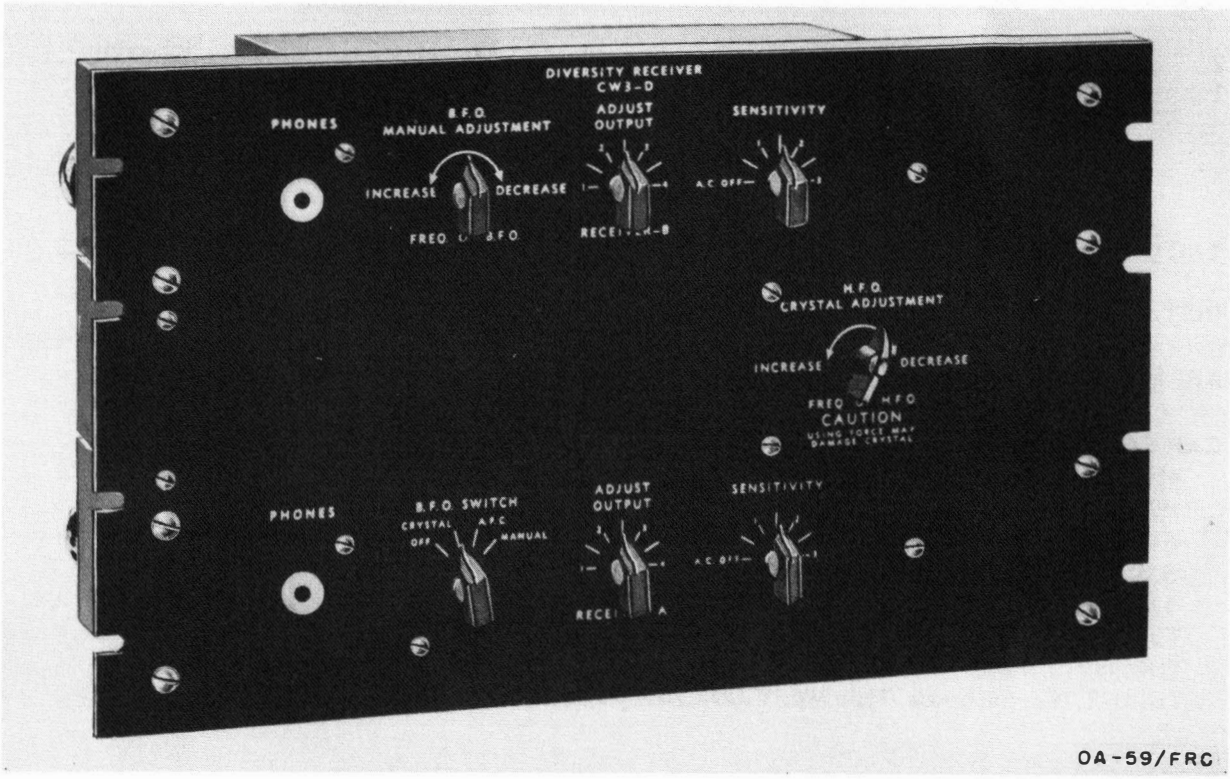
Radio Receiver Assembly OA-58/FRC measures 22 x 84 x 21 inches, net weight 650 pounds. Packed for domestic shipment: total weight 1,122 pounds, total volume 78.74 cu ft, 2 ship tons.

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

AN/FRR-TYPE

AN/COMP TYPE NUMBER: OA-59/FRC

RADIO RECEIVER ASSEMBLY



OA-59/FRC

Radio Receiver Assembly OA-59/FRC is a crystal-controlled, dual diversity, fixed-frequency, a-m (cw) receiving equipment used for radioteletype and radiotelegraph long-range communication in fixed plant installations.

This equipment consists, essentially, of two commercial type (Wilcox Model CW 3-D) receivers, each with its own power supply, rack-and-panel-mounted in a steel floor type cabinet. It operates in 6 bands, which are selected by means of appropriate plug-in coils furnished with the equipment. Is provided with h-f and beat-frequency oscillators common to both receiver components.

This set uses two rhombic or two other matched-type antenna systems.

AN/FRR-TYPE

OA-59/FRC :AN/COMP TYPE NUMBER
RADIO RECEIVER ASSEMBLY

INSTRUCTION LITERATURE: TM 11-2204
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Army
DATE OF THIS SHEET : 15 Feb 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
2	Wilcox Model CW3-D Receivers	10-1/2 x 19 x 11-1/2	Not available
1	Metal cabinet	72 x 24 x 17	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -83/SR, -158/FRT, 159/FRT, - 171/FR, -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; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 1.9 - 24.0, in 6 bands.

Band 1: 1.9 - 3.6.	Band 4: 9.4 - 16.5.
Band 2: 3.4 - 5.9.	Band 5: 16.5 - 20.0.
Band 3: 5.8 - 9.4.	Band 6: 20.0 - 24.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw.

POWER REQUIREMENTS: (1.3 amp) 110 - 115 v, 69 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver Assembly OA-59/FRC packed for export shipment: total weight 528 pounds, total volume 37 cu ft, 0.9 ship ton.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	AN/FRR-TYPE AN/COMP TYPE NUMBER: R-208/FR RADIO RECEIVER

R-208/FR

Radio Receiver R-208/FR is a crystal-controlled, a-m (cw only) receiving equipment used for long distance point-to-point or ground-to-air applications at fixed plant installations.

This equipment consists of a single rack-mounted component which may be installed with any combination of eight receivers (one or more of which may be Radio Receiver R-209/FR) on a standard relay rack. It can be preset by selection of appropriate interchangeable coils to operate in frequency channels covered by four sets of plug-in coils for each band.

When installed in combinations of several receivers, each receiver can be controlled independently, either locally or from a remote operating point, through use of Remote Control Console CY-161/FRC.

Sensitivity, frequency selection, beat-frequency oscillator, and noise controls are included. It uses a doublet, rhombic, or other suitable type of antenna system.

Operates on 110 v, 60 cyc ac.

AN/FRR-TYPE

R-208/FR : AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-853

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)

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

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Fixed plant applications.

INSTALLATION: Ground, permanent.

APPROXIMATE RANGE (IN MILES): Medium to Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/FRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -83/SR, -158/FRT, -159/FRT, -171/FR, -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; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 1.95 - 16.5, by use of four sets of r-f coils.

Set 1: 1.95 - 3.6. Set 3: 5.6 - 10.0.

Set 2: 3.50 - 6.1. Set 4: 9.4 - 16.5.

TYPE MODULATION: Am.

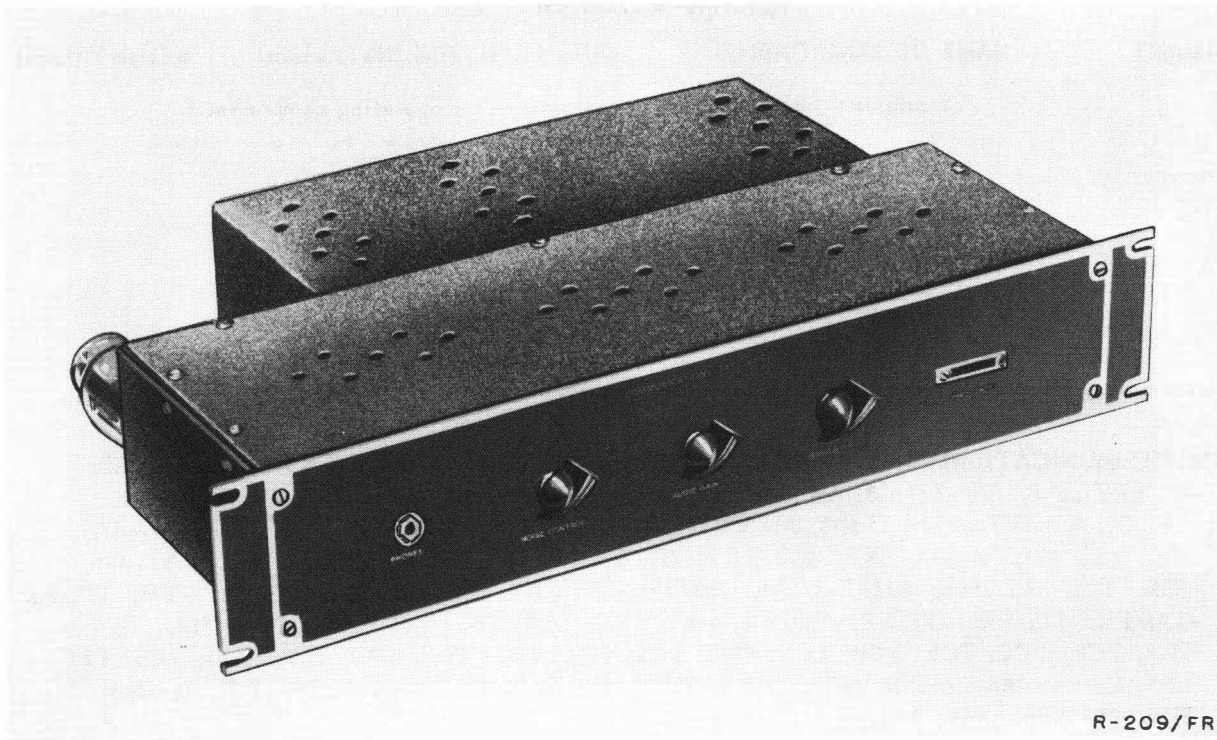
TYPE OF SIGNAL: Cw.

POWER REQUIREMENTS: 70 w, 110 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-208/FR measures 3-15/32 x 12-1/2 x 19 inches, net weight 20.6 pounds, volume 0.477 cu ft. Packed for domestic shipment: total weight 25 pounds, total volume 0.95 cu ft. Packed for export shipment: total weight 40 pounds, total volume 2.5 cu ft. Shipped in 1 package both domestic and export.

STATUS: Limited Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR-TYPE** AN/COMP TYPE NUMBER: R-209/FR RADIO RECEIVER



R-209/FR

Radio Receiver R-209/FR is a crystal-controlled, superheterodyne a-m (voice), m-f and h-f receiving equipment designed for use in point-to-point or ground-to-air communication and similar applications at fixed plant installations.

This equipment consists of a single, panel-mounted radio receiver having three panel controls and designed for assembly to a standard relay rack which can accommodate a total of eight such receivers. It may be preset by means of four sets of interchangeable r-f coils.

Can be mounted with seven other identical receivers, or in any combination of Radio Receivers R-208/FR and R-209/FR, and installed in a single floor type cabinet to form a single operating bay of equipment.

Each receiver so assembled can be individually controlled locally or, by means of Remote Control Console CY-161/FRC, from a remote operating point.

Antenna systems used by this equipment may be of the long wire, doublet, rhombic, or other suitable type.

Is powered by 70 w of 110 v ac.

AN/FRR- TYPE	INSTRUCTION LITERATURE: TM 11-853
R-209/FR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVER	USING SERVICE : Army
	DATE OF THIS SHEET : 30 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: Fixed plant.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Medium to long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -83/SR, -158/FRT, -159/FRT, -171/FR, -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; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 1.95 - 16.5, by use of four sets of r-f coils.

Set 1: 1.95 - 3.6.
Set 2: 3.50 - 6.1.
Set 3: 5.6 - 10.0.
Set 4: 9.4 - 16.5.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER REQUIREMENTS: 70 w, 110 v, 60 cyc ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-209/FR measures 3-15/32 x 12-1/4 x 19 inches, net weight 20 pounds, volume 0.467 cu ft. Packed for domestic shipment: total weight 25 pounds, total volume 0.95 cu ft. Packed for export shipment: total weight 50 pounds, total volume 2.39 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army, Navy DATE OF THIS SHEET: 30 Jan 52	AN/FRR-TYPE AN/COMP TYPE NUMBER: R-274/FRR RADIO RECEIVER

R-274/FRR

Radio Receiver R-274/FRR is a medium-, high-, and very-high-frequency a-m (voice, tone and cw) receiving equipment used for communication and special applications in fixed plant and similar installations.

This equipment consists of a single radio receiver component having a built-in power supply which is mounted on a panel for rack mounting. It requires additional equipment for reproduction of audio signals.

Carrier shift signals can be fed to appropriate teletype terminal equipment or to Dual Diversity Converter CV-31/TRA-7 and similar units. Provision is made for use of the audio end of this radio receiver alone, and for stand-by operation when used in conjunction with radio transmitting equipment.

It operates with a balanced doublet or single-wire antenna.

There are three models of this equipment; R-274/FRR is constructed according to military specification and is interchangeable with R-274A/FRR, (not illustrated), which is a commercial (Hammarlund SP-600-JX-1) communication type receiver; also used as part of Navy Radio Set AN/GRR-8. R-274/FRR is a commercial (Hammarlund SP-600-JX-6) equipment procured by the Navy.

AN/FRR-TYPE

R-274/FRR :AN/COMP TYPE NUMBER

RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-897

CLASSIFICATION OF EQUIPMENT: Unclassified

USING SERVICE: Army, Navy

DATE OF THIS SHEET: 30 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: Mobile and fixed radio security teams, fixed plant.

INSTALLATION: Ground, semipermanent or fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-2, -4; AN/VRT-1; BC-191, -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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; TDN; TDO; TEB; TEC; TEF; Collins 18S-4 (AF Model); 32V-2; Fisher TS 25-3; Marconi TH-41-B; Westinghouse Type MW; Wilcox 96D, 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 0.54 - 54.0 in 6 bands.

Band 1: 0.54 - 1.27	Band 3: 3.0 - 7.0	Band 5: 13.8 - 29.7
Band 2: 1.27 - 3.0	Band 4: 7.0 - 13.8	Band 6: 29.7 - 54.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, icw, mcw (voice or tone), carrier shift radioteletype.

POWER REQUIREMENTS: 120 w, 95 - 130 and 190 - 260-v, 50/60 cyc, 1 phase, ac.

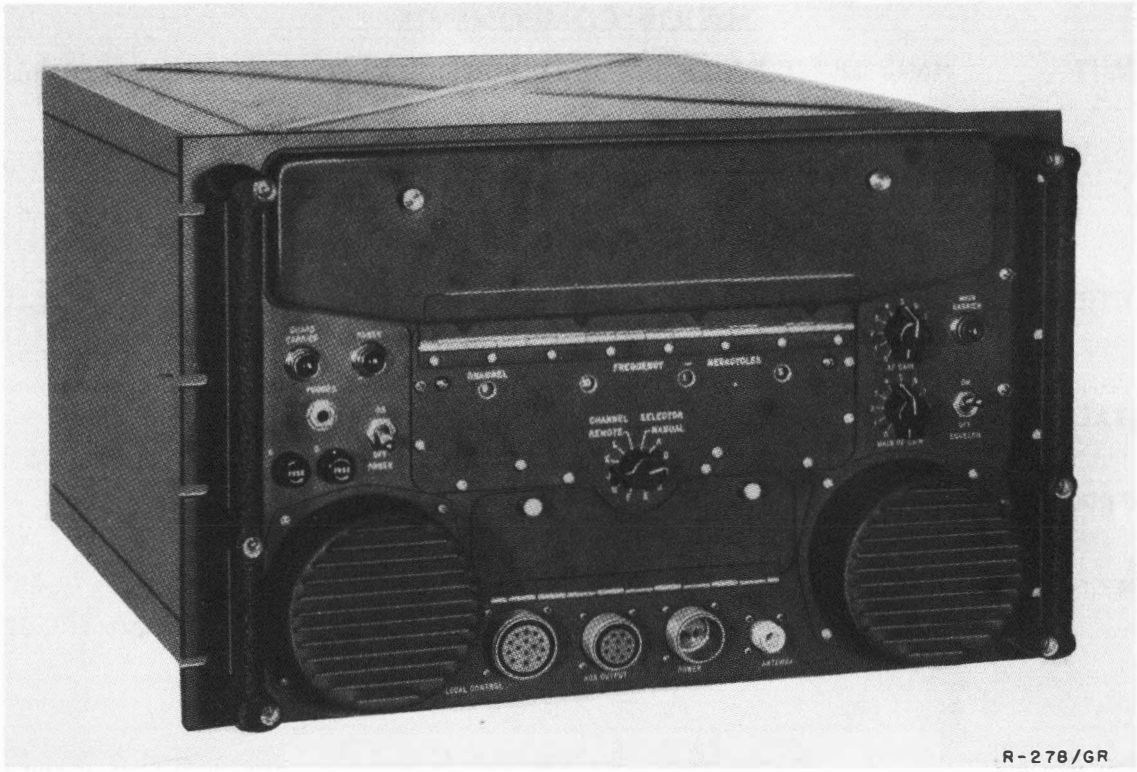
PHYSICAL CHARACTERISTICS

Radio Receiver R-274/FRR measures 10-1/2 x 16-3/4 x 19 inches, net weight 58 pounds, volume 2.04 cu ft. Packed for export shipment: total weight 105 pounds, total volume 4.64 cu ft. Shipped in 1 package.

STATUS: Substitute Standard
CLASSIFICATION OF EQUIPMENT: Restricted
USING SERVICE: Air Force
DATE OF THIS SHEET: 19 May 52

AN/FRR-TYPE

AN/COMP TYPE NUMBER: R-278/GR
RADIO RECEIVER



Radio Receiver R-278/GR is a fixed, or mobile, ground-operated, u-h-f, crystal controlled a-m receiver, operating on any one of 10 preset channels (of a total of 1,750 spaced 100 kc apart) in the 225.0 to 399.9 mc range. It also monitors either one of two crystal-controlled preset, "stand-by", guard frequencies in the range 238 to 248 mc.

The moment a signal is impressed on the preset guard frequency, it automatically takes over control of the receiver on that one frequency.

It is used for ground-to-air and point-to-point communication, and with Radio Direction Finder Set AN/CRD-6 can be used for navigation applications.

This receiver can be remotely controlled up to five miles by means of Radio Set Control C-565/GR and Control Indicator C-806/GR.

The antenna input impedance is 52 ohms, which permits using Antennas AS-505/GR, AT-197/GR, and AS-450/GR.

It has an audio output of 3 w at 600 ohm impedance which permits operation of loudspeakers, or feeding into telephone lines.

Operates on 110 or 220-v, ac.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-35-OA-192-3
R-278/GR :AN/COMP TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Restricted
RADIO RECEIVER	USING SERVICE : Air Force
	DATE OF THIS SHEET : 19 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: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground operated.

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/GRT-3; AN/MRC-12, -20, -22; AN/PRC-14, -17, -20; AN/TRC-32; AN/URC-4; AN/URT-10; MAR; MAY; TDZ; TED.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 1,750 channels in the frequency range 225.0 - 399.9 . 10 preset channels: also operates on any guard frequency between 238 and 248 .

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, tone.

POWER OUTPUT: 3 w (Nominal).

POWER REQUIREMENTS: (Peak power required) 470 w, 115/230 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiver R-278/GR measures 19 x 12-1/4 x 20 inches, net weight 115 pounds, volume 4 cu ft. Packed for domestic shipment: total weight 145 pounds, total volume 6 cu ft. Packed for export shipment: total weight 155 pounds, total volume 6 cu ft. Shipped in 1 package both domestic and export.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Army DATE OF THIS SHEET: 30 Jan 52	**AN/FRR- TYPE** AN/COMP TYPE NUMBER: R-320/FRC RADIO RECEIVER

R-320/FRC

Radio Receiver R-320/FRC is an a-m (voice, cw, and mcw) receiving equipment used for general communications such as point-to-point, ground-to-air, and ship-to-shore applications or for diversity reception.

Two types of receivers have been procured under this nomenclature designation. R-320/FRC (illustrated above) is a commercial (RCA Model AR-88-F) receiver having avc, i-f gain, and a diode output circuit. It operates in the frequency range 0.535 to 0.32 mc (in 6 bands) and requires 115/230 v ac. It is used in Radio Receiver Assembly OA-56A/FRC, which uses three such receivers for triple diversity reception.

R-320A/FRC is a commercial (Hammarlund SP-600-J-4) receiver having avc, i-f gain, a diode output circuit, a crystal filter, and a beat-frequency oscillator. It operates in the frequency range 0.54 to 54.0 mc, (in 6 bands) and can be adjusted for operation from 95 to 260 v ac (by seven transformer taps).

AN/FRR-TYPE

R-320/FRC :AN/COMP TYPE NUMBER
RADIO RECEIVER

INSTRUCTION LITERATURE: TM 11-899
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)

(Equipment consists of one major operating component.)

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Electronic warfare detachments.

INSTALLATION: Ground, fixed station.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; 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: 0.535 - 32.0, in 6 overlapping bands.

Band 1: 0.535 - 1.60.	Band 4: 11.9 - 16.6.
Band 2: 1.570 - 4.55.	Band 5: 16.1 - 22.7.
Band 3: 4.450 - 12.15	Band 6: 22.0 - 32.0.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 2.5 w, maximum undistorted.

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

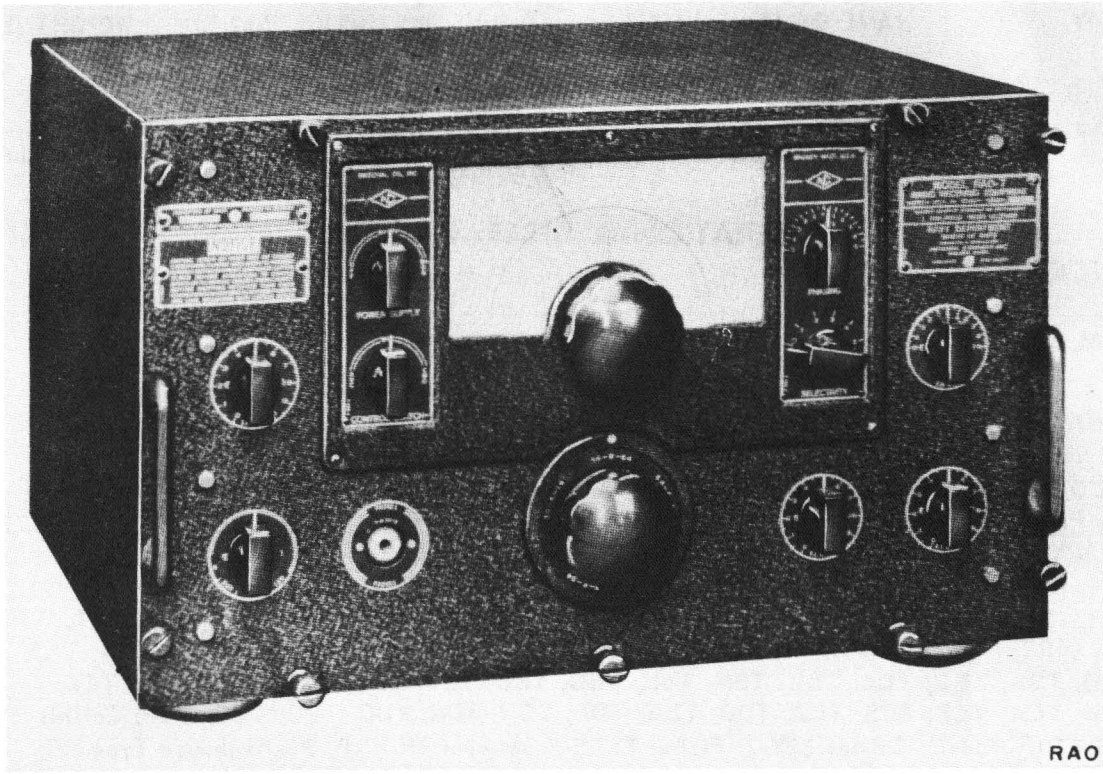
PHYSICAL CHARACTERISTICS

Radio Receiver R-320/FRC weighs 98 pounds net, volume 2.37 cu ft. Packed for export shipment: total weight 200 pounds, total volume 8.93 cu ft. Shipped in 2 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: Navy
DATE OF THIS SHEET: 29 Mar 52

AN/FRR-TYPE

SERVICE TYPE NUMBER: RAO, RAO-1
RADIO RECEIVING EQUIPMENT



RAO

Radio Receiving Equipments RAO and RAO-1 are high-selectivity, general purpose receivers for receiving radiotelegraph or voice signals.

They are similar in design: RAO is designed for rack installation; RAO-1 for table installation.

Both receivers are supplied with loudspeakers and fitted with loudspeaker power output sockets distinct from the headset output sockets.

Electrically, RAO-1 is the same as RAO with the addition of a noise limiter and a second stage of a-f amplification.

A headset and an antenna are required but not supplied.

These receivers may be operated from batteries in an emergency.

AN/FRR-TYPE

RAO, RAO-1 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: Not Available
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE : Navy
DATE OF THIS SHEET : 29 Mar 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Receiver Unit CNA-46072, -46088	10-7/8 x 17-9/16 x 13-3/8	55
1	Loudspeaker CNA-49092,	7 x 19 x 3-1/2	Not Available
	-49106	9-7/16 x 10-1/4 x 7-7/16	11

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18, -19; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, -19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4, -10; AN/VRC-1, -4; AN/VRT-1; BC-191, -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; TBY; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDD; TDE; TDF; TDH; 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: 0.54 - 30.0, in 5 bands.

Band 1: 0.54 - 1.30.
Band 2: 1.3 - 2.8.
Band 3: 2.8 - 6.4.
Band 4: 6.4 - 14.0.
Band 5: 14.0 - 30.0.

TYPE MODULATION: AM.

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

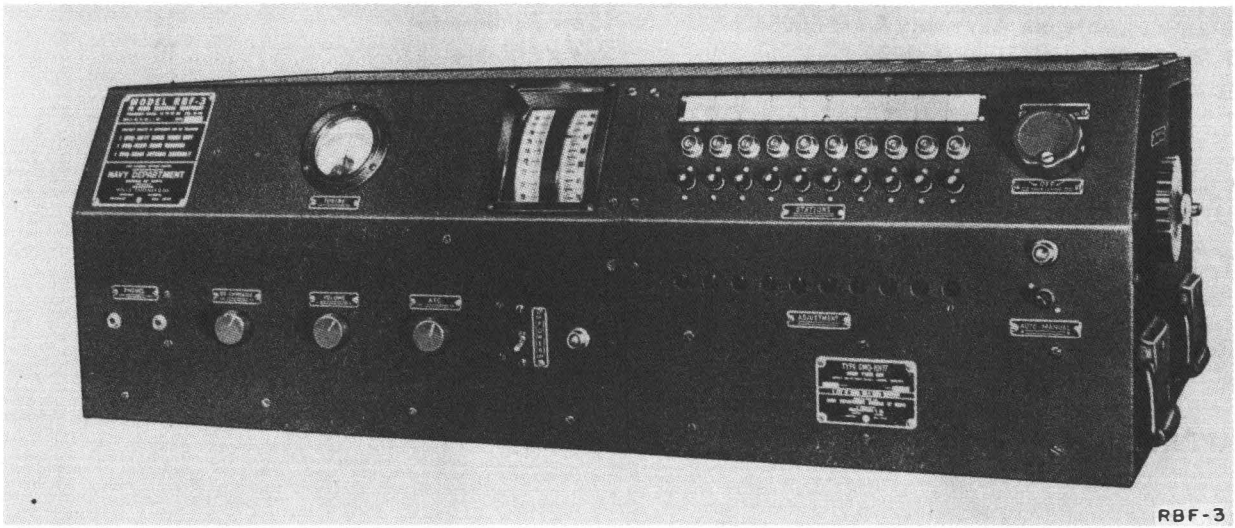
POWER OUTPUT: 12-mw output to headset socket.
2-w output to loudspeaker socket.

POWER REQUIREMENTS: RAO: 50 w, 115 v($\pm$ 10%) 50/62 cyc, 1 phase.
RAO-1: 70 w, 115 v($\pm$ 10%) 50/62 cyc, 1 phase.
Battery operation: 16.8 w, 240 v and 20 w, 6.3 v.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RAO or RAO-1 measures 20-5/16 x 17-9/16 x 13-3/8 inches.

STATUS: Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 4 Apr 52	**AN/FRR- TYPE** SERVICE TYPE NUMBER: RBF-3 RADIO RECEIVING EQUIPMENT



Radio Receiving Equipment RBF-3 is an f-m superheterodyne receiver designed for monitoring signals from as many as 10 sono-radio-buoy transmitting equipments. It is used in harbor defense and underwater sound detection applications.

The receiver has a special tuning unit which provides manual tuning, push-button tuning, or (by means of a motor driven tuning and muting device) continuous automatic tuning of one station after another for 5- second periods.

The receiving equipment is complete and ready for installation except for a headset, required but not supplied.

In an emergency, the receiver can be operated from batteries, using manual tuning only.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 900,225
RBF-3 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 4 Apr 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CWQ-46204	12-7/16 x 39-1/8 x 18-3/16	235
1	Radio Tuner Unit CWQ-10177	Not Available	Not Available
1	Antenna Assembly CWQ-66084	152 x 72 diameter	34
1	Ground Plane A-1202	Not Available	10
1	Antenna Coaxial Cable CASSN-70-1	200 feet long	17
1	Constant Voltage Transformer 30B722	Not Available	55

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Shore.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/TRC-1, -3, -4.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 70 - 90.

TYPE MODULATION: Fm.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: 500 mw into 50 - or 5,000-ohm load.

POWER REQUIREMENTS: 215 w, 95-125 v, 50/60 cyc, 1 phase.
Battery operation: 53 w, 8 v; 45 w, 300 v.

PHYSICAL CHARACTERISTICS

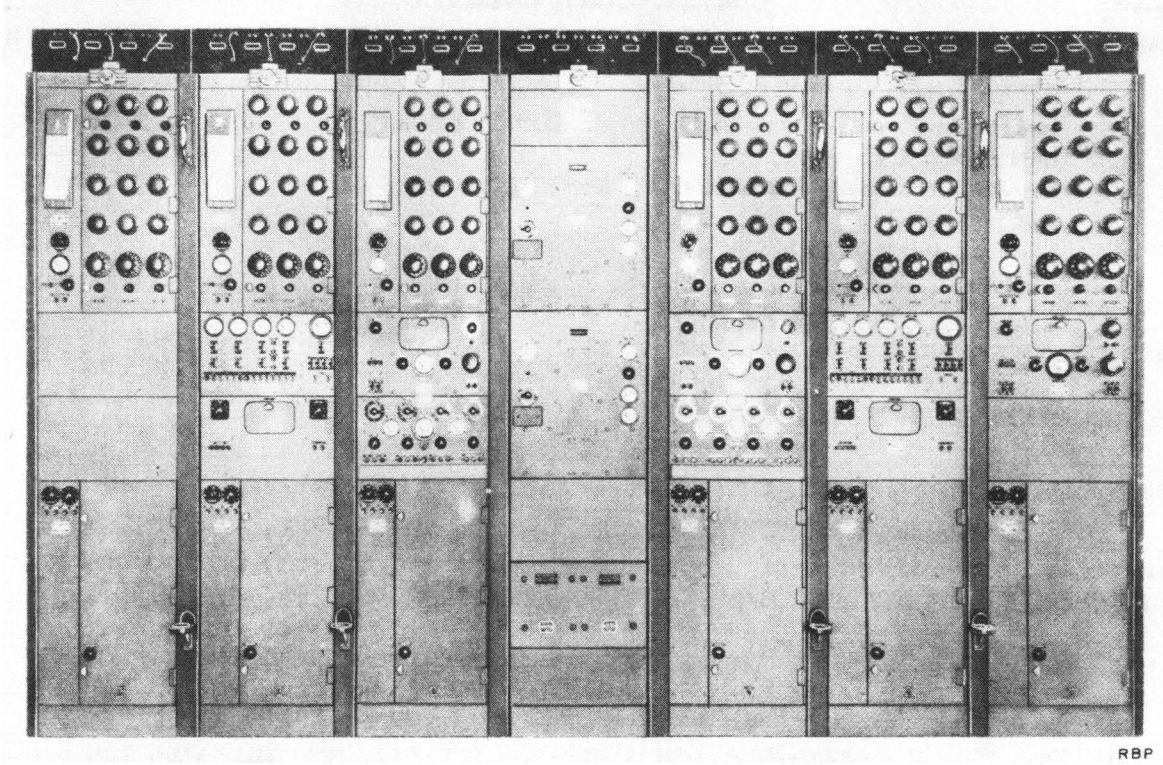
Radio Receiving Equipment RBF-3 measures 12-7/16 x 39-1/8 x 18-3/16 inches, net weight 235 pounds. Packed for domestic shipment: Total weight 880 pounds, total volume 43.49 cu ft, 1.1 ship tons. Shipped in 6 packages.

STATUS: Limited Standard
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: See note below*
DATE OF THIS SHEET: 29 May 52

AN/FRR- TYPE

SERVICE TYPE NUMBER: RBP, RBP-1 and -2

DIVERSITY RADIO RECEIVING EQUIPMENT



RBP

Diversity Radio Receiving Equipments RBP, RBP-1, and RBP-2 are shore-based dual diversity a-m (cw, mcw, and voice) units. Six h-f superheterodyne receivers may be used, either as two three-set units, three two-set units, or six individual units, for diversity reception of long range signals. A typical installation places the antennas for the respective receivers 1,000 feet apart.

The space diversity system is used to counteract the fading characteristics of long range signals.

Each of the six identical receivers covers the 3- to 24-mc range in three bands, is designed for extreme stability, excellent selectivity, and very high gain and includes automatic gain control.

Signal control panels are used for switching, combining, and monitoring signals.

Three-tone keyer units are used and keying speeds up to 500 dot cps are possible.

For best results, fishbones, rhombics, open V, or other antennas which afford good directional characteristics should be used.

Seven antenna panels are available.

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* RBP: Navy, Army.
RBP-1, -2: Navy.

AN/FRR-TYPE

RBP, RBP-1 and -2 :SERVICE TYPE NUMBER
DIVERSITY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,478; 95250
CLASSIFICATION OF EQUIPMENT: Unclassified
USING SERVICE: See note below*
DATE OF THIS SHEET: 29 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
6	RF Amplifier Unit CRV-50096	28 x 19 x 8-1/4	83
6	Intermediate Frequency Amplifier Unit CRV-50097	28 x 19 x 9-1/4	85
2	Signal Control Panel CRV-50099, CRV-50120	10-1/2 x 19 x 5-7/8	17
2	AF Amplifier Unit CRV-50098	10-1/2 x 19 x 10-1/4	32
2	Rectifier Power Unit CRV-20136	21 x 19 x 9-5/8	123

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground, fixed.

APPROXIMATE RANGE (IN MILES): Long.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -21, -25; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7, 19, -20; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -83/SR, -158/FRT, -159/FRT, -171/FR, -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; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 3 - 24, in 3 bands.
Band 1: 3 – 6. Band 2: 6 – 12. Band 3: 12 – 24.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Cw, mcw, voice.

POWER OUTPUT: Telephone: 60 mw into 600 ohms.
Telegraph: 6 db above 1.5 to 12.0 mw with attenuator pad out.

POWER REQUIREMENTS: 813 w, 98 – 125 v, 60 cyc, 1 phase ac.

PHYSICAL CHARACTERISTICS

Diversity Radio Receiving Equipment RBP, RBP-1, or RBP-2 measures 88-5/8 x 142-5/16 x 44-5/16 inches.

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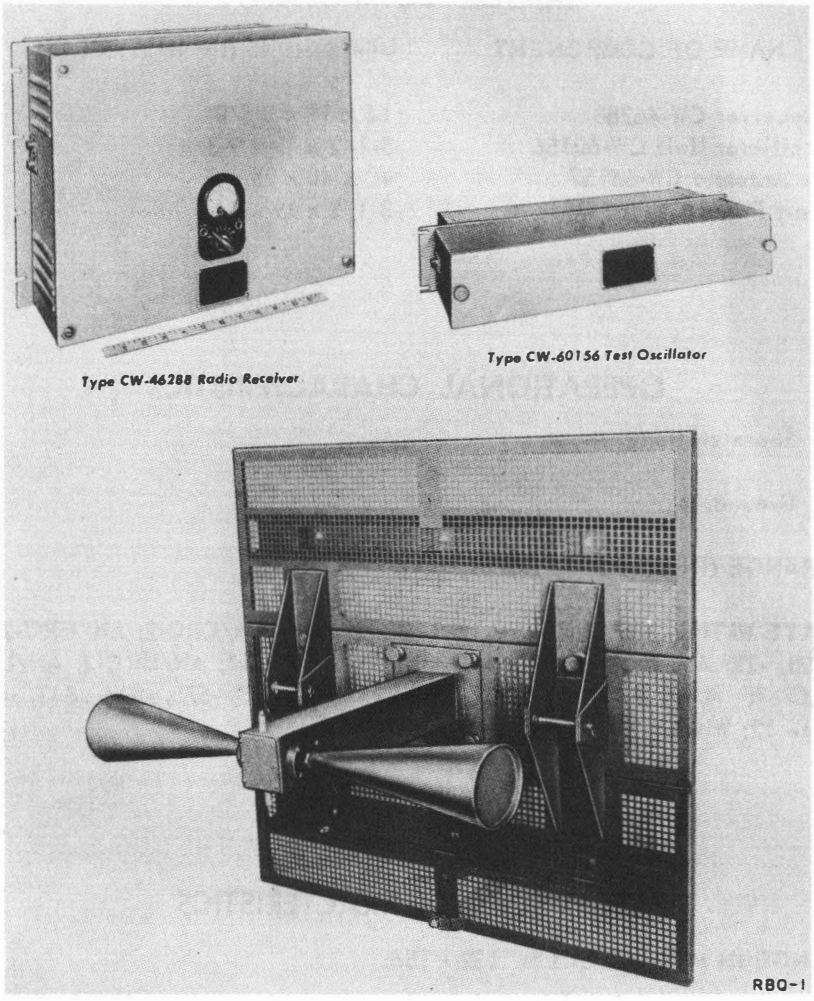
* RBP: Navy, Army.
RBP-1, -2: Navy.

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

AN/FRR-TYPE

SERVICE TYPE NUMBER: RBQ-1

HIGH FREQUENCY RADIO RECEIVING EQUIPMENT



Type CW-46288 Radio Receiver

Type CW-60156 Test Oscillator

RBQ-1

High Frequency Radio Receiving Equipment RBQ-1 is used as the radio receiving terminal of a permanent point-to-point v-h-f radio link system. It provides one crystal-controlled channel within the frequency range 132 to 156 mc. Facilities are provided for local or remote control of the equipment.

It is used for reception of one voice channel, two voice-frequency carrier telephone channels, or multichannel v-f carrier telegraph.

Portable antenna, Navy Type CW-66157, is used for semipermanent installations. For permanent high-tower installations either 9-db antenna, Western Electric Co. Type D-150428, or 3-db antenna, Western Electric Co. Type D-150427, is required but not supplied.

Outdoor cabinet, Navy Type CW-10589, is available, which permits installation of the equipment at the base of the antenna tower or pole.

AN/FRR-TYPE

RBQ-1 :SERVICE TYPE NUMBER

HIGH FREQUENCY RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 900,621
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	Radio Receiver CW-46288	14 x 19 x 9-5/8	Not Available
1	Test Oscillator Unit CW-60156	3-1/2 x 19 x 9-3/4	" "
1	Portable Antenna CW-66157	40 x 40 x 25	65
1	Spare Part Panel CW-10569	3-1/2 x 19 x 5	Not Available

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Shore stations.

INSTALLATION: Ground.

APPROXIMATE RANGE (IN MILES): 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/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 132 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

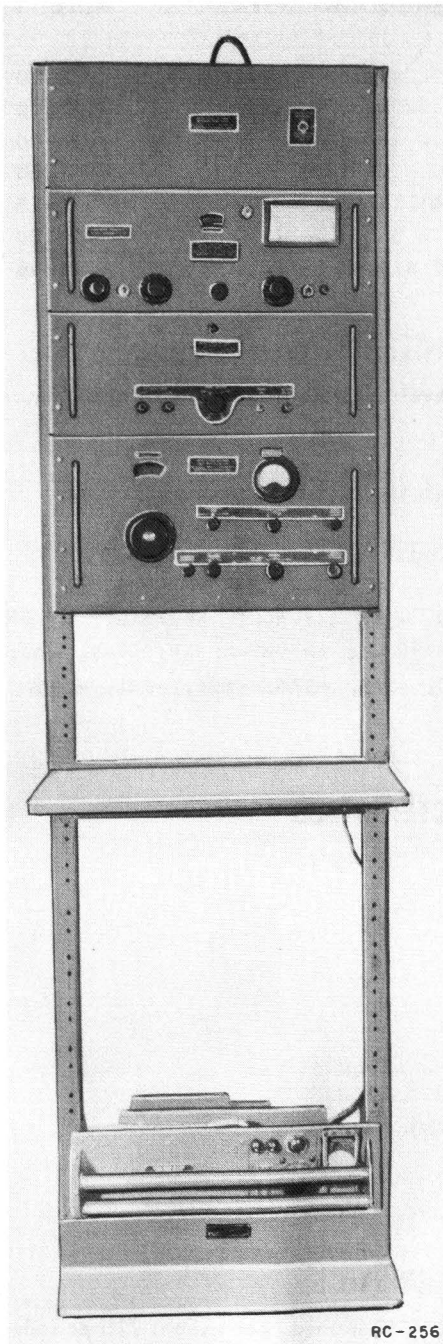
POWER OUTPUT: 30 mw into 600 ohm load.

POWER REQUIREMENTS: 110 w, 110-120 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

High Frequency Radio Receiving Equipment RBQ-1 measures21 x 19 x 9-5/8 inches.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Air Force DATE OF THIS SHEET: 12 May 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RC-256 RADIO RECEIVING EQUIPMENT



RC-256

Radio Receiving Equipment RC-256 is a-m (voice, cw, icw and tone) equipment which operates in the frequency range 100 to 156 mc. It is used with, but not part of, Radio Transmitter RC-257 to form a single-channel radio-link terminal station for point-to-point and air-to-ground communication.

The input impedance matches Radio Frequency Cable RG-11/U coaxial cable for operation with Antenna Equipment RC-81 or RC-81-C.

This receiver provides continuous tuning over its entire frequency range.

A series type noise limiter is built-in for reduction of pulse type interference.

Frequency Meter BC-1420 is supplied for the precise calibration of this equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: TO 16-40RC-256-6-3-4-6
RC-256 :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Air Force
	DATE OF THIS SHEET : 12 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver BC-1421	10-15/32 x 19 x 13-9/16	38.00
1	Rectifier RA-147	8-23/32 x 19 x 6-31/32	26.00
1	Frequency Meter BC-1420	7 x 19 x 11-1/2	35.00
1	Switching Panel PN-56	6-31/32 x 19-1/8	7.50
1	Antenna Equipment RC-81-C	Not Available	6.75
1	Fuse Panel PN-15-B	5 x 19 x 5	24.00
1	Frame FM-39	72 x 20 x 3	121.00

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Normally issued on any organizational level as project material in accordance with AFR 100-17.

INSTALLATION: Ground, fixed designed for mounting in standard 19-inch relay rack.

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/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice, cw, icw and tone.

POWER OUTPUT: 1.2 w into 600 ohm impedance (maximum).

POWER REQUIREMENTS: 100 w, 110-125/220-250 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RC-256 measures 72 x 20 x 13-9/16 inches, net weight 725 pounds, volume 44 cu ft, 1.1 ship tons. Packed for either domestic or export shipment: total weight 948 pounds, total volume 66.53 cu ft, 1.66 ship tons. Shipped in 2 packages.

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

AN/FRR-TYPE

SERVICE TYPE NUMBER: RCO

RADIO RECEIVING EQUIPMENT

Radio Receiving Equipment RCO is a general purpose, crystal-controlled, fixed-tunes, single-channel receiver of modulated telegraph signals, and (more frequently) of voice signals, over the aeronautical v-h-f range.

RCO is often used in multichannel installations where two or more receivers provide two or more receiving channels.

It is supplied with a complete antenna assembly which includes the vertical 1/4-wave adjustable rod, ground plane, and 100-foot transmission line, with connectors.

A special four-pin socket is provided for remote controlled operation of the receiver. One pair of pins are used for the speaker, and the other pair for squelch and r-f gain controls.

A headset, or remote control equipment, and a crystal of the appropriate frequency are required but not supplied with the equipment.

AN/FRR-TYPE	INSTRUCTION LITERATURE: NavShips 900,255
RCO :SERVICE TYPE NUMBER	CLASSIFICATION OF EQUIPMENT: Unclassified
RADIO RECEIVING EQUIPMENT	USING SERVICE : Navy
	DATE OF THIS SHEET : 2 May 52

MAJOR COMPONENTS

QUANT	NAME OF COMPONENT	DIMENSIONS (IN) INSTALLED	WEIGHT (LBS)
1	Radio Receiver CCI-46220	5-1/4 x 19 x 14	28
1	Antenna Assembly CKV-66091	Not Available	18

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Naval air bases, airport control towers, or aeronautical ground stations.

INSTALLATION: Ground, rack mounted.

APPROXIMATE RANGE (IN MILES): 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/URT-7, -10; AN/VRC-1; BC-640; MAW; MBS; RC-257; SCR-522, -542, -573, -575, -624, -641, -643; TDG; TDQ; TDT; ARC Type 12; Wilcox 99A.

TECHNICAL CHARACTERISTICS

FREQUENCY RANGE IN MEGACYCLES: 100 - 156.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Mcw, voice.

POWER OUTPUT: 0.5 w into 600 ohms.

POWER REQUIREMENTS: 75 w, 110-120 v, 50/60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipment RCO measures 5-1/4 x 19 x 14 inches. Packed for export shipment: total weight 140 pounds, total volume 8.5 cu ft. Shipped in 2 packages.

STATUS: Substitute Standard CLASSIFICATION OF EQUIPMENT: Unclassified USING SERVICE: Navy DATE OF THIS SHEET: 2 May 52	**AN/FRR-TYPE** SERVICE TYPE NUMBER: RDE, RDE-1 RADIO RECEIVING EQUIPMENT

RDE

Radio Receiving Equipments RDE and RDE-1 are single channel, fixed-tuned, crystal-controlled general purpose, radiotelephone receivers used for airport control operation and aeronautical ground stations.

A squelch circuit is used to block the receiver when no signals are being received.

Provisions are made for remote control of the receiver, and muting or disabling may also be controlled remotely over the transmitter press-to-talk circuit.

Four frequency bands are selected by plug-in coil sets.

Either a high-impedance antenna of 50 uuf or more, or a low-impedance 100- or 400-ohm line may be used.

AN/FRR-TYPE

RDE, RDE-1 :SERVICE TYPE NUMBER

RADIO RECEIVING EQUIPMENT

INSTRUCTION LITERATURE: NavShips 95257
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	Radio Receiver CCI-46219	3-1/2 x 19 x 13	31
1	Coil Set CCI-47363	5-1/8 x 1-7/16 x 4-5/16	Not Available
1	Coil Set CCI-47364	5-1/8 x 1-7/16 x 4-5/16	" "
1	Coil Set CCI-47365	5-1/8 x 1-7/16 x 4-5/16	" "
1	Coil Set CCI-47366	5-1/8 x 1-7/16 x 4-5/16	" "

OPERATIONAL CHARACTERISTICS

TACTICAL USE: Airport control towers or aeronautical ground stations.

INSTALLATION: Ground, rack-mounted.

APPROXIMATE RANGE (IN MILES): Medium.

CAN COMMUNICATE WITH: AN/ARC-2, -5, -8, -9, -21, -25, -26; AN/ART-13; AN/CRT-3; AN/FRC-10; AN/FRT-5, -6, -15, -17, -18; AN/GRC-9, -13, -26; AN/MRC-2, -6, -16, -20, -22; AN/PRC-7; AN/SRT-4; AN/TRQ-1; AN/URT-2, -3, -4; AN/VRC-1, -4; BC-191, -339, -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, -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; TBW; TBX; TCB; TCC; TCE; TCH; TCK; TCP; TCS; TCZ; TDE; TDF; TDH; 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: 2.0 - 8.0 in four bands.

Band 1: 2.0 - 2.8
Band 2: 2.8 - 4.0
Band 3: 4.0 - 5.5
Band 4: 5.5 - 8.0.

TYPE MODULATION: Am.

TYPE OF SIGNAL: Voice.

POWER OUTPUT: 0.5 w into 600 ohm load.

POWER REQUIREMENTS: 60 va, 110-115 v, 60 cyc, 1 phase, ac.

PHYSICAL CHARACTERISTICS

Radio Receiving Equipments RDE, RDE-1 measure 3-1/2 x 19 x 13 inches.