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OTTAWA, CANADA

MAMARONECK, N. Y.

THE TECHNICAL MATERIEL CORPORATION



(AN URT-19(A))

MODEL SBT-1K(F)

GENERAL PURPOSE TRANSMITTER

for

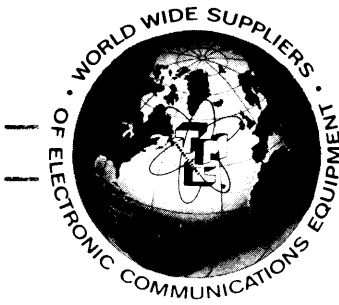
TECHNICAL MANUAL

TO

APPENDIX

NOTICE

THE CONTENTS AND INFORMATION CONTAINED IN THIS INSTRUCTION MANUAL IS PROPRIETARY TO THE TECHNICAL MATERIEL CORPORATION TO BE USED AS A GUIDE TO THE OPERATION AND MAINTENANCE OF THE EQUIPMENT FOR WHICH THE MANUAL IS ISSUED AND MAY NOT BE DUPLICATED EITHER IN WHOLE OR IN PART BY ANY MEANS WHATSOEVER WITHOUT THE WRITTEN CONSENT OF THE TECHNICAL MATERIEL CORPORATION.



THE TECHNICAL MATERIEL CORPORATION

C O M M U N I C A T I O N S E N G I N E E R S

700 FENIMORE ROAD

MAMARONECK, N. Y.

W a r r a n t y

The Technical Materiel Corporation, hereinafter referred to as TMC, warrants the equipment (except electron tubes*, fuses, lamps, batteries and articles made of glass or other fragile or other expendable materials) purchased hereunder to be free from defect in materials and workmanship under normal use and service, when used for the purposes for which the same is designed, for a period of one year from the date of delivery F.O.B. factory. TMC further warrants that the equipment will perform in a manner equal to or better than published technical specifications as amended by any additions or corrections thereto accompanying the formal equipment offer.

TMC will replace or repair any such defective items, F.O.B. factory, which may fail within the stated warranty period, PROVIDED:

1. That any claim of defect under this warranty is made within sixty (60) days after discovery thereof and that inspection by TMC, if required, indicates the validity of such claim to TMC's satisfaction.
2. That the defect is not the result of damage incurred in shipment from or to the factory.
3. That the equipment has not been altered in any way either as to design or use whether by replacement parts not supplied or approved by TMC, or otherwise.
4. That any equipment or accessories furnished but not manufactured by TMC, or not of TMC design shall be subject only to such adjustments as TMC may obtain from the supplier thereof.

Electron tubes* furnished by TMC, but manufactured by others, bear only the warranty given by such other manufacturers. Electron tube warranty claims should be made directly to the manufacturer of such tubes.

TMC's obligation under this warranty is limited to the repair or replacement of defective parts with the exceptions noted above.

At TMC's option any defective part or equipment which fails within the warranty period shall be returned to TMC's factory for inspection, properly packed with shipping charges prepaid. No parts or equipment shall be returned to TMC, unless a return authorization is issued by TMC.

No warranties, express or implied, other than those specifically set forth herein shall be applicable to any equipment manufactured or furnished by TMC and the foregoing warranty shall constitute the Buyers sole right and remedy. In no event does TMC assume any liability for consequential damages, or for loss, damage or expense directly or indirectly arising from the use of TMC Products, or any inability to use them either separately or in combination with other equipment or materials or from any other cause.

*Electron tubes also include semi-conductor devices.

PROCEDURE FOR RETURN OF MATERIAL OR EQUIPMENT

Should it be necessary to return equipment or material for repair or replacement, whether within warranty or otherwise, a return authorization must be obtained from TMC prior to shipment. The request for return authorization should include the following information:

1. Model Number of Equipment.
2. Serial Number of Equipment.
3. TMC Part Number.
4. Nature of defect or cause of failure.
5. The contract or purchase order under which equipment was delivered.

PROCEDURE FOR ORDERING REPLACEMENT PARTS

When ordering replacement parts, the following information must be included in the order as applicable:

1. Quantity Required.
2. TMC Part Number.
3. Equipment in which used by TMC or Military Model Number.
4. Brief Description of the Item.
5. The *Crystal Frequency* if the order includes crystals.

PROCEDURE IN THE EVENT OF DAMAGE INCURRED IN SHIPMENT

TMC's Warranty specifically excludes damage incurred in shipment to or from the factory. In the event equipment is received in damaged condition, the carrier should be notified immediately. Claims for such damage should be filed with the carrier involved and not with TMC.

All correspondence pertaining to Warranty Claims, return, repair, or replacement and all material or equipment returned for repair or replacement, within Warranty or otherwise, should be addressed as follows:

THE TECHNICAL MATERIEL CORPORATION
Engineering Services Department
700 Fenimore Road
Mamaroneck, New York

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APPENDIX

RACKS AND ACCESSORIES

1. INTRODUCTION

This appendix contains technical information pertaining to the equipment racks and accessory units used in the SBT-1K(F) transmitter.

The units covered in this appendix are:

- a. Electrical Equipment Cabinet RAK-11B1 and RAK -17B1
- b. Auxiliary Power Panel APP-4
- c. RF Output Assembly AX -198

2. DESCRIPTION OF EQUIPMENT

a. ELECTRICAL EQUIPMENT CABINET RAK-11B1 AND RAK-17B1.

Electrical Equipment Cabinets RAK-11B1 and RAK-17B1 are standard relay-type racks that provide an enclosure for the modular units constituting the SBT-1K(F). Cable access openings with removable cover plates are located on both sides, bottom and rear of the racks.

RAK-11B1-B and RAK-17B1-B are base-mounted racks; the racks are bolted to the bases which in turn rest on the floor.

RAK-11B1-S and RAK-17B1-S are shock-mounted racks which are mounted to the structure with six shock mounts, four at the bottom and two at the top.

RAK-11B1 is equipped with tilt-lock drawer slides for mounting Sideband Exciter CBE, Frequency Amplifier CHG, Controlled Master Oscillator CMO, Controlled Oscillator CLL, Divider Chain CHL, Frequency Standard CSS, and Power Supply CPP-5. Non-tilt slide mechanisms are provided in the rack for mounting Power Supply CPP-2.

RAK-17B1 is equipped with tilt-lock drawer slides for mounting Amplifier RFD, Tone Intelligence Unit TIS, and LV Power Supply PS-4A. Auxiliary Power Panel APP-4 is installed in the rack prior to shipment; provisions are made in the rack for installation of Monitor Control Unit MCU-2 and HV Power Supply PS-5.

RAK-11B1 and RAK-17B1 contain forced-air cooling systems consisting of intake fans and air filters on the rear doors of the cabinets, and filtered air exhausts at the top of the cabinets.

Refer to Sections 1 and 2 of the SBT-1K(F) system manual for further information concerning RAK-11B1 and RAK-17B1.

b. AUXILIARY POWER PANEL APP-4. - Auxiliary Power Panel APP-4 distributes line voltage to various SBT-1K(F) modular units and facilitates connection of external equipment. Two individually fused utility outlets provide 115- or 230- vac (depending upon input power source) for external test equipment. Two terminal blocks (E501 and E502) are provided for connection of external equipment intended to function with the SBT-1K(F).

Refer to Sections 1 and 2 of the SBT-1K(F) systems manual for further information concerning the APP-4.

c. RF OUTPUT ASSEMBLY AX-198. - RF Output Assembly AX-198, containing control relay K602 and antenna relay K601, permits use of the SBT-1K(F) in a transmitter/receiver antenna system (refer to Section 4 of SBT-1K(F) system manual).

3. INSTALLATION OF APP-4, AX-198, RAK-11B1 AND RAK-17B1

The APP-4 and AX-198 units are mounted in RAK-17B1 prior to shipment. Ensure that the APP-4 and AX-198 have not become loose during transit; secure units as required. Refer to Section 2 of the SBT-1K(F) system manual for information concerning the installation of RAK-11B1, RAK-17B1, and all other modular units.

4. PARTS LISTS

Reference designations have been assigned to identify all maintenance parts of the equipment. These designations are used for marking the equipment (adjacent to the part they identify) and are included on drawings, diagrams, and in the parts lists. Parts lists for RAK-11B1, RAK-17B1, APP-4, and AX-198 are given in tables 1, 2, 3, and 4, respectively. The TMC part number given in these tables is the number by which the part may be ordered.

5. SCHEMATIC DIAGRAMS

Schematic diagrams for the APP-4 and the AX-198 are given in figures 1 and 2, respectively.

TABLE 1. PARTS LIST, RAK-11B1

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
B901	FAN, VENTILATING, PROPELLER: 115 volts, 50/60 cps; 14 watts; 100 cfm; blade diameter, 4-12 inches; overall dim. 4-11/16 x 4-11/16 x 1-1/2 inches.	Rack Cooling	BL-106-2
B902	Same as B901.	Rack Cooling	
E901	TERMINAL BOARD: barrier type; 4 double screw terminals; 6-32 thd, phenolic body.	Blower Interconnect	TM-102-4
J901	CONNECTOR, RECEPTACLE, ELECTRICAL: RF type; 1 round female contact; straight type; series BNC to BNC.	Connect Attenuator Assy	UG-625/U
J902	Same as J901.	Connect Attenuator Assy	
J903	CONNECTOR, RECEPTACLE, ELECTRICAL: 2 half round female contacts; twist lock type; supplied with mounting brackets and hardware.	p/o AC Power Strip	JJ-170
J904	Same as J903.	p/o AC Power Strip	
J905	Same as J903.	p/o AC Power Strip	
J906	Same as J903.	p/o AC Power Strip	
J907	Same as J903.	p/o AC Power Strip	
J908	Same as J903.	p/o AC Power Strip	

TABLE 1. PARTS LIST, RAK-11B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
J909	CONNECTOR, RECEPTACLE, ELECTRICAL: 3 flat male contacts; locking type, polarized; rated at 20 amps 250 volts AC/DC; 10 amps 575 volts.	AC Power	PL-133-NG
J910	CONNECTOR, RECEPTACLE, ELECTRICAL: 2 half round male contacts, locking type; straight type. LOOSE ITEM		JJ-100
MP901	FILTER, AIR CONDITIONING: replaceable type; filtering medium, steel mesh; steel frame; capacity 640 cfm; o/a dim. 10-1/8 x 9-7/8 x 1/2 inches.	Air Filter	AD-103-9
MP902	FILTER, AIR CONDITIONING: replaceable type; filtering medium, steel mesh; steel frame; capacity 640 cfm; o/a dim. 16-7/8 x 7-5/8 x 1/2 inches.	Air Filter	AD-103-5
P901	CONNECTOR, PLUG, ELEC- TRICAL: RF type; 1 male contact; straight type.	p/o CA-590	PL-169
P902	Same as P901.	p/o CA-590	
P903	Same as P901.	p/o CA-590	
P904	Same as P901.	p/o CA-590	
P905	Same as P901.	p/o CA-590	

TABLE 1. PARTS LIST, RAK-11B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
P906	Same as P901.	p/o CA-590	
P907	Same as P901.	p/o CA-590	
P908	Same as P901.	p/o CA-590	
P909	Same as P901.	p/o CA-590	
P910	Same as P901.	p/o CA-590	
P911	Same as P901.	p/o CA-590	
P912	Same as P901.	p/o CA-590	
P913	Same as P901.	p/o CA-590	
P914	Same as P901.	p/o CA-590	
P915	Same as P901.	p/o CA-590	
P916	Same as P901.	p/o CA-590	
P917	Same as P901.	p/o CA-590	
P918	Same as P901.	p/o CA-590	
P919	Same as P901.	p/o CA-590	
P920	Same as P901.	p/o CA-590	
P921	Same as P901.	p/o CA-590	
P922	Same as P901.	p/o CA-590	
P923	Same as P901.	p/o CA-590	
P924	Same as P901.	p/o CA-590	

TABLE 1. PARTS LIST, RAK-11B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
P925	CONNECTOR, PLUG, ELECTRICAL: 16 female contacts; 14 #16 contacts; 2 #10 contacts right angle type.	p/o CA-576	PL-186
P926	CONNECTOR, PLUG, ELECTRICAL: 14 #16 round male contacts; straight type.	p/o CA-576	MS3106B20-27P
P927	Same as P925.	p/o CA-551-1	
P928	CONNECTOR, PLUG, ELECTRICAL: 16 male contacts; 14 #16 contacts, 2 #10 contacts; right angle type.	p/o CA-551-3	PL-187
P929	Same as P925.	p/o CA-551-2	
P930	Same as P928.	p/o CA-551-2	
P931	Same as P925.	p/o CA-551-1	
P932	Same as P928.	p/o CA-551-1	
P933	CONNECTOR, PLUG, ELECTRICAL: twist lock type; 2 straight male contacts.	p/o CA-575-2	PL-171
P934	CONNECTOR, PLUG, ELECTRICAL: twist lock type; 3 half round female contacts; straight type. LOOSE ITEM		PL-134-NG
R901	RESISTOR, FIXED, COMPOSITION: 33 ohms, $\pm 10\%$; 2 watt.	Balance Network	RC42GF330K
R902	Same as R901.	Balance Network	

TABLE 1. PARTS LIST, RAK-11B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
R903	RESISTOR, FIXED, COMPOSITION: 47 ohms, $\pm 10\%$; 2 watt	Balance Network	RC42GF470K
W901	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, various color 7 feet 3 inches of insulated MIL type MWC wire; two connectors symbol no's. P931, P932.	CPP-2 to CHL Interconnect	CA-551-1
W902	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, various color 8 feet of insulated MIL type MWC wire; two connectors symbol no's. P929, P930.	CPP-2 to CLL Interconnect	CA-551-2
W903	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of various color 9 feet of insulated MIL type MWC wire; two connectors symbol no's. P927, P928.	CPP-2 to CMO Interconnect	CA-551-3
W904	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, various color 8 feet 5 inches insulated stranded MIL type MWC wire; 2 connectors symbol no's. P925, P926.	CPP-5 to CHG Interconnect	CA-576-8-5
W905	CABLE ASSEMBLY, POWER, ELECTRICAL: 1 foot retracted length; 2, size 18 AWG insulated cable; 1 connector symbol no. P933, 2 terminal lugs.	AC to Blower	CA-575-2

TABLE 2. PARTS LIST, RAK-17B1

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
B601	FAN, AXIAL: 115 v, 50/60 cps; single phase; nominal RPM 1650; running capacitor 2 uf; full load watts 35; 450 CFM at 60 cps; 8 inch dia. blade with fan guard.	Rack Cooling	BL-101
C613	CAPACITOR, FIXED, PAPER DIELECTRIC: 2 uf, $\pm 10\%$; 600 vdcw.	Phase Shift	CP53B1FF205K
CP609	ADAPTER, CONNECTOR: RF type; 1 female and 1 male contact; right angle; series HN to HN.	CU-2 Mtg.	UG-212C/U
CP610	Same as CP609.		
CP612	ADAPTER, CONNECTOR: RF type; 2 round male contacts, 1 each end; straight type, series HN to UHF.	CU-2 Mtg.	SA-103
CP613	Same as CP612.	CU-2 Mtg.	
E601	TERMINAL BOARD: barrier type; 2 double screw terminals, 6-32 thd; phenolic body.	Blower Interconnect	TM-102-2
E604	TERMINAL BOARD: fanning type; 11 angle type terminals, left end feed.	Part of W619	TM-105-11AL
E607	TERMINAL BOARD: fanning type; 14 angle type terminals, right end feed.	Part of W620	TM-105-14AR

TABLE 2. PARTS LIST, RAK-17B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
J601	CONNECTOR, RECEPTACLE, ELECTRICAL: twist lock type; 3 half round male contacts; straight type.	AC Input	JJ-194-NG
J602	CONNECTOR, RECEPTACLE, ELECTRICAL: twist lock type; 2 half round male contacts; straight type.	Utility AC Input	JJ-100
J603	CONNECTOR, RECEPTACLE, ELECTRICAL: 4 round #16 female contacts; straight type.	Blower Connect	MS3102A14S-2S
J604	CONNECTOR, RECEPTACLE, ELECTRICAL: 1 round #12 female contact; straight type.	Part of W617	MS3102A18-16S
J605	CONNECTOR, RECEPTACLE, ELECTRICAL: 35 round female contacts; 28 #16 contacts, 7 #12 contacts; straight type.	Part of W616	MS3102A32-7S
J612	CONNECTOR, RECEPTACLE, ELECTRICAL: twist lock type; 2 half round straight female contacts; supplied with mounting brackets and hardware.	Part of AC Power Strip	JJ-170
J613	Same as J612.	Part of AC Power Strip	
MP601	FILTER, AIR CONDITIONING: replaceable type; filtering medium, steel mesh; steel frame; capacity 640 CFM; overall dimensions 10-1/8 x 9-7/8 x 1/2 inch.	Air Filter	AD-103-9

TABLE 2. PARTS LIST, RAK-17B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
MP602	FILTER,AIR CONDITIONING: replaceable type; filtering medium, steel mesh; steel frame; capacity 640 CFM; overall dimensions 16-7/8 x 7-5/8 x 1/2 inch.	Air Filter	AD-103-5
P601	CONNECTOR, PLUG, ELEC- TRICAL: twist lock type; 3 half round female contacts; straight type.	Part of W611	PI-134-NG
P603	CONNECTOR, PLUG, ELEC- TRICAL: 4 round #16 male contacts; angle type.	Blower Connect	MS3108A14S-2P
P606	CONNECTOR, PLUG ELEC- TRICAL: 1 #33 male contact; straight type. Supplied as a loose item		PL-150
P607	CONNECTOR, PLUG, ELEC- TRICAL: 14 #16 female con- tacts; straight type.	Part of W619	MS3106B20-27S
P609	CONNECTOR, PLUG, ELEC- TRICAL: 22 round male con- tacts; 18 #16 contacts, 4 #12 contacts; straight type.	Part of W620	MS3106B28-11P
P611	CONNECTOR, PLUG, ELEC- TRICAL: RF type; 1 round male coaxial contact; straight type; series BNC to BNC.	Part of W618	UG-260/U

TABLE 2. PARTS LIST, RAK-17B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
P612	CONNECTOR, PLUG, ELECTRICAL: RF type; 1 round male coaxial contact; straight type; teflon dielectric.	Part of W618	PL-259A/TEF
P614	CONNECTOR, PLUG, ELECTRICAL: 35 round male contacts; 28 #16 contacts, 7 #12 contacts; straight type.	Part of W614	MS3106B32-7P
P615	CONNECTOR, PLUG, ELECTRICAL: 1 round #12 male contact; straight type.	Part of W617	MS3106B18-16P
P620	CONNECTOR, PLUG, ELECTRICAL: twist lock type; 3 half round female contacts; straight type. Supplied as a loose item.		PL-190-NG
P624	CONNECTOR, PLUG, ELECTRICAL: RF type; 1 round male coaxial contact; straight type; series BNC to BNC. Supplied as a loose item.		UG-260/U
P626	CONNECTOR, PLUG, ELECTRICAL: 14 round #16 male contacts; straight type.	Part of W620	MS3106B20-27P
P627	CONNECTOR, PLUG, ELECTRICAL: twist lock type; 2 half round female contacts straight type w/cable clamp. Supplied as a loose item.		PL-100
P635	CONNECTOR, PLUG, ELECTRICAL: RF type; 1 male contact; straight type.	Part of W629	PL-169

TABLE 2. PARTS LIST, RAK-17B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
P636	Same as P635.	Part of W629	
S601	SWITCH, PUSH-PULL: SPDT; 15 amps at 120/250 VAC; .2 amps at 250 VDC.	Interlock	SW-230
S602	Same as S601.	Interlock	
W611	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, 1 connector symbol P601, 59 inches of HWC14(19)UO, 53 inches of HWC10(37)U90, 51 inches of HWC10(37)U9 insulated cable and 3 terminal lugs.	AC; PS-4 to APP-4	CA-509
W612	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, 31 inches of HWC14(19)UO, 30 inches of HWC10(37)U90, 27 inches of HWC10(37)U9 insulated cable; 1 connector symbol J601 and 3 terminal lugs.	AC; APP-4 to AC Jack	CA-493
W616	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, 86 inches of high voltage wire and 2 connectors symbol numbers J605, P614.	RFD to PS-4	CA-593
W617	CABLE ASSEMBLY, POWER, ELECTRICAL: consists of, 66 inches of various color MWC wire and 2 connectors symbol numbers J604, P615.	RFD to PS-5	CA-594

TABLE 2. PARTS LIST, RAK-17B1 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
W618	CABLE ASSEMBLY, RADIO FREQUENCY: consists of 10 feet of RF cable and 2 connectors, symbol numbers P611, P612.	RFD to Output	CA-383-10F
W619	CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL BRANCHED: consists of, various lengths and colors of MIL type MWC, HWC cable; 1 connector symbol number P607, and 1 terminal board symbol number E604.	Main Cable	CA-595
W620	CABLE ASSEMBLY, SPECIAL PURPOSE, ELECTRICAL BRANCHED: consists of, various lengths and colors of MIL type MWC cable; 2 connectors symbol numbers P609, P626, and 1 terminal board symbol E607.	APP-4 to TIS to Output	CA-596
W629	CABLE ASSEMBLY, RADIO FREQUENCY: consists of 80 inches of RF cable RG-174/U; 2 connectors symbol numbers P635, P636.	ALDC	CA-480-3-80

TABLE 3. PARTS LIST, APP-4

REF SYM	DESCRIPTION	FUNCTION	TMC PART NO.
C501	CAPACITOR, feed-thru type: 1000 uuf, +20%, 500 wvdc, char. A.	RF Bypass	CK70A102M
C502	Same as C501.	RF Bypass	
thru C520	Same as C501.	RF Bypass	
C521	CAPACITOR, fixed: mica; .01 uf, +10%, char. B 300 wvdc.	Filter	CM35B103K
C522	Same as C521.	Filter	
C523	Same as C521.	Filter	
C524	Same as C521.	Filter	
CB501	CIRCUIT BREAKER, dual, companion trip; 15 amp, curve 5, 230 VAC operation	Main Power	SW-261
E501	TERMINAL, strip: barrier lug type; 16 terminals; base material black bakelite.	Terminal Board	TM-100-16
E502	Same as E501.	Terminal Board	
F501	FUSE, cartridge: hi-rating 250 v, 15 amps.	Utility Outlet	FU-103-15
F502	Same as F501.	Utility Outlet	
I501	LAMP, incandescent: double contact; 120 volts, 3 watts; bayonet base	Main Power Indicator	BI-102-3

TABLE 3. PARTS LIST, APP-4 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
J501	CONNECTOR, receptacle: AN socket; 22 contacts.	Power Connector	MS3102A-28-11S
J502	PLUG, receptacle: U-shape grounding type - 3 prongs.	Utility Outlet	JJ-173
J503	Same as J502.	Utility Outlet	
L501	COIL, R. F.: fixed; 2.5 mh.	RF Choke	CL-140-2
L502 thru L520	Same as L501. Same as L501.	RF Choke	
L521	COIL, 2 uf, \pm .1 uh Q-200 at 7.9 mc.	Filter Choke	CL-269
L522	Same as L521.	Filter Choke	
R501	SHUNT ASSY., .0042 ohms, +5% -1%; 20 amps at 115 VAC.	Shunt Input	AR-132
R502	Same as R501.	Shunt Input	
R503	SHUNT ASSY., .075 ohms, \pm 10%, 5 amps at 115 VAC.	Shunt Input	AR-133
R504	Same as R503.	Shunt Input	
R505	RESISTOR, fixed: wire wound; 5000 ohms, \pm 5%, 10 watts.	Shunt	RW-109-32
XF501	FUSE, extractor post: end terminal is removable.	F501 Socket	FH-100-1
XF502	Same as XF501.	F502 Socket	
XI501	LIGHT, INDICATOR: bayonet base; w/red frosted lamp.	I501 Socket	TS-124-1

TABLE 4. PARTS LIST, AX-198

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
C601	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 10,000 uuf; GMV; 500 vdcw.	Bypass	CC-100-16
C602 thru C612	Same as C601.	Bypass	
CP601	ADAPTER, CONNECTOR: rf type; 1 male and 1 female contact; angle type; series UHF to UHF.	Receiver Input Adapter	UG-646/U
CP602	Same as CP601.	Receiver Input Adapter	
CP603	Same as CP601.	Antenna Adapter	
CP604	Same as CP601.	Transmitter Output Adapter	
CP605	Same as CP601.	Antenna Adapter	
CP606	ADAPTER, CONNECTOR: rf type; 2 round male contacts; straight type UHF to UHF.	Transmitter Output Adapter	SA-104
CP607	Same as CP606.	Relay Adapter	
E601	See table 1.		
E602	CONTACT, ELECTRICAL: beryllium copper silver plated; spring loaded 3/4 x 1-1/8 x 3/4 over all.	Transmitter Output	AX-154

TABLE 4. PARTS LIST, AX-198 (CONT)

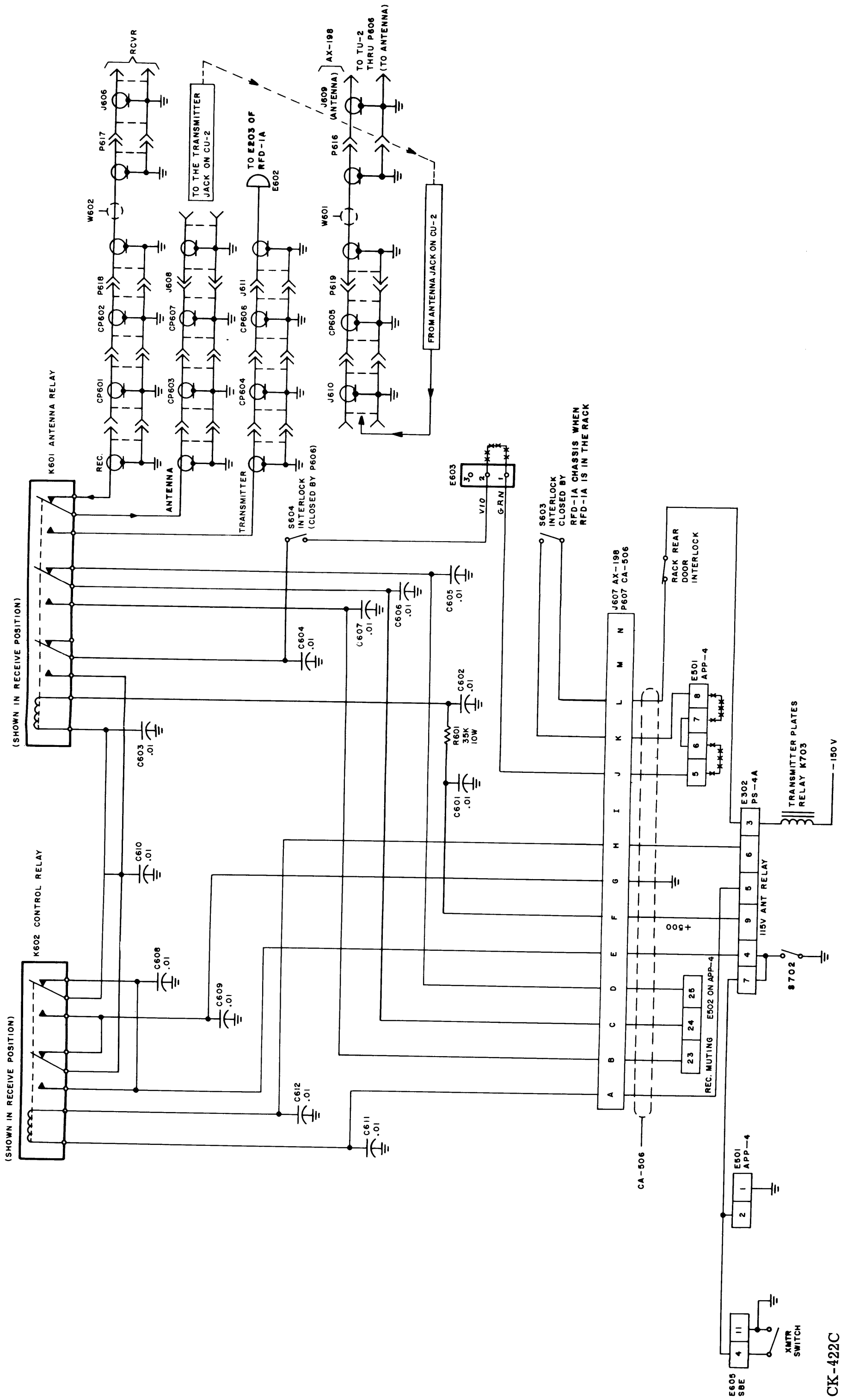
REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
E603	TERMINAL BOARD: barrier type; three single screw terminals and feed thru solder lugs 8-32thd; phenolic body.	Interlock Jumper	TM-100-3
J606	ADAPTER, CONNECTOR: rf type; 2 round female contact; straight type; series BNC to BNC.	Receiver Input	UG-492A/U
J607	CONNECTOR, RECEPTACLE, ELECTRICAL: 14 No. 16 round male contacts; straight type.	Power Input	MS3102A-20-27P
J608	ADAPTER, CONNECTOR: rf type, two round female contacts; straight type series UHF to UHF	Coupler	UG-307/U
J609	ADAPTER, CONNECTOR: rf type, 1 round female contact each end; straight type; series QDS to UHF.	Antenna	JJ-147
J610	Same as J608.	Coupler Jack	
J611	CONNECTOR, RECEPTACLE, ELECTRICAL: rf type; 1 round female contact; straight type; series UHF to UHF.	Transmitter Jack	JJ-195
K601	RELAY, SOLENOID: coaxial type; coil rating, 220 vdc at 2 watts; auxiliary contacts, DPDT; transmit-receive contact, 1 KW power rating to 400 mc; c/o three 50 ohm UHF connectors.	Antenna Relay	RL-139-4-220DC

TABLE 4. PARTS LIST, AX-198 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
K602	RELAY, ARMATURE: 10,000 ohm coil resistance; 115 VAC; contacts rated at 5 amps 115 V non-inductive.	Control Relay	RL-116-AC-2C-115
P605	See table 1.		
P606	See table 1.		
P608	See table 1.		
P613	CONNECTOR, PLUG, ELECTRICAL: rf type; 1 round male coaxial contact; straight type; teflon dielectric.	P/O W601	PL-259-A/TEF
P617	CONNECTOR, PLUG, ELECTRICAL: rf type; 1 round male coaxial contact; straight type; series BNC to BNC.	P/O W602	UG-260/U
P618	Same as P616.	P/O W602	
P619	Same as P616.	P/O W601	
R601	RESISTOR, FIXED, WIRE-WOUND: 35,000 ohms; +5%; 10 watts with solder lug type terminals.	Dropping Resistor	RW-109-40
S603	SWITCH, PUSH-PULL: SPDT; 15 amps at 120, 250 VAC; .2 amps at 250 vdc.	Interlock Switch	SW-230
S604	SWITCH, SENSITIVE: SPDT; operating force 6 to 14 oz. release force, 4 oz. min.; 10 amps at 125/250 vac; 1/2 amp at 125 vdc.	Interlock Switch	SW-189

TABLE 4. PARTS LIST, AX-198 (CONT)

REF. SYM.	DESCRIPTION	FUNCTION	TMC PART NO.
W601	CABLE ASSEMBLY, RF: consists of 5-1/4 inch of RG-8/U cable and connectors P616 and P619.	Interconnect Cable, Coupler Output Jack to Antenna Input Jack	CA-512-1-5.25
W602	CABLE ASSEMBLY, RF; consists of 11-1/4 inch of RG-59/U and connectors P617 and P618	Interconnect Cable, Relay to Receiver Input	CA-383-11.25C



CK-422C
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FIGURE 2. SCHEMATIC DIAGRAM, AX-198