

CG-273-74



VOLUME 2

1715

TECHNICAL MANUAL

*for*

LORAN  
TRANSMITTING SET  
AN/FPN-42

SECTION 7

→ PARTS LIST

SPERRY GYROSCOPE COMPANY  
DIVISION OF SPERRY RAND CORPORATION  
GREAT NECK, NEW YORK

TREASURY DEPARTMENT  
U. S. COAST GUARD



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## SECTION 7

## PARTS LIST

## 7-1. INTRODUCTION.

Reference designations (previously referred to as circuit symbols, reference symbols, etc.) have been assigned to identify all maintenance parts of the equipment. They are used for marking the equipment (adjacent to the parts they identify) and are included on drawings, diagrams and the parts list. The initial letters of a reference designation indicate the kind of part (generic group), such as resistor, amplifier, electron tube, etc. The end number differentiates between parts of the generic group. The alpha-numeric in parenthesis designates the specific unit within the equipment: R(2A2)005 thus designates resistor 005 in unit 2A2. Sockets associated with a particular plug-in device, such as an electron tube or a fuse, are identified by a reference designation which includes the reference designation of the plug-in device. For example, the socket for fuse F7 is designated XF7.

## 7-2. LIST OF MAJOR UNITS.

Table 7-1 is arranged by the groups of reference designations that apply to a major unit. Thus when the reference designation of a part is known, this table will furnish ready reference to the major unit in which it is used. The table also gives the following information for each major unit (1) its colloquial name (see column 5), official nomenclature (see columns 3 and 4); (2) quantity in one equipment; (3) location of its parts in table 7-2.

## 7-3. MAINTENANCE PARTS LIST.

Table 7-2 lists all major units and their maintenance parts. The parts of each major unit are grouped together. Column 1 lists the reference designations of the various parts in alpha-numerical order. Column 2 gives the name and describes each part. Column 3 gives the functional location of each electrical part in the equipment.

## 7-4. LIST OF MANUFACTURERS.

Table 7-3 lists manufacturers of parts used in the equipment. The first column includes the federal vendors' codes used in table 7-2 to identify manufacturers.

TABLE 7-1. LORAN TRANSMITTING SET AN/FPN-42  
LIST OF MAJOR UNITS

REF. DESIGNATION	QTY	NAME OF MAJOR UNIT	DESIGNATION	COLLOQUIAL NAME	PAGE
1A	1	Power Supply Assembly	PP-2540/FPN-42	High Voltage Power Supply	7-3
2A	1	Transmitter Control Group	OA-2631/FPN-42	Pulse Control Unit	7-3
2A1	1	Pulse Generator	0-706/FPN-42	Pulse Generator	7-6
2A2	1	Oscilloscope	OS-103/FPN	Monitor Oscilloscope	7-32
2A3	1	Power Supply Assembly	PP-2541/FPN-42	Dual Power Supply	7-75
2A5	1	Control Panel			7-91
2A6	1	Blower Assembly			7-96
2A7	1	Pulse Generator	0-706/FPN-42	Pulse Generator	7-97
2A9	1	Electrical Pulse Analyzer	TS-1360/FPN-42	Pulse Analyzer	7-97
3A	1	Amplifier Assembly	AM-2481/FPN-42	Transmitter	7-115
3A	1	Cabinet Assembly			7-115
3A1	1	Pulse Driver			7-133
3A2	1	Oscilloscope	OS-103/FPN	Transmitter Monitor Oscilloscope	7-138
4A	1	Antenna Coupler	CU-807/FPN-42	Coupling and Load Unit	7-139
5A	1	Centrifugal Fan Assembly	HD-399/FPN-42	Blower Assembly	7-143
6A	1	Support Equipment			7-144
6A1	1	Test Equipment			7-144
6A2	1	Special Tools			7-144
6A3	1	Installation Equipment			7-144
8A	1	Inter-unit Cable			7-144
8A1	1	Cables			7-144
8A2	1	Cables			7-144

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST

POWER SUPPLY ASSEMBLY PP-2540/FPN-42 (UD1A)  
Refer to Section 7, Volume 3, for Maintenance Parts List

## TRANSMITTER CONTROL GROUP OA-2631/FPN-42

REF. DESIG.	DESCRIPTION	FUNCTION
(2A)	PULSE CONTROL: (56232 No. 1504535)	Pulse Control
C(2A)001	CAPACITOR, FIXED, PAPER 2 uf 220 VAC, (56232 No. 4223-09407)	Blower, 2A6
E(2A)081	Same as E(2A1)007	Standoff
E(2A)082	Same as E(2A1)007	Standoff
J(2A)001	CONNECTOR, PLUG, ELECTRICAL: 2 cont, 1 conn mating end, 02660 No. SC-264, (56232 No. 1200138)	100kc Input Jack
J(2A)002	Same as J(2A)001	Transmitter Scope Trigger Input
J(2A)003	Same as J(2A)001	Standby 100 kc Input Jack
J(2A)004	Same as J(2A)001	Standby Trigger Input Jack
J(2A)005	Same as J(2A)001	Spare

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
TRANSMITTER CONTROL GROUP OA-2631/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
J(2A)006	Same as J(2A)001	Spare
J(2A)007	Same as J(2A)001	Dummy Load Monitor Input Jack
J(2A)008	Same as J(2A)001	Trigger Out- put To Transmitter #1 Jack
J(2A)009	Same as J(2A)001	Pulse Output To Trans- mitter #1 Jack
J(2A)010	Same as J(2A)001	Pulse Output To Trans- mitter #1 Jack
J(2A)011	Same as J(2A)001	Spare
J(2A)012	Same as J(2A)001	Spare
J(2A)013	Same as J(2A)001	Antenna Pick- up Loop Monitor Jack
J(2A)014	Same as J(2A)001	Trigger Output To Transmitter #2 Jack
J(2A)015	Same as J(2A)001	100 kc Transfer Jack
J(2A)016	Same as J(2A)001	Trigger Transfer Jack
J(2A)017	Same as J(2A)001	100 kc Transfer Jack

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 TRANSMITTER CONTROL GROUP OA-2631/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
J(2A)018	Same as J(2A)001	100 kc Transfer Jack
K(2A)001	RELAY, ARMATURE: 4pdt, dbl break, AC, DC, 115vac, 26.5 V DC, max at 15 amps, 70309 No. POX 34, (56232 No. 813222)	Trans Scope Trig Control
K(2A)002	Same as K(2A)001	Interlock Disable
K(2A)003	Same as K(2A)001	Thermostat
K(2A)004	Same as K(2A)001	Pulse Analyzer B+ Interlock
K(2A)005	Same as K(2A)001	Pulse Analyzer B+ Selector
K(2A)006	Same as K(2A)001	Interlock Ind.
P(2A)001	CONNECTOR, PLUG, ELECTRICAL: (56232 No. 0658-004)	Amplifier
S(2A)001 thru S(2A)004	SWITCH, INTERLOCK: AC, DC, 10 amp, 1/2 amp, 1/4 amp, 250V max, spdt, 74059 No. 2AC6, (56232 No. 849511)	Interlock
S(2A)005	SWITCH, THERMOSTATIC: spst, 1/2 amp, 120 V AC, MIL-T-5574A, MIL-E-5272A; 78043 No. C4344-9, (56232 No. 1381594)	Cabinet thermostat



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
TRANSMITTER CONTROL GROUP OA-2631/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
T(2A)001	TRANSFORMER, POWER, STEPDOWN: 105V, 115V, 125V, 60 c.p.s., 6.3V, 20 amps, 96906 No. MS90023-2, (156232 No. 1380805)	Filament Switch
T(2A)002	Same as T(2A)001	Filament Switch
TB(2A)001	TERMINAL BOARD: 18 term. incl, scr type, 04430 No. 18GD18-6BP, (56232 No. 618269-018)	Pulse Control Board 1
TB(2A)002	Same as TB(2A)001	Pulse Control Board 2
TB(2A)003	TERMINAL BOARD: 16 term. incl, scr type, 71785 No. 16-142A-B2P, (56232 No. 618263-016)	Pulse Control Input Terminal Board

PULSE GENERATOR 0-706/FPN-42

(2A1)	PULSE GENERATOR: (56232 No. 1504541)	
C(2A1)001	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 10,000uuf, ±5%, plstc C, 51/64 X 51/64 X 5/16 in., MIL-C-5A, 81349 No. CM35D103J, (56232 No. 015-025)	Coupling V1A to V2A
C(2A1)003	Same as C(2A1)001	Grid Bypass, V2B
C(2A1)004	Same as C(2A1)001	Coupling, Gate CR1, CR2 to V3A

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)005	Same as C(2A1)001	Coupling, V3B to Balanced Modulator
C(2A1)006	Same as C(2A1)001	Coupling, V3A to V3B
C(2A1)007	Same as C(2A1)001	Coupling, V3B to Balanced Modulator
C(2A1)008	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .10uf, ±10%, met. C, uninsulated, hermetically sealed, .562 in. dia X 1 1/8 in.	Coupling V7A to gate, CR1, CR2
C(2A1)009	Same as C(2A1)008	Coupling V7A to gate, CR1, CR2
C(2A1)010	Same as C(2A1)008	Coupling, V6B to V7A
C(2A1)011	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 470 uuf, ±5%, plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C471J, 96906 No. MS35036-29, (56232 No. 610793-039)	Coupling V6A to V6B
C(2A1)012	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 56uuf, ±5%, plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C560J, 96906 No. MS35036-12, (56232 No. 610793-017)	Coupling, Delay Line to V6A

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)013	Same as C(2A1)012	Coupling, Delay Line To V8A
C(2A1)014	Same as C(2A1)011	Coupling V8A to V8B
C(2A1)015	Same as C(2A1)008	Coupling V8B to V9A
C(2A1)016	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .47uf, ±10%, met. C, uninsulated, hermetically sealed, .750 in. dia X 2 1/8 in. lg, MIL-C-25A, 81349 No. CP08A1KE474K, (56232 No. 0328-039)	Coupling V9B To Balanced Modulator
C(2A1)017	CAPACITOR, FIXED, PAPER DIELECTRIC, 200V, .47uf, ±10%, met. C, uninsulated, hermetically sealed, .562 in. dia X 1 5/8 in. lg, MIL-C-25A 81349 No. CP08A1KC474K, (56232 No. 0328-020)	Coupling, V9B To Balanced Modulator
C(2A1)018	CAPACITOR, FIXED MICA DIELECTRIC: 500V DC 3300uuf, ±5%, plstc C, 51/64 X 5/64 X 1/4 in., MIL-C-5A, 81349 No. CM30D332J, (56232 No. 015-013)	Coupling, Trigger Input To J2
C(2A1)019	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 100uuf, ±5%, plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C101J, 96906 No. MS35036-17, (56232 No. 610793-023)	Coupling, Trigger Input To V10A

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)020	CAPACITOR, FIXED, MICA DIELECTRIC : 300 V DC, 20uuf ±5%, plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C200J, (56232 No. 610793-006)	Coupling, V10B to J2
C(2A1)021	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .068uf, ± 10%, met. C, uninsulated, hermetically sealed, .400 in. dia X 1 3/8 in. lg, MIL-C-25A, 81349 No. CP08A1KE683K, (56232 No. 0328-034)	Coupling, V10A To V10B
C(2A1)022	CAPACITOR, FIXED, MICA DIELECTRIC: 500V DC, 4700 uuf, ±5%, plstc C, 51/64 X 51/64 X 5/16 in., MIL-C-5A, 81349 No. CM35D472J, (56232 No. 015-017)	Coupling, V10A To V11A
C(2A1)023	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, .047 uf, ±10%, met.C, uninsulated, hermetically sealed, .400 in. dia X 7/8 in. lg, MIL-C-25A 81349 No. CP08A1KC473K, (56232 No. 0328-014)	Grid Bypass, V11B
C(2A1)024	Same as C(2A1)001	Coupling, V7B To J5
C(2A1)025	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, 1 uf, ±10%, met. C, insulated, hermetically sealed, 1 in. dia X 1 5/8 in. lg, 72928 No. Type XHF2775-10 (56232 No. 889961)	Droop Gen. Feed-Back, V11B To V11A

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)026	Same as C(2A1)019	Cathode Bypass V9A
C(2A1)027	Same as C(2A1)008	Coupling, V9A To V9B
C(2A1)028	Same as C(2A1)001	Coupling, V5 To V12A
C(2A1)029	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 1000 uuf, $\pm 5\%$ , plstc C, 47/64 X 7/16 X 3/16 in., MIL-C-5A, 81349 No. CM20D102J, (56232 No. 011-055)	Coupling, V12A To V13
C(2A1)030	Same as C(2A1)029	Coupling, V12A To V14
C(2A1)031	Same as C(2A1)025	Bypass, Screen V13, V14
C(2A1)032	Same as C(2A1)001	Bypass, T4
C(2A1)034	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, 2.0 uf, $\pm 10\%$ , met. C, insulated, hermetically sealed, 1 in. dia X 1 7/8 in. lg, 56289 No. 118P20594S4, (56232 No. 632313-427)	Bypass, Plates, V15, V16, V17, V18
C(2A1)035	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 820 uuf, $\pm 5\%$ , plstc C, 47/64 X 7/16 X 3/16 in., MIL-C-5A, 81349 No. CM20D821J, (56232 No. 011-053)	Coupling, T3 To V1B
C(2A1)036	Same as C(2A1)008	Coupling, V9B To J4

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)037	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, .068 uf, $\pm 10\%$ , met. C, uninsulated, hermetically sealed, .400 in. dia X 7/8 in. lg, MIL-C-25A, 81349 No. CP08A1KC683K, (56232 No. 0328-015)	1000 u sec Pulse Spacing V11A
C(2A1)038	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, .10 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .463 in. dia X 1 3/16 in. lg. MIL-C-25A, 81349 No. CP09A1KC104K, (56232 No. 0645-016)	Coupling, V12B To J3
C(2A1)039	Same as C(2A1)008	Coupling, V1B To T7
C(2A1)040	Same as C(2A1)029	+300V Divider By-pass
C(2A1)041	Same as C(2A1)029	Bias Divider By-pass
C(2A1)042	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V DC, 10 uf, +10%, E characteristic, mineral oil impregnated, 81349 No. CP70B1EF106K, (56232 No. 040-009)	Coupling
C(2A1)043	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC 600V peak working voltage, 120 uuf, +5%, thermosetting plastic, 33/64 in. w, 19/64 in. h., 3/64 in deep, 81349 No. CM15C121J, MS35036-18, (56232 No. 610793-025)	Output Transformer Monitor Winding Capacitor Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A1)044	Same as C(2A1)019	Output Transformer Monitor Winding Capacitor Divider
C(2A1)045	Same as C(2A1)029	Grid By-pass
C(2A1)046	Same as C(2A1)029	Coupling
C(2A1)047	Same as C(2A1)029	Cathode Follower Coupling
C(2A1)048	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 4. 0-30.0uuf, 500V, MIL-C-81, 81350 No. CV11C300, (56232 No. 0282-003)	Coupling
C(2A1)049	Same as C(2A1)048	Coupling
CR(2A1)001 thru CR(2A1)004	SEMICONDUCTOR DEVICE DIODE: MIL-E-111027, 81349 No. type 1N458, (56232 No. 619139-001)	100kc Gate
CR(2A1)005	Same as CR(2A1)001	Trigger V6A
CR(2A1)006	Same as CR(2A1)001	Trigger V8A
CR(2A1)007	Same as CR(2A1)001	Ped. Restorer
CR(2A1)008	Same as CR(2A1)001	Trigger V10A
CR(2A1)010	Same as CR(2A1)001	Ped. Restorer
DL(2A1)001	DELAY LINE: 5 usec + 5%, (56232 No. 1200518)	5 usec Delay, Trigger Input To Ped. Gen. and Gate Gen.

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
DS(2A1)001	LAMP, INCANDESCENT: 28V, 1.2-1.6w, .035 amp dsgn cur, 24455 No. Type T bulb, (56232 No. 0174-031)	Indicator, Operate
DS(2A1)002	Same as DS(2A1)001	Indicator Fuse
E(2A1)007 thru E(2A1)084	INSULATOR, STANDOFF, DIELECTRIC MATL: 91663 No. TMT-12, (56232 No. 839118)	Standoff
F(2A1)001	FUSE CARTRIDGE: 1.50 amp. nor. inst, MIL-F-151600, 96906 No. MS90078-10-1 (56232 No. 632337-010)	120V Input
F(2A1)002	Same as F(2A1)001	120V AC Input
FL(2A1)001	FILTER, BAND PASS: 130 to 200kc bandwidth, Type LGH 9709, (56232 No. 1200520)	100kc Low Pass
J(2A1)001	CONNECTOR, PLUG ELECTRICAL: 2 cont, 1 conn mating end, 02660 No. SC-264, (56232 No. 1200138)	Pulse Output
J(2A1)002	CONNECTOR, RECEPTACLE, ELECTRICAL: L loss plstc dielectric, 88044 No. UG-290 A/U, (56232 No. 603306)	Oscilloscope Trigger Input
J(2A1)003	Same as J(2A1)002	Droop Modulator Monitor
J(2A1)004	Same as J(2A1)002	100KC Modulating Monitor
J(2A1)005	Same as J(2A1)002	100 KC Monitor



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
J(2A1)006	Same as J(2A1)001	Trigger Input
J(2A1)007	Same as J(2A1)001	100 kc Input
J(2A1)008	Same as J(2A1)002	Pulse Monitor
J(2A1)009	Same as J(2A1)001	Transmit Scope Triggers
L(2A1)001	CHOKES, RADIO FREQUENCY: 125 ma, for use w/freq abv 2.5 mh, 76487 No. 34100, (56232 No. 267691)	+ 300 VDC Filter
MP(2A1)001	PAWL STOP: 94222 No. 45, (56232 No. 1240719)	Pawl Stop
MP(2A1)002 thru MP(2A1)004	TERMINAL, STUD: brs cond, dipped solder fin., 91663 no. type bmt 19, (56232 No. 285492)	
MP(2A1)005	Same as MP(2A1)001	
MP(2A1)006	Same as MP(2A1)001	
MP(2A1)007 thru MP(2A1)012	NUT, SELF-LOCKING, LATCH, 53705 No. LN-10, (56232 No. 1240720)	
MP(2A1)013 thru MP(2A1)015	GROMMET, RUBBER: syn rub., MIL-G-3060, 88044 No. ANQ31 A8-13, (56232 No. 0130-019)	
MP(2A1)016 thru MP(2A1)021	SPACER: teflon, (56232 No. 1200976)	
MP(2A1)022	GASKET: syn rub. sh type GPA, (56232 No. 1240686-002)	

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(2A1)023	GASKET: syn rub. sh type GPA, (56232 No. 1240686- 001)	
MP(2A1)024	Same as MP(2A1)023	
MP(2A1)025 thru MP(2A1)030	TERMINAL, STANDOFF: brs cond, cad. pl fin. 91663, type BMT 19, (56232 No. 285492)	
R(2A1)005	RESISTOR, FIXED, COMPOSITION: 100,000 ohms, ±5%, 1w at 70 deg C amb temp, F, MIL-R-11, 81349 No. RC32GF104J, 96906 No. MS35044-149, 01121 No. GB-1045, (56232 No. 813188-097)	V2A Grid
R(2A1)006	RESISTOR, FIXED, COMPOSITION: 47,000 ohms, ±5%, 1w at 70deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF473J, 96906 No. MS35044-141, 01121 No. GB-4735, (56232 No. 813188-089)	V2 Cathode
R(2A1)007	RESISTOR, FIXED COMPOSITION: 22,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF223J, 96906 No. MS35044-133, 01121 No. GB- 2235, (56232 No. 813188-081)	V2B Plate Load
R(2A1)008	Same as R(2A1)005	V2B Grid Bias

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)009	RESISTOR, FIXED, COMPOSITION: 150,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF154J, 96906 NO. MS35044-153, 01121 No. GB-1545, (56232 No. 813188-101)	V2 Grid Bias Voltage Divider
R(2A1)010	RESISTOR, FIXED, COMPOSITION: 330,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF334J, 96906 No. MS35044-161, 01121 No. GB-3345, (56232 No. 813188-109)	V1 Grid Bias Dropping
R(2A1)011	RESISTOR, FIXED, COMPOSITION: 68,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF683J, 96906 No. MS35044-145, 01121 No. GB-6835, (56232 No. 813188-093)	Low Pass Filter Load
R(2A1)012	Same as R(2A1)005	100 kc Gate
R(2A1)013	Same as R(2A1)005	100 kc Gate
R(2A1)014	RESISTOR, FIXED, COMPOSITION: 39,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF393J, 96906 No. MS35044-139, 01121 No. GB3935, (56232 No. 813188-087)	100 kc Gate Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)015	RESISTOR, FIXED, COMPOSITION: 470,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF474J, 96906 No. MS35044-165, 01121 No. GB-4745, (56232 No. 813188-113)	V3A Grid
R(2A1)016	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF223J, 96906 No. MS35045-119, 01121 No. HB-2235, (56232 No. 813190-081)	V3A Plate Load
R(2A1)017	RESISTOR, FIXED, COMPOSITION: 10,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF103J, 96906 No. MS35044-125, 01121 No. GB-1035, (56232 No. 813188-073)	V3B Plate Load
R(2A1)018	RESISTOR, FIXED, COMPOSITION: 470 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF471J, 96906 No. MS35044-93, 01121 No. GB-4715, (56232 No. 813188-041)	V3A Cathode
R(2A1)019	Same as R(2A1)015	V3B Grid
R(2A1)020	Same as R(2A1)018	V3B Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)021	RESISTOR VARIABLE, COMPOSITION: 10,000 ohms, ±20%, 2w, linear taper, 81349 No. RV4NAYSD103B, (56232 No. 625713-043)	V3B Cathode Load
R(A21)022	RESISTOR, FIXED, COMPOSITION: 12,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF123J, 96906 No. MS35045-113, 01121 No. HB-1235, (56232 No. 813190-075)	100 kc Bal. Adj. V3B Cathode
R(A21)023 thru R(A21)030	RESISTOR, FIXED, FILM: 61,900 ohms, ±1%, 1/2 w, MIL-R-10509A, 81349 No. RN20X6192F, (56232 No. 614599-564)	100 kc Bal. Mod. Bridge
R(2A1)031	Same as R(2A1)005	CR4 Voltage Dropping
R(2A1)033	RESISTOR, FIXED, COMPOSITION: 6800 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF682J, 96906 No. MS35044-121, 01121 No. GB-6825, (56232 No. 813188-069)	CR4 Voltage Dividing
R(2A1)034	Same as R(2A1)011	CR3 Voltage Dropping
R(2A1)035	Same as R(2A1)017	CR3 Voltage Dividing

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)037	RESISTOR, FIXED, COMPOSITION: 2.2 meg, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF225J, 96906 No. MS35044-181, 01121 No. GB-2255, (56232 No. 813188-129)	V6A Grid Dropping
R(2A1)038	RESISTOR, FIXED, COMPOSITION: 120,000 ohms, ±5%, 1w at 70 deg C amb temp, F, MIL-R-11, 81349 No. RC32GF124J, 96906 No. MS35044-151, 01121 No. GB-1245, (56232 No. 813188-099)	V6A Grid
R(2A1)039	Same as R(2A1)017	V6A Plate Load
R(2A1)040	RESISTOR, FIXED, COMPOSITION: 6800 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF682J, 96906 No. MS35045-107, 01121 No. HB-6825, (56232 No. 813190-069)	V6B Plate Load
R(2A1)041	RESISTOR, FIXED, COMPOSITION: 3300 ohms, ± 5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF332J, 96906 No. MS35044-113, 01121 No. GB-3325, (56232 No. 813188-061)	V6B Plate Voltage Dropping

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)042	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 2.5 meg, $\pm 20\%$ , 2w, std A taper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYS255B, (56232 No. 625713-057)	Gate Width Adj. Grid V6B
R(2A1)043	RESISTOR, FIXED, COMPOSITION: 560,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF564J, 96906 No. MS35044-167, 01121 No. GB-5645, (56232 No. 813188-115)	V6B Grid Voltage Dropping
R(2A1)044	RESISTOR, FIXED, COMPOSITION: 2700 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF272J, 96906 No. MS35044-111, 01121 No. GB-2725, (56232 No. 813188-059)	V6 Cathode
R(2A1)045	RESISTOR, FIXED, COMPOSITION: 1 meg, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF105J, 96906 No. MS35044-173, 01121 No. GB-1055, (56232 No. 813188-121)	V7A Grid
R(2A1)046	Same as R(2A1)017	V7A Cathode
R(2A1)047	Same as R(2A1)017	V7A Plate Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)048	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF101J, 96906 No. MS 35044-77, 01121 No. GB-1015, (56232 No. 813188-025)	D11 Load
R(2A1)049	Same as R(2A1)037	V8A Grid Voltage Dropping
R(2A1)050	Same as R(2A1)038	V8A Grid
R(2A1)051	Same as R(2A1)017	V8A Plate Load
R(2A1)052	Same as R(2A1)044	V8B Plate Load
R(2A1)053	Same as R(2A1)040	V8B Plate Dropping
R(2A1)054	Same as R(2A1)044	V8 Cathode
R(2A1)055	Same as R(2A1)042	V8B Grid, Pulse Width Adj.
R(2A1)056	RESISTOR, FIXED, COMPOSITION: 680,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF684J, 96906 No. MS35044-169, 01121 No. GB-6845, (56232 No. 813188-117)	V8B Grid Voltage Dropping
R(2A1)057	Same as R(2A1)045	V9A Grid



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)058	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 100,000 ohms, $\pm 20\%$ , 2w, std a taper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYSD104B, (56232 No. 625713-049)	Ped Rise Time Adj. V9A
R(2A1)059	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 1 meg, $\pm 20\%$ , 2w, std at taper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYSD105B, (56232 No. 625713-055)	V9A Delay Time Adj.
R(2A1)060	Same as R(2A1)041	V9A Cathode Bias
R(2A1)061	RESISTOR, FIXED, COMPOSITION: 1000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, E, MIL-R-11, 81349 96906 No. MS35044-101, 01121 No. GB-1025, (56232 No. 813188-049)	V9B Cathode Bias
R(2A1)062	Same as R(2A1)017	V9B Cathode Load
R(2A1)063	RESISTOR, FIXED, COMPOSITION: 3900 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, GB-1035, (56232 No. 813188-063)	V9B Plate Voltage Dropping
R(2A1)064	Same as R(2A1)033	V9B Plate Load
R(2A1)065	Same as R(2A1)045	V9B Grid Leak
R(2A1)066	Same as R(2A1)037	V10A Bias Voltage Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)067	Same as R(2A1)038	V10A Grid Bias Voltage Divider
R(2A1)068	Same as R(2A1)017	V10A Plate Load
R(2A1)069	Same as R(2A1)007	V10B Plate Load
R(2A1)070	RESISTOR, FIXED COMPOSITION: 220,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF224J, 96906 No. MS35044-157, 01121 No. GB-2245, (56232 No. 813188-105)	V15, 16, 17, 18 Bias Limiter
R(2A1)071	RESISTOR, FIXED, COMPOSITION: 1.8 meg, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF185J, 96906 No. MS35044-179, 01121 No. GB-1855, (56232 No. 813188-127)	V10B GRID Bias
R(2A1)072	Same as R(2A1)041	V10 Cathode Bias
R(2A1)074	Same as R(2A1)045	V11A Grid Leak
R(2A1)075	RESISTOR, VARIABLE, COMPONENT: 1 sect, 3 meg, $\pm 20\%$ , 2w, std A taper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYSD505B, (56232 No. 625713-059)	V11A Droop Adj.

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)076	Same as R(2A1)043	V11A Plate Load
R(2A1)077	Same as R(2A1)043	V11A Plate Dropping
R(2A1)078	RESISTOR, FIXED, COMPOSITION: 8200 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF822J, 96906 No. MS35045-109, 01121 No. HB-8225, (56232 No. 813190-071)	V11B Cathode Load
R(2A1)079	Same as R(2A1)005	V11B Pulse Amplitude Adj.
R(2A1)080	Same as R(2A1)022	V11B Cathode Load
R(2A1)081	RESISTOR, FIXED, COMPOSITION: 56,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF563J, 96906 No. MS35044-143, 01121 No. GB-5635, (56232 No. 813188-091)	V15, V16 Grid Leak
R(2A1)082	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 50,000 ohms, ±20%, 2w, std A taper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYS503B, (56232 No. 625713-047)	V5 Cathode Load
R(2A1)083	Same as R(2A1)015	V12A Grid Leak

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)084	Same as R(2A1)018	V12A Cathode Load
R(2A1)085	Same as R(2A1)017	V12A Cathode Load
R(2A1)086	Same as R(2A1)017	V12A Plate Load
R(2A1)087	Same as R(2A1)007	S1 Grounding
R(2A1)088	Same as R(2A1)005	V13 Grid Bias
R(2A1)089	Same as R(2A1)005	V14 Grid Bias
R(2A1)090	Same as R(2A1)081	V13 Screen Grid Dropping
R(2A1)091	Same as R(2A1)081	V17, V18 Grid Leak
R(2A1)092	RESISTOR, FIXED, COMPOSITION: 15,000 ohms $\pm 5\%$ , 1w, 813490 No. RC32GF153J, (56232 No. 813188-077)	V12B Grid Leak
R(2A1)093	RESISTOR, FIXED, COMPOSITION: 5600 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF562J, 96906 No. MS35044-119, 01121 No. GB-5625, (56232 No. 813188-067)	V12B Cathode Load
R(2A1)094	RESISTOR, FIXED, COMPOSITION: 2200 ohms, $\pm 5\%$ , 1w, 81349 No. RC32GF222J, (56232 No. 813188-057)	V7B Cathode Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)095	RESISTOR, FIXED, COMPOSITION: 33,000 ohms, $\pm 5\%$ , 1w, 81349 No. RC32GF333J, (56232 No. 813188-085)	Grid, V12B
R(2A1)096	RESISTOR, FIXED, COMPOSITION, 220 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF221J, 96906 No. MS35044-85, 01121 No. GB-2215, (56232 No. 813188-033)	V17, V18, Plate Decoupling
R(2A1)099	Same as R(2A1)061	T1 Damping
R(2A1)100	Same as R(2A1)061	V15A Parasitic Suppressor
R(2A1)101	Same as R(2A1)061	V15A Parasitic Suppressor
R(2A1)102	Same as R(2A1)061	V17A Parasitic Suppressor
R(2A1)103	Same as R(2A1)061	V18A Parasitic Suppressor
R(2A1)104	Same as R(2A1)061	V15B Parasitic Suppressor
R(2A1)105	Same as R(2A1)061	V16B Parasitic Suppressor

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)106	Same as R(2A1)061	V17B Parasitic Suppressor
R(2A1)107	Same as R(2A1)061	V18B Parasitic Suppressor
R(2A1)109	Same as R(2A1)061	V1B Cathode Load
R(2A1)110	Same as R(2A1)005	V1B Bias Limiter
R(2A1)111	Same as R(2A1)007	V1B Bias Volt Divider
R(2A1)113	RESISTOR, FIXED, COMPOSITION: 4700 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF472J, 96906 No. MS35045-103, 01121 No. HB-4725, (56232 No. 813190-065)	DS1 Dropping
R(2A1)114	Same as R(2A1)113	DS1 Dropping
R(2A1)115	Same as R(2A1)113	DS2 Dropping
R(2A1)116	Same as R(2A1)113	DS2 Dropping
R(2A1)117	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF101J, 96906 No. MS35043-63, 01121 No. EB-1015, (56232 No. 813186-025)	Trigger Input Signal Limiter

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A1)118	RESISTOR, FIXED, COMPOSITION: 10,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF103J, 96906 No. MS35043-111, 01121 No. EB-1035, (56232 No. 813186-073)	Paraphase Amplifier Load
R(2A1)119	Same as R(2A1)118	Paraphase Amplifier Load
R(2A1)120	Same as R(2A1)043	Grid
R(2A1)121	Same as R(2A1)043	Grid
R(2A1)122	Same as R(2A1)043	Scope Trigger Clipper Circuit
R(2A1)123	Same as R(2A1)017	Grid Divider
R(2A1)124	Same as R(2A1)093	Monitor Transformer Terminating
R(2A1)125	Same as R(2A1)017	Monitor Transformer Terminating
R(2A1)126	Same as R(2A1)007	Droop Modulator Output Transformer Terminating
R(2A1)127	Same as R(2A1)081	Grid
R(2A1)128	RESISTOR, FIXED, COMPOSITION: 1,000 ohms, + 5%, 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB-1025, (56232 No. 813190-049)	Cathode Follower Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(2A1)001	SWITCH, TOGGLE: spdt, AC, DC, 250V MAX, 6 amp AC .5 DC, res cur rating, 20 amp max nom cur, 30V, JAN-S-23, 81350 No. ST42D, (56232 No. 0232-004)	Scope Trigger
S(2A1)002	Same as S(2A1)001	Pulse Spacing
T(2A1)001	TRANSFORMER, PULSE: 300, 300, 300V, .25 to 3.0 usec, 1000 pps, (56232 type SRH 6066, PT No. 606834-002)	100 kc Input
T(2A1)002	TRANSFORMER, PULSE: 90, 300, 300V, .25 to 3.0 usec, 1000 pps, (56232 type SRH 6065, PT No. 606833-002)	Trigger Input
T(2A1)003	Same as T(2A1)002	Oscilloscope Trigger Out
T(2A1)004	TRANSFORMER, RADIO FREQUENCY: 100k ohm min. at 100kc 50ma DC, MIL-T-27A, (56232 No. 1383173)	Plates V13, V14
T(2A1)005	TRANSFORMER, POWER, STEPDOWN: 300V, duty cycle 0.03, single phase, 73386 No. 32537, (56232 No. 1381774)	Pulse Output
T(2A1)006	TRANSFORMER, POWER, STEPDOWN: two 6.3V, 6 amp secondary winding, 81349 No. MIL TF4RX015A, (56232 No. 1381573)	V15-18 Filament
T(2A1)007	Same as T(2A1)002	Transmitter Scope Trigger Out



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
TB(2A1)001	TERMINAL BOARD: 10 term. incl, scr type, 04430 No. 10GD18L-6BP, (56232 No. 618244-010)	Power Input
V(2A1)001	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5687 WA, (56232 No. 736560-001)	100 kc AMP
V(2A1)002	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5751, (56232 No. 671114-001)	Cathode Follower and 100 kc Squarer
V(2A1)003	ELECTRON TUBE: MIL-E-1, 81349 No. type 5814A, (56232 No. 716841-001)	100 kc Paraphase AMP
V(2A1)004	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5726 6AL5W, (56232 No. 716857-001)	Bal. Mod.
V(2A1)005	Same as V(2A1)004	Bal. Mod.
V(2A1)006	Same as V(2A1)003	Gate Generator
V(2A1)007	Same as V(2A1)003	Gate AMP and Cathode Follower
V(2A1)008	Same as V(2A1)003	Ped. Gen
V(2A1)009	Same as V(2A1)003	Ped Shaper
V(2A1)010	Same as V(2A1)003	Droop Ped. Gen
V(2A1)011	Same as V(2A1)003	Droop Ped. Shaper
V(2A1)012	Same as V(2A1)003	Paraphase AMP
V(2A1)013	ELECTRON TUBE: MIL-E-1, 81349 No. type 6005/6AQ5W (56232 No. 719349-001)	Droop Mod.

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
V(2A1)014	Same as V(2A1)013	Droop Mod.
V(2A1)015 thru V(2A1)018	Same as V(2A1)001	Output Cathode Follower
XVE(2A1)001 thru XVE(2A1)003	SHIELD, ELECTRON TUBE: (56232 No. 752889-001)	For XV(2A1)001, 002, and 003 respectively
XVE(2A1)004	SHIELD, ELECTRON TUBE: (56232 No. 752696-001)	For XV(2A1)004
XVE(2A1)005	Same as XVE(2A1)004	For XV(2A1)005
XVE(2A1)006 thru XVE(2A1)012	Same as XVE(2A1)001	For XV(2A1)006 thru XV(2A1)012 respectively
XVE(2A1)013	Same as XVE(2A1)004	For XV(2A1)013
XVE(2A1)014	Same as XVE(2A1)004	For XV(2A1)014
XVE(2A1)015 thru XVE(2A1)018	Same as XVE(2A1)001	For XV(2A1)015 thru XV(2A1)018 respectively
XV(2A1)001 thru XV(2A1)003	SOCKET, ELECTRON TUBE: copper base alloy contacts, nonplated, (56232 No. 752890- 001)	For V(2A1)001, 002, 003 respectively
XV(2A1)004	SOCKET, ELECTRON TUBE: copper base alloy contacts, nonplated, 81349 No. TS102P01, (56232 No. 752695- 001)	For V(2A1)004
XV(2A1)005	Same as XV(2A1)004	For V(2A1)005
XV(2A1)006 thru XV(2A1)012	Same as XV(2A1)001	For V(2A1)006 thru V(2A1)012 respectively

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

PULSE GENERATOR 0-706/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
XV(2A1)013	Same as XV(2A1)004	For V(2A1)013
XV(2A1)014	Same as XV(2A1)004	For V(2A1)014
XV(2A1)015 thru XV(2A1)018	Same as XV(2A1)001	For V(2A1)015 thru V(2A1)018 respectively

OSCILLOSCOPE 0S-103/FPN

(2A2)	OSCILLOSCOPE 0S-103/FPN: sweep circuits included, .5-500,000 cps 0.5 vp-p polarity switch included no marker, (56232 No. 1501486)	Monitor Scope
C(2A2)001	CAPACITOR, FIXED, PLASTIC DIELECTRIC: 300V AC, .1 uf, ±20%, plstc impregnated paper C, 9/16 in. dia X 3/4 in. lg, Texas Capacitor Co. No. type-27, (56232 No. 1200649)	Coupling
C(2A2)002	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 4.0 -30.0 uuf, 500V, MIL-C-81, 81350 No. CV11C300, (56232 No. 0282-003)	Vertical Amplifier Trimmer
C(2A2)003	CAPACITOR, VARIABLE MICA: 14 to 15 uuf, 500VDC W, 28480 No. 13-33, (56232 No. 4223-09333)	Vertical Amplifier Gain Trimmer
C(2A2)004	CAPACITOR, VARIABLE MICA DIELECTRIC: 50-380 uuf, 175V, 84171 No. type ELMENCO465, (56232 No. 1200595-002)	Vertical Amplifier Trimmer

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)005	CAPACITOR, FIXED, MICA DIELECTRIC: 500 VDC, 820 uuf, $\pm 5\%$ , plstc C, 51/64 X51/64X1/4 in., MIL-C-5A, 81349 No. CM30D821J, (56232 No. 015-047)	Vertical Gain Control
C(2A2)006	CAPACITOR, FIXED, MICA DIELECTRIC: 300 VDC, 10,000 uuf, $\pm 5\%$ , plstc C, 51/64X51/64X5/16 in. (56232 No. 015-042)	Vertical Gain Control
C(2A2)007	CAPACITOR FIXED CERAMIC DIELECTRIC: 100 VDC .01 uf mop 100%, insulated, 96095 no. type BPD-01, (56232 No. 1200594)	Grid Leak
C(2A2)008	Same as C(2A2)007	Grid Leak
C(2A2)009	CAPACITOR, FIXED, MICA DIELECTRIC: 300 V DC, 75 uuf, $\pm 5\%$ , plstc C, 33/64X19/64X3/16 in., MIL-C-5A, 81349 No. CM15C750J, (56232 No. 610793-020)	Vertical Amplifier Vernier
C(2A2)010	CAPACITOR, FIXED, MICA DIELECTRIC: 500V, 15 uuf, $\pm 10\%$ , plstc C, 35/64 in. D, 7/32 in. H, 5/16 in. W, 76433 No. type Q, (56232 No. 1200640-003)	Vertical Amplifier Vernier
C(2A2)012	CAPACITOR, VARIABLE, MICA DIELECTRIC: 170-780 uuf, 175V, 84171 No. type ELMENCO469, (56232 No. 1200595-001)	Differential Amplifier Trimmer

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)013	CAPACITOR, FIXED, MICA DIELECTRIC: 500VDC, 560uuf, $\pm 5\%$ plstc C, 51/64X 51/64X1/4 in., MIL-C-5A, 81349 No. CM30D561J, (56232 No. 015-043)	Cathode
C(2A2)015	CAPACITOR, FIXED, TITANIUM DIOXIDE: 2 uuf, $\pm 10\%$ , 500VDC W, 28480 No. 15-118, (56232 No. 4223-09334-002)	Coupling
C(2A2)016	Same as C(2A2)015	Coupling
C(2A2)017	CAPACITOR, FIXED, TITANIUM DIOXIDE: 3.3 uuf, $\pm 10\%$ , 500 VDC W, 28480 No. 15-78 (56232 No. 4223-09334-001)	Coupling
C(2A2)018	Same as C(2A2)017	Coupling
C(2A2)019	CAPACITOR, FIXED, TITANIUM DIOXIDE: 1.5 uuf, $\pm 10\%$ , 500V DCW, 28480 No. 15-38, (56232 No. 4223-09334-003)	
C(2A2)021	Same as C(2A2)019	Coupling
C(2A2)022	Same as C(2A2)007	Cathode By-pass
C(2A2)101	Same as C(2A2)001	Coupling
C(2A2)102	Same as C(2A2)002	Horizontal Amplifier Trimmer
C(2A2)103	Same as C(2A2)003	Horizontal Amplifier Gain Trimmer

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)104	Same as C(2A2)004	Horizontal Amplifier Trimmer
C(2A2)105	Same as C(2A2)005	Horizontal Gain Control
C(2A2)106	Same as C(2A2)006	Horizontal Gain Control
C(2A2)107	Same as C(2A2)007	Grid Leak
C(2A2)108	Same as C(2A2)007	Grid Leak
C(2A2)109	Same as C(2A2)009	Horizontal Amplifier Vernier
C(2A2)110	Same as C(2A2)010	Horizontal Amplifier Vernier
C(2A2)111	CAPACITOR, FIXED, MICA DIELECTRIC: 500V, 200 uuf, ±10%, plstc C, 51/64 in. D, 7/32 in. H, 15/32 in. W, 76433 No. type OXM, (56232 No. 1200640-005)	Sweep Calibrator Resistor
C(2A2)113	CAPACITOR, VARIABLE, CERAMIC DIELECTRIC: 7.0-45.0 uuf, 500V, MIL-C-81, 81350 No. CV11D450, (56232 No. 0282-005)	Sweep Generator Trimmer
C(2A2)114	Same as C(2A2)012	Differential Amplifier Trimmer
C(2A2)115	Same as C(2A2)013	Cathode Capacitor
C(2A2)116	Same as C(2A2)003	Horizontal Amplifier Internal Sweep Trimmer

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)118	Same as C(2A2)003	Differential Amplifier Trimmer
C(2A2)119	Same as C(2A2)019	Coupling
C(2A2)120	Same as C(2A2)019	Coupling
C(2A2)121	Same as C(2A2)017	Coupling
C(2A2)122	Same as C(2A2)017	Coupling
C(2A2)123	CAPACITOR, FIXED TITANIUM DIOXIDE: 2.2 uuf $\pm 10\%$ , 500 VDCW, 28480 No. 15-52, (56232 No. 4223-09334-004)	Coupling
C(2A2)125	Same as C(2A2)123	Coupling
C(2A2)126	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V, .010 uf, $\pm 10\%$ , met. C, insulated, hermetically sealed, .375 in. dia X 15/16 in lg. MIL-C-25A, 81349 No. CP09A1KF103K, (56232 No. 0645-046)	Cathode By-pass
C(2A2)201	CAPACITOR, FIXED, PAPER DIELECTRIC: 1000V, .047 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .625 in. dia X 1 7/16 in. lg, MIL-C-25A, 81349 No. CP09A1KG473K, (56232 No. 0645-068)	Blocking
C(2A2)203	Same as C(2A2)201	Blocking
C(2A2)204	CAPACITOR, FIXED, MICA DIELECTRIC: 500V, 27 uuf, $\pm 10\%$ , plstc C, 35/64 in. D, 7/32 in. H, 5/16 in. W, 00853 No. type K1427, (56232 No. 1200596-001)	Coupling

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)205	CAPACITOR, FIXED, MICA DIELECTRIC: 500VDC, 68 uuf, $\pm 5\%$ , plstc C, 47/64 X7/16X3/16 in., MIL-C-5A, 81349 No. CM20C680J, (56232 No. 011-027)	Coupling
C(2A2)206	Same as C(2A2)007	150V By-pass
C(2A2)207	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 500V, 10 uuf, $\pm 0.5$ uuf, insulated case, .250 in. dia X .562 in. lg, 72982 No. type NP0K, (56232 No. 1200593)	Coupling
C(2A2)208	Same as C(2A2)204	Sawtooth Generator
C(2A2)209	CAPACITOR, FIXED, MICA DIELECTRIC: 500V, 200 uuf, $\pm 5\%$ , plstc C, 35/64 in. D, 7/32 in. H, 5/16 in. W, MIL-C-5A, 81349 No. CM15E201J, (56232 No. 1200662)	Plate By-pass
C(2A2)210	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V, .0022 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .298 in. dia X 13/16 in. lg, MIL-C-25A, 81349 No. CP09A1KF222K, (56232 No. 0645-042)	Sawtooth Generator
C(2A2)211	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 1000V, 20,000 uuf, plstc C, insulated, .820 in. dia X 1 1/2 in. lg, 01121 No. 48A-203W, (56232 No. 776011)	Cathode By-pass



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)212	Same as C(2A2)007	Blocking
C(2A2)213	Same as C(2A2)210	Sweep Calibrator
C(2A2)214	Same as C(2A2)015	Coupling
C(2A2)215	Same as C(2A2)015	Coupling
C(2A2)216	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 500V, 10,000 uuf, P100 M20%, insulated body, 3/4 in. dia X 5/32 in. lg, MIL-C-11015, 96906 No. MS90131-1, (56232 No. 0521-009)	Sweep Calibrator
C(2A2)218	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 0.01 uf, ±20%, 1000VDCW, 28480 No. 15-43, (56232 No. 4223-09662)	Coupling
C(2A2)220	CAPACITOR, FIXED, PLASTIC DIELECTRIC: 200V, 1 uf, ±5%, wax impregnated paper C, .610 in. dia X 1 19/32 in. lg, 84411 No. type 621M10552, (56232 No. 1200664-001)	Sweep Control
C(2A2)221	CAPACITOR, FIXED, PAPER DIELECTRIC: 200VDC, ±5%, .1 uf, .095 to .105 uf, .363 dia X 3 1/32 in. lg. 2 terms, axial wire type #22 AWG, 1-1/2 in. lg. 84411 type 620M, (56232 No. 1200664-002)	Sweep Control

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)222	CAPACITOR, FIXED, PLASTIC DIELECTRIC: 400V, .01 uf, ±5%, wax impregnated paper C, .223 in. dia X 27/32 in. lg, 84411 No. type 620M10354 (56232 No. 1200664-003)	Sweep Control
C(2A2)223	Same as C(2A2)004	Sweep Control
C(2A2)224	Same as C(2A2)005	Sweep Control
C(2A2)225	Same as C(2A2)113	Sweep Generator Trimmer
C(2A2)226	Same as C(2A2)009	Sweep Control
C(2A2)227	Same as C(2A2)113	Sweep Generator Trimmer
C(2A2)228	Same as C(2A2)220	Sweep Control Cap
C(2A2)229	CAPACITOR, FIXED, PAPER DIELECTRIC: 0.10 uf, ±10%, 400VDCW, MIL-C-25A, 81349 No. CP09A1KE104K, (56232 No. 0645-035)	Sweep Generator Control
C(2A2)230	Same as C(2A2)126	Sweep Control
C(2A2)231	CAPACITOR, FIXED, MICA DIELECTRIC:500 VDC, 680 uuf, ±5%, plstc C, 51/64 X51/64X1/4 in. MIL-C-5A 81349 No. CM30D681J, (56232 No. 015-045)	Sweep Control

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)232	CAPACITOR, FIXED, MICA DIELECTRIC: 500 VDC 470 uuf, $\pm 5\%$ , plstc C, 47/64 X7/16X3/16 in., MIL-C-5A, 81349 No. CM20D471J, (56232 No. 011-047)	Sweep Control
C(2A2)301	CAPACITOR, FIXED, ELECTROLYTIC: 2 section 20 uf per sect. 450V DC, (56232 No. 4223-09531)	Filter
C(2A2)302	CAPACITOR, FIXED, ELECTROLYTIC: 80 uf, 300 VDCW, 28480 No. 18-64, (56232 No. 4223-09335)	Power Supply
C(2A2)303	CAPACITOR, FIXED, ELECTROLYTIC: 160 uf, 450 VDCW, 28480 No. 18-51- HP, (56232 No. 4223- 09336)	Power Supply Filter
C(2A2)304A	Same as C(2A2)301	150V Bias Filter
C(2A2)304B	Same as C(2A2)301	150V Output Filter
C(2A2)305	CAPACITOR, FIXED, PAPER DIELECTRIC: 1000V, 100 uf, $\pm 10\%$ , insulated metal case, hermetically sealed, 733 in. dia 1-11/16 in. lg, MIL-C-25A, 81349 No. CP09A1KG104K, (56232 No. 0645-070)	Astigmatism Control By-pass

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)306	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V, .010 uf, ±10%, met. C, uninsulated, hermetically sealed, .312 in. dia X 7/8 in. lg, MIL-C-25A, 81349 No. CP08A1KF103K, (56232 No. 0328-046)	Grid By-pass
C(2A2)307	Same as C(2A2)306	Grid By-pass
C(2A2)308	Same as C(2A2)229	Grid By-pass
C(2A2)309	Same as C(2A2)306	Voltage Reference By-pass
C(2A2)310A	CAPACITOR, FIXED, ELECTROLYTIC: 450V, 20-20-20-20 uf, M 10%P 50% cap. tol, M55deg. C to P85 deg. C working temp range, met C, 1 3/8 in. dia X 2 1/2 in. lg, 37942 No. type FP444, (56232 No. 1200615)	(A)+ 100 V Filter
C(2A2)310B	Same as C(2A2)310A	(B)+ 300V Filter
C(2A2)311	CAPACITOR, FIXED, PAPER DIELECTRIC: 500V, .0068 uf, ±10%, plstc C, 5/8 in. dia X 1 15/16 in. lg, 56289 No. 184P682950, (56232 No. 1200733)	Grid By-pass
C(2A2)312	Same as C(2A2)311	Coupling

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)313	CAPACITOR, FIXED, PAPER DIELECTRIC: .0015 uf, $\pm 20\%$ , 500VDCW, 28480 No. 16-126, (56232 No. 4223-09337)	Intensity Adjustment Filter
C(2A2)314	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V, .0015 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .298 in. dia X 13/16 in. lg, MIL-C-25A, 81349 No. CP09A1KF152K, (56232 No. 0645-041)	Filter
C(2A2)315	Same as C(2A2)314	Filter
C(2A2)316	CAPACITOR, FIXED, CERAMIC DIELECTRIC: .020u, -0 +100%, 600VDCW, 28480 No. 15-85, (56232 No. 4223-09663)	Cathode By-pass
C(2A2)320	Same as C(2A2)306	Grid By-pass
C(2A2)322	CAPACITOR, FIXED, CERAMIC DIELECTRIC: 1000V DC, 2000 uuf, 20% insulated body, 11/16 in dia X 3/16 in. thk. 49956 No. type D, (56232 No. 1200661)	Screen By-pass
C(2A2)323	CAPACITOR, FIXED, MICA DIELECTRIC: 500VDC, 200 uuf, $\pm 5\%$ , plstc C, 47/64 X 7/16 X 3 1/16 in., MIL-C-5A, 81349 No. CM20D201J, (56232 No. 011-038)	Coupling

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A2)324	Same as C(2A2)229	+ 140 V By-pass
C(2A2)325	Same as C(2A2)306	+ 300 V By-pass
C(2A2)326	CAPACITOR, FIXED, PAPER DIELECTRIC: 600V, .001uf, ±10% insulated met. C, hermetically sealed, .298 in. dia X 13/16 in. lg, MIL-C-25A, 81349 No. CP09A1KF102K, (56232 No. 0645-040)	Focus Control By-pass
C(2A2)327	Same as C(2A2)007	Grid By-pass
C(2A2)328	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .22uf, ±10%, met. C, uninsulated, hermetically sealed, .562 in. dia X 1 5/8 in. lg, MIL-C-25A, 81349 No. CP08A1KE224K, (56232 No. 0328-037)	Filter
CA(2A2)304	Same as C(2A2)304A	150 V Bias Filter
CR(2A2)301	RECTIFIER, metallic, 28480 No. 212-114, (56232 No. 4223-09338)	Power Supply
CR(2A2)302	Same as CR(2A2)301	Power Supply
CR(2A2)303 thru CR(2A2)306	RECTIFIER: silicon, 500V P. V. 28480 No. 212-147, (56232 No. 4223-09339)	Voltage Doubler

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
DS(2A2)001	LAMP, INCANDESCENT: 105-125 VAC, 1/4 in., .0003 amp, external, 81349 type NE. 2A (56232 No. 632234-004)	Differential Amplifier Indicator
DS(2A2)002	Same as DS(2A2)001	Differential Amplifier Indicator
DS(2A2)101	Same as DS(2A2)001	Differential Amplifier Indicator
DS(2A2)102	Same as DS(2A2)001	Differential Amplifier Indicator
DS(2A2)302 thru DS(2A2)305	LAMP, INCANDESCENT: 6.3V, 0.945W, .15 amp. dsgn. cur, 24455 No. type T bulb, (56232 No. 0174-011)	Scale Lights
DS(2A2)307	Same as DS(2A2)001	Voltage References
DS(2A2)308	Same as DS(2A2)001	Voltage Reference
E(2A2)001	BINDING POST ASSEMBLY: red, 28480 No. AC-10D, (56232 No. 4223-09340)	Vertical Input
E(2A2)002	INSULATOR, BINDING POST: 28480 No. AC-54B, (56232 No. 4223-09341)	Vertical Input Insulator
E(2A2)003	Same as E(2A2)001	
F(2A2)101	FUSE, CARTRIDGE: 2 amp, 125 V max, AC, DC, T delay, 25 sec min at 200% load, 71400 No. type MDL, (56232 No. 1200584-002)	Filament Transformer

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
J(2A2)001	CONNECTOR ASSEMBLY: 28480 No. G-76J, (56232 No. 4223-09342)	Vertical Amplifier Input
J(2A2)101	Same as J(2A2)001	Horizontal Amplifier Input
L(2A2)201	REACTOR: R. F. Imh: 28480 No. 48-96, (56232 No. 4223-09386)	Plate Choke
L(2A2)202	COIL, RADIO FREQUENCY: 360 uh, 28480 No. 48-63, (56232 No. 4223-09363-001)	Plate Choke
L(2A2)301	COIL, RADIO FREQUENCY: 700 turns, univ wound type, 21 AWG, .156 in. dia, 3/8 in. X 1 1/2 in., 5 mh nom ind, 99848 No. type 35000- 15-502, (56232 No. 1200655)	R. F. Oscillator Choke
L(2A2)302	COIL, RADIO FREQUENCY: 200 uh, 28480 No. 48-34, (56232 No. 4223-09363-002)	Oscillator
R(2A2)001	RESISTOR, FIXED, DEPOSITED CARBON: 900,000 ohms $\pm 1\%$ , 1 w 28480 No. 31-900K, (56232 No. 4223-07360-003)	Grid
R(2A2)002	RESISTOR, FIXED, DEPOSITED CARBON: 90,000 ohms $\pm 1\%$ , 1/2w, 28480 No. 33-90K, (56232 No. 4223-09359-005)	Grid
R(2A2)003	RESISTOR, FIXED, FILM: 9,000 ohms, $\pm 1\%$ , 1/2w, 19701 No. type DC-1/2B, (56232 No. 1381079-012)	Grid



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)004	RESISTOR, FIXED, FILM: 1000 ohms, ±1%, 1/2w, 19701 No. type DC-1/2C, (56232 No. 1381079-003)	Grid
R(2A2)005	RESISTOR, FIXED, FILM: 1 meg, ±1%, 1/2w, 19701 No. type DC-1/2A, (56232 No. 1381079-010)	Grid
R(2A2)006	RESISTOR, FIXED, COMPOSITION: 100,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF104J, 96906 No. MS35043-135, 01121 No. EB-1045, (56232 No. 813186-097)	Grid Leak
R(2A2)007	Same as R(2A2)006	Grid Leak
R(2A2)008	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF101J, 96906 No. MS35043-63, 01121 No. EB-1015, (56232 No. 813186-025)	Grid
R(2A2)009	Same as R(2A2)008	Grid
R(2A2)010	RESISTOR, VARIABLE: dual concentric linear taper, rear section .250 ohms, ±10%, front section 10,000 ohms, ±10%, 2w, 28480 No. 210-199, (56232 No. 4223-09323)	A & B Vertical DC Balance Controls

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)011	RESISTOR, FIXED, COMPOSITION: 2.7 meg, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF275J, 96906 No. MS35043-169, 01121 No. EB-2755, (56232 No. 813186-131)	Divider
R(2A2)012	RESISTOR, FIXED, FILM: 75,000 ohms, ±1%, 1w, MIL-R-10509A, 81349 No. RN75B7502F, 96906 No. MS35837-515, (56232 No. 626197-572)	+ 150V Divider
R(2A2)014	RESISTOR, FIXED, FILM: 100,000 ohms, ±1%, 1/2w, 15909 No. type No. -850S, (56232 No. 1200609)	Plate
R(2A2)015	Same as R(2A2)014	Plate
R(2A2)016	RESISTOR, FIXED, FILM: 30,500 ohms, ±1%, 1w, 19701 No. type DC-1, (56232 No. 1200636-002)	Plate
R(2A2)017	Same as R(2A2)016	Plate
R(2A2)018	RESISTOR, VARIABLE: Composition 20,000 ohms, 28480 No. 210-195, (56232 No. 4223-09324)	Vertical Amplifier Vernier
R(2A2)019	RESISTOR, FIXED, FILM: 15,000 ohms, ±1%, 1/2w 19701 No. type DC-1/2C, (56232 No. 1381079-011)	Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)020	RESISTOR, VARIABLE: linear taper, 500 ohms $\pm 10\%$ , 0.2w 28480 No. 210-203, (56232 No. 4223-09325)	Vertical Amplifier Balance Adjustment
R(2A2)021	Same as R(2A2)019	Cathode
R(2A2)022	RESISTOR, FIXED DEPOSITED CARBON: 1200 ohms, $\pm 1\%$ 1/2w 28480 No. 33-1200, (56232 No. 4223-09359-002)	Vert. Ampl. Col.
R(2A2)023	RESISTOR, FIXED, DEPOSITED CARBON: 1800 ohms, $\pm 1\%$ , 1/2w, 28480 No. 33-1800, (56232 No. 4223-09359- 003)	Vert. Ampl. Gain Control
R(2A2)025	RESISTOR, FIXED, FILM: 3,000 ohms, $\pm 1\%$ , 1/2w, 19701 No. type DC-1/2C, (56232 No. 1381079-013)	Horizontal Sensitivity Control
R(2A2)028	RESISTOR, FIXED, DEPOSITED CARBON: 6000 ohms, $\pm 1\%$ , 1/2w, 28480 No. 33-6000, (56232 No. 4223-09359-004)	Vert. Ampl. Gain Control
R(2A2)029	Same as R(2A2)003	Vertical Amplifier Sensitivity Control
R(2A2)030	Same as R(2A2)003	Vertical Amplifier Sensitivity Control
R(2A2)031	Same as R(2A2)019	Vertical Sensitivity Control

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)032	Same as R(2A2)019	Vertical Sensitivity Control
R(2A2)033	Same as R(2A2)008	Grid
R(2A2)034	Same as R(2A2)008	Grid
R(2A2)035	RESISTOR, FIXED, FILM: 41,500 ohms, $\pm 1\%$ , 1w, 19701 No. type DC-1, (56232 No. 1200636-003)	Plate
R(2A2)036	Same as R(2A2)035	Plate
R(2A2)037	RESISTOR, FIXED, DEPOSITED CARBON: 49,000 ohms $\pm 1\%$ , 1w, 28480 No. 31-49K, (56232 No. 4223- 09360-001)	Cathode
R(2A2)038	RESISTOR, VARIABLE, COMPOSITION: 5000 ohms, $\pm 10\%$ , 1/4w, 81349 No. RV2ATSA502A, (56232 No. 4223-09555)	Vertical Position Control
R(2A2)039	RESISTOR, FIXED, COMPOSITION: 560 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF561J, 96906 No. MS35043-81, 01121 No. EB-5615, (56232 No. 813186-043)	Cathode
R(2A2)040	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 5,000 ohms, $\pm 30\%$ , 1/3w, lin taper, met. rd shaft, nor tor, 71450 No. 210-134, (56232 No. 1200603)	Vertical Amplitude Gain Adjust

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)041	RESISTOR, FIXED, FILM: 800,000 ohms, $\pm 1\%$ , 1/2w, 19701 No. type DC-1/2A, (56232 No. 1381079-006)	Plate
R(2A2)042	Same as R(2A2)008	Grid
R(2A2)043	Same as R(2A2)008	Grid
R(2A2)044	Same as R(2A2)041	Plate
R(2A2)045	RESISTOR, FIXED, COMPOSITION: 5100 ohms $\pm 5\%$ , 1w 81349 No. RC42GF223J, 56232 No. 813188-066)	Divider
R(2A2)046	RESISTOR, FIXED COMPOSITION: 22,000 ohms, $\pm 5\%$ , 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF223J, 96906 No. MS35045-119, 01121 No. HB-2235, (56232 No. 813190-081)	Plate
R(2A2)047	RESISTOR, FIXED, COMPOSITION: 10,000 ohms, $\pm 5\%$ , 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF103J, 96906 No. MS35045-111, 01121 No. HB-1035, (56232 No. 813190-073)	Cathode
R(2A2)048	Same as R(2A2)046	Plate
R(2A2)049	Same as R(2A2)045	Divider
R(2A2)050	Same as R(2A2)008	Grid
R(2A2)051	Same as R(2A2)008	Grid
R(2A2)101	Same as R(2A2)001	Grid
R(2A2)102	Same as R(2A2)002	Grid

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)103	Same as R(2A2)003	Grid
R(2A2)104	Same as R(2A2)004	Grid
R(2A2)105	Same as R(2A2)005	Grid
R(2A2)106	Same as R(2A2)006	Grid Leak
R(2A2)107	Same as R(2A2)006	Grid Leak
R(2A2)108	Same as R(2A2)008	Grid
R(2A2)109	Same as R(2A2)008	Grid
R(2A2)110A, B	Same as R(2A2)010	A&B Horizontal DC Balance Control
R(2A2)111	Same as R(2A2)011	Divider
R(2A2)112	Same as R(2A2)012	+ 150V Divider
R(2A2)114	Same as R(2A2)014	Plate
R(2A2)115	Same as R(2A2)014	Plate
R(2A2)116	Same as R(2A2)016	Plate
R(2A2)117	Same as R(2A2)016	Plate
R(2A2)118	RESISTOR, VARIABLE: composition 20,000 ohms, 28480 No. 210-195, (56232 No. 4223-09664)	Hor. Sweep Vernier Control
R(2A2)119	Same as R(2A2)019	Cathode
R(2A2)120	Same as R(2A2)020	Horizontal Amplifier Balance Adjustment
R(2A2)121	Same as R(2A2)019	Cathode
R(2A2)122	Same as R(2A2)022	Hor. Ampl. Col.
R(2A2)123	Same as R(2A2)023	Hor. Ampl. Gain Control

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)125	Same as R(2A2)025	Horizontal Sensitivity Control
R(2A2)128	Same as R(2A2)028	Horizontal Ampl. Gain Control
R(2A2)129	Same as R(2A2)003	Horizontal Sensitivity Control
R(2A2)130	Same as R(2A2)003	Horizontal Sensitivity Control
R(2A2)131	Same as R(2A2)019	Horizontal Sensitivity Control
R(2A2)132	Same as R(2A2)019	Horizontal Sensitivity Control
R(2A2)133	RESISTOR, FIXED, FILM: 50,000 ohms, $\pm 1\%$ , 1/2w 19701 No. type DC-1/2B, (56232 No. 1381079-015)	Sweep Generator Control
R(2A2)134	RESISTOR, VARIABLE: comp, 1 sect, 125,000 ohms, $\pm 20\%$ , 2w, lin taper, met. C, rd, 71450 No. type model 2, (56232 No. 1200632)	Sweep Attenuator Adjustment Control
R(2A2)136	RESISTOR, FIXED, FILM: 900,000 ohms, $\pm 1\%$ , 1/2w, 19701 No. type DC-1/2A, (56232 No. 1381079-004)	Sawtooth Control
R(2A2)137	Same as R(2A2)008	Grid
R(2A2)138	Same as R(2A2)008	Grid

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)139	RESISTOR, FIXED, FILM: 415,000 ohms, +1%, 1w, special requirements on 19701 resistor, (56232 No. 1200636-003)	Plate
R(2A2)140	Same as R(2A2)139	Plate
R(2A2)141	Same as R(2A2)037	Cathode
R(2A2)142	Same as R(2A2)038	Horiz. Position Control
R(2A2)143	Same as R(2A2)039	Cathode
R(2A2)144	Same as R(2A2)040	Hor. Amplifier Gain Adjust
R(2A2)145	RESISTOR, FIXED, FILM: 1.5 meg, ±1%, 1/2w, 75042 No. type DCC, (56232 No. 1200634-002)	Plate
R(2A2)146	Same as R(2A2)008	Grid
R(2A2)147	Same as R(2A2)008	Grid
R(2A2)148	Same as R(2A2)145	Plate
R(2A2)149	RESISTOR, FIXED, COMPOSITION: 6200 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF622J, 96906 No. MS35045-106, 01121 No. HB-6225, (56232 No. 813190-068)	+ 150V Divider
R(2A2)150	RESISTOR, FIXED, COMPOSITION: 7500 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF752J, 96906 No. MS35044-122, 01121 No. GB-7525, (56232 No. 813188-070)	Divider



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)151	Same as R(2A2)150	Divider
R(2A2)152	RESISTOR, FIXED, COMPOSITION: 27,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF273J, 96906 No. MS35045-121, 01121 No. HB-2735, (56232 No. 813190-083)	Plate
R(2A2)153	Same as R(2A2)152	Plate
R(2A2)154	Same as R(2A2)008	Grid
R(2A2)155	Same as R(2A2)008	Grid
R(2A2)164	RESISTOR VARIABLE: composition 2500 ohms ±20%, 1/2w, 28480 No. 210-98, (56232 No. 4223-09326)	Horizontal Sweep 5 Times Magnitude Adjustment
R(2A2)165	RESISTOR, FIXED, COMPOSITION: 56 megohms, ±10%, 1/2w, 28480 No. 23-56M, (56232 No. 4223- 09327)	Grid
R(2A2)201	RESISTOR, FIXED, COMPOSITION: 680,000 ohms ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF684J, 96906 No. MS35043-155, 01121 No. EB-6845, (56232 No. 813186-117)	Grid

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)202	RESISTOR, FIXED COMPOSITION: 1.2 meg. ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF125J, 96906 No. MS35043-161, 01121 No. EB-1255, (56232 No. 813186-123)	Grid
R(2A2)203	RESISTOR, FIXED, COMPOSITION: 39,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF393J, 96906 No. MS35045-125, 01121 No. HB-3935, (56232 No. 813190-087)	Plate
R(2A2)204	RESISTOR, FIXED, COMPOSITION: 13,000 ohms +5% 1w, 81349 No. RC32GF133J (56232 No. 813188-076)	Plate
R(2A2)205	Same as R(2A2)204	Plate
R(2A2)206	Same as R(2A2)203	Plate
R(2A2)207	Same as R(2A2)203	Cathode
R(2A2)208	Same as R(2A2)202	Divider
R(2A2)210	RESISTOR, FIXED, FILM: 2 meg, ±1%, 1/2w, 19701 No. type DC-1/2C, (56232 No. 1381079-017)	Divider
R(2A2)211	RESISTOR, FIXED, COMPOSITION: 47 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF470J, 96906 No. MS35043-55, 01121 No. EB-4705, (56232 No. 813186- 017)	Grid

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)212	RESISTOR, FIXED, COMPOSITION: 3600 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF362J, 96906 No. MS35043-100, 01121 No. EB-3625, (56232 No. 813186-062)	Plate
R(2A2)213	RESISTOR, FIXED, COMPOSITION: 3300 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF332J, 96906 No. MS35043-99, 01121 No. EB-3325, (56232 No. 813186-061)	Plate
R(2A2)214	RESISTOR, FIXED, COMPOSITION: 30,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF303J, 96906 No. MS 35045-122, 01121 No. HB-3035, (56232 No. 813190-084)	Cathode
R(2A2)215	RESISTOR, FIXED, FILM: 216.3K ohms, ±1%, 1/2w, 83700 type DC1/2B, (56232 No. 381079-018)	Grid bias
R(2A2)216	RESISTOR, FIXED, DEPOSITED CARBON: 680 ohm, ±1%, 1/2w, 28480 No. 33-680, (56232 No. 4223-09359-001)	Voltage Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)217	RESISTOR, FIXED, DEPOSITED CARBON: 479,000 ohms, $\pm 1\%$ , 1w, 28480 No. 31-479K, (56232 No. 4223-09360-002)	Divider
R(2A2)219	RESISTOR, FIXED, COMPOSITION: 120,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF124J, 96906 No. MS35043-137, 01121 No. EB-1245, (56232 No. 813186-099)	Grid Leak
R(2A2)220	RESISTOR, VARIABLE, COMPOSITION: 1 sect, 100,000 ohms, $\pm 30\%$ , 1/4w, lin taper, met. rd shaft, nor tor, 71450 No. 210-138, (56232 No. 1200602-001)	Pre-set Adjustment Pot.
R(2A2)221	RESISTOR, FIXED, COMPOSITION: 27,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF273J, 96906 No. MS35043-121, 01121 No. EB-2735, (56232 No. 813186-083)	Grid
R(2A2)222	RESISTOR, FIXED, COMPOSITION: 7.5 meg, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF755J, 96906 No. MS35043-180, 01121 No. EB-7555, (56232 No. 813186-142)	Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)223	RESISTOR, FIXED, COMPOSITION: 16,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF163J, 96906 No. MS35043-116, 01121 No. EB-1635, (56232 No. 813188-078)	Plate
R(2A2)224	RESISTOR, FIXED COMPOSITION: 62,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF623J, 96906 No. MS35045-130, 01121 No. HB-6235, (56232 No. 813190-092)	Plate
R(2A2)225	Same as R(2A2)047	Cathode
R(2A2)226	Same as R(2A2)047	Cathode
R(2A2)227	Same as R(2A2)216	Grid
R(2A2)228	RESISTOR, FIXED, FILM: 284,000 ohms, ±1%, 1/2w 19701 No. type DC-1/2C, (56232 No. 1381079-019)	Grid Bias
R(2A2)229	RESISTOR, VARIABLE: composition, linear taper 500,000 ohms ±30%, 1/4w 28480 No. 210-146, (56232 No. 4223-09362-001)	Sweep Length Control
R(2A2)230	RESISTOR, FIXED, COMPOSITION: 390,000 ohms ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF394J, 96906 No. MS35043-149, 01121 No. EB-3945, (56232 No. 813186-111)	Voltage

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)231	RESISTOR, FIXED, COMPOSITION: 270,000 ohms $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF274J, 96906 No. MS35043-145, 01121 No. EB-2745, (56232 No. 813186-107)	Voltage Divider
R(2A2)232	RESISTOR, FIXED COMPOSITION: 1000 ohms $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF102J, 96906 No. MS35043-87, 01121 No. EB-1025, (56232 No. 813186-049)	Plate
R(2A2)233	RESISTOR, FIXED, COMPOSITION: 33,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF333J, 96906 No. MS35044-137, 01121 No. GB-3335, (56232 No. 813188-085)	Cathode
R(2A2)234	RESISTOR, FIXED, COMPOSITION: 82,000 ohms, $\pm 5\%$ , 2w at 70 deg. C amb temp F, MIL-R-11, 81349 No. RC42GF823J, 96906 No. MS35045-133, 01121 No. HB-8235 (56232 No. 813190-095)	Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)235	RESISTOR, FIXED, COMPOSITION: 470 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF471J, 96906 No. MS35043-79, 01121 No. EB-4715, (56232 No. 813186-041)	Grid
R(2A2)236	Same as R(2A2)221	Sawtooth Generator
R(2A2)237	Same as R(2A2)235	Grid Resistor
R(2A2)238	RESISTOR, FIXED, COMPOSITION: 68,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF683J, 96906 No. MS35045-131, 01121 No. HB-6835, (56232 No. 813190-093)	Plate Resistor
R(2A2)239	Same as R(2A2)008	Cathode
R(2A2)240	Same as R(2A2)229	Calibrate Adjust
R(2A2)241	RESISTOR, FIXED, DEPOSITED CARBON: 2.163 megohms, ±1%, 1w 28480 No. 31-2.163M, (56232 No. 4223-09360-004)	Sweep Col.
R(2A2)242	RESISTOR, FIXED, COMPOSITION: 22 meg, ±10%, 1/2w at 70 deg. C amb temp, K, MIL-R-11B, 81349 No. RC20GF220K, 01121 No. type EB2261, (56232 No. 1200647)	Sweep Calibrator

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)243	RESISTOR, FIXED, COMPOSITION: 3 meg, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF305J, 96906 No. MS35043-170, 01121 EB-3055, (56232 No. 813186-132)	Bias Top
R(2A2)244	Same as R(2A2)025	Sweep Calibrator
R(2A2)245	RESISTOR, FIXED, COMPOSITION: 1200 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF122J, 96906 No. MS35043-89, 01121 No. EB-1225, (56232 No. 813186-051)	Filament By-pass
R(2A2)246	Same as R(2A2)011	Bias Top
R(2A2)250	RESISTOR, FIXED, DEPOSITED CARBON: 3.6 megohms, $\pm 1\%$ , 1/2w, 28480 No. 33-3.6M (56232 No. 4223-09359- 008)	Sweep Generator Control
R(2A2)251	RESISTOR, FIXED, DEPOSITED CARBON: 1.2 megohms, $\pm 1\%$ , 1/2w, 28480 No. 1.2M, (56232 No. 4223-09359-009)	Sweep Generator Control
R(2A2)252	Same as R(2A2)251	Sweep Generator Control



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)253	RESISTOR, FIXED, DEPOSITED CARBON: 36 megohms, $\pm 1\%$ , 2w, 28480 No. 32-36M, (56232 No. 4223-09665)	Sweep Time Control
R(2A2)254	RESISTOR, FIXED, DEPOSITED CARBON: 12 megohms, $\pm 1\%$ , 1w 28480 No. 31-12M, (56232 No. 4223-09360-008)	Sweep Time Control
R(2A2)255	Same as R(2A2)254	Sweep Time Control
R(2A2)256	RESISTOR, FIXED, FILM: 1.15 meg $\pm 1\%$ , 1/2w, (56232 No. 4223-09360-010)	Sweep Generator Control
R(2A2)257	RESISTOR, FIXED, DEPOSITED CARBON: 376,000 ohms, $\pm 1\%$ , 1/2w 28480 No. 33-376K (56232 No. 4223-09359-011)	Sweep Generator Control
R(2A2)258	Same as R(2A2)257	Sweep Control
R(2A2)259	RESISTOR, VARIABLE: composition, linear taper 20,000 ohms $\pm 10\%$ , 1/4w 28480 No. 210-136, (56232 No. 4223-09328)	.1 Sec. Sweep Time Adjustment
R(2A2)260	Same as R(2A2)259	10 Millisecond Sweep Time Adjustment

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)261	Same as R(2A2)259	1 Millisecond Sweep Time Adjustment
R(2A2)262	RESISTOR, VARIABLE, composition, 50,000 ohms, $\pm 30\%$ , 1/3w, linear taper, 28480, No. 210-153, (56232 No. 4223-09666)	Sweep Time Vernier
R(2A2)263	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF223J, 96906 No. MS35043-119, 01121 No. EB-2235, (56232 No. 813186-081)	Voltage Divider
R(2A2)265	RESISTOR, FIXED, COMPOSITION: 3.9 megohms, $\pm 5\%$ , 1/2w, RC20GF395J (56232 No. 813186-135)	Sweep Generator Control
R(2A2)301	Same as R(2A2)145	Voltage Divider
R(2A2)302	RESISTOR, FIXED, WIREWOUND: 4000 ohms, $\pm 5\%$ , 20w, 28480 No. 27-43 (56232 No. 4223-09361)	300 V Gate Tube By-pass
R(2A2)303	Same as R(2A2)220	Astigmatism Adjustment
R(2A2)304	RESISTOR, FIXED, COMPOSITION: 2.2 meg, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF225J, 96906 No. MS35044-181, 01121 No. GB-2255, (56232 No. 813188-129)	Screen

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)305	Same as R(2A2)232	Grid
R(2A2)306	RESISTOR, FIXED, COMPOSITION: 68,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF683J, 96906 No. MS35044-145, 01121 No. GB-6835, (56232 No. 813188-093)	Screen
R(2A2)307	RESISTOR, FIXED, COMPOSITION: 10,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF103J, 96906 No. MS35043-111, 01121 No. EB-1035, (56232 No. 813186-073)	Screen
R(2A2)308	RESISTOR, FIXED, COMPOSITION: 1 meg, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF105J, 96906 No. MS35044-173, 01121 No. GB-1055, (56232 No. 813188-121)	Plate
R(2A2)309	Same as R(2A2)232	Grid
R(2A2)310	RESISTOR, FIXED, DEPOSITED CARBON: 1.13 megohms, ±1%, 1/2w, 28480 No. 33-1.13M (56232 No. 4223-09359-006)	Divider
R(2A2)311	RESISTOR, FIXED, FILM: 1.39 meg, ±1%, 1/2w, 19701 No. type DC-1/2A, (56232 No. 1381079-031)	Grid Bias

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)312	RESISTOR, FIXED, DEPOSITED CARBON: 2.84 megohms, $\pm 1\%$ , 1/2w 28480 No. 31-2.84M (56232 No. 4223-09360-007)	Divider
R(2A2)313	RESISTOR, FIXED, WIREWOUND: 20,000 ohms, $\pm 10\%$ , 10w, 28480 No. 26-77 (56232 No. 4223-09384)	+ 585V Gate Tube By-pass
R(2A2)314	RESISTOR, FIXED, WIREWOUND: 1500 ohms, $\pm 10\%$ , 20w, 28480 No. 27-46, (56232 No. 4223-09385)	+100V Gate Tube By-pass
R(2A2)315	Same as R(2A2)308	Screen
R(2A2)316	Same as R(2A2)232	Grid
R(2A2)317	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF223J, 96906 No. MS35044-133, 01121 GV-2235, (56232 No. 813188-081)	Screen
R(2A2)318	Same as R(2A2)221	Screen
R(2A2)319	RESISTOR, FIXED, COMPOSITION: 1.2 meg, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF125J, 96906 No. MS35044-175, 01121 No. GB-1255, (56232 No. 813188-123)	Plate

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)320	Same as R(2A2)232	Grid
R(2A2)321	RESISTOR, FIXED, DEPOSITED CARBON: 1.75 megohms, $\pm 1\%$ , 1/2w, 28480 No. 33-1.75M, (56232 No. 4223-09359-007)	Divider
R(2A2)322	RESISTOR, FIXED, FILM: 2.52 meg, $\pm 1\%$ , 1/2w, 19701 No. type DC-1/2B, (56232 No. 1381079-030)	Grid Bias
R(2A2)323	RESISTOR, FIXED, COMPOSITION: 680,000 ohms $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF684J, 96906 No. MS35044-169, 01121 No. GB-6845, (56232 No. 813188-117)	Screen
R(2A2)324	RESISTOR, FIXED, COMPOSITION: 100,000 ohms $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF104J, 96906 No. MS35044-149, 01121 No. GB-1045, (56232 No. 813188-097)	Screen
R(2A2)325	Same as R(2A2)232	Grid
R(2A2)326	RESISTOR, FIXED, COMPOSITION: 12,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF123J, 96906 No. MS35044-127, 01121 No. GB-1235, (56232 No. 813188-075)	Screen

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)327	Same as R(2A2)263	Voltage Divider
R(2A2)328	RESISTOR, FIXED, COMPOSITION: 4700 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF472J, 96906 No. MS35043-103, 01121 No. EB-4725, (56232 No. 813186-065)	Voltage Divider
R(2A2)329	Same as R(2A2)319	Plate
R(2A2)330	Same as R(2A2)232	Grid
R(2A2)331	Same as R(2A2)005	Voltage Divider
R(2A2)332	RESISTOR, VARIABLE: composition, linear taper 3.5 meg ohms, $\pm 30\%$ , 1/4w, 28480 No. 210-194, (56232 No. 4223-09362-002)	150V Regulator Adjust
R(2A2)333	Same as R(2A2)311	Divider
R(2A2)334	RESISTOR, VARIABLE: composition, 1 sect, 1 meg, $\pm 30\%$ , 1/4w, lin taper, met. rd shaft, nor tor, 71450 No. 210-139, (56232 No. 1200602- 002)	H. V. Adjustment Pot.
R(2A2)335	RESISTOR, FIXED, DEPOSITED CARBON: 20 meg ohms, $\pm 1\%$ , 1w, 28480 No. 31-20M, (56232 No. 4223-09360-005)	Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)336	RESISTOR, VARIABLE: composition 1 sect, 5 meg, ±30%, 1/2w, lin taper, met. rd shaft, nor tor, 12697 No. A47-5 MEG-S, (56232 No. 1200607)	Focus Adjustment
R(2A2)337	Same as R(2A2)005	Voltage Divider
R(2A2)338	Same as R(2A2)221	Cathode
R(2A2)339	Same as R(2A2)304	Cathode
R(2A2)341	Same as R(2A2)307	Filter
R(2A2)343	RESISTOR, VARIABLE: composition, 1 meg ohm, ±30%, 0.2w, 28480 No. 210-118, (56232 No. 4223- 09330)	Intensity Adjustment Control
R(2A2)346	RESISTOR, FIXED, DEPOSITED CARBON: 29 meg ohms, ±1%, 1w, 28480 No. 31-29M, (56232 No. 4223-09360-006)	Intensity Control Bleeder
R(2A2)348	RESISTOR, FIXED, COMPOSITION: 270,000 ohms ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF274J, 96906 No. MS35044-159, 01121 No. GB-2745, (56232 No. 813188-107)	Plate
R(2A2)349	Same as R(2A2)046	Plate
R(2A2)350	RESISTOR, FIXED, COMPOSITION: 47,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF473J, 96906 No. MS35043-127, 01121 No. EB-4735, (56232 No. 813186-089)	Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)351	Same as R(2A2)232	Grid
R(2A2)352	RESISTOR, FIXED, COMPOSITION: 2000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF202J, 96906 No. MS35045-94, 01121 No. HB-2025, (56232 No. 813190-056)	+ 150V Divider
R(2A2)353	RESISTOR, FIXED, COMPOSITION: 510 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF511J, 96906 No. MS35044-94, 01121 No. GB-5115, (56232 No. 813188-042)	Divider
R(2A2)354	RESISTOR, FIXED, COMPOSITION: 2700 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF272J, 96906 No. MS35043-97, 01121 No. EB-2725, (56232 No. 813186-059)	+ 300V Divider
R(2A2)355	RESISTOR, FIXED, COMPOSITION: 68,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF683J, 96906 No. MS35043-131, 01121 No. EB-6835, (56232 No. 813186-093)	Divider



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)356	Same as R(2A2)355	Divider
R(2A2)357	RESISTOR, VARIABLE: ww, 1 sect, 25 ohms, $\pm 10\%$ , 2w, lin taper, met. C, rd, 71450 No. type GC-252, (56232 No. 1200628)	Scale Light Dimmer Control
R(2A2)358	Same as R(2A2)323	Plate
R(2A2)359	RESISTOR, FIXED, FILM: 750,000 ohms, $\pm 1\%$ , 1/2w MIL-R-10509A, 81349 No. RN70B7503F, 96906 No. MS35836-503, (56232 No. 630705-668)	+ 150V Divider
R(2A2)360	RESISTOR, FIXED, COMPOSITION: 10 meg, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF106J, 96906 No. MS35043-183, 01121 No. EB-1065, (56232 No. 813186-145)	Plate
R(2A2)361	RESISTOR, FIXED, COMPOSITION: 56,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF563J, 96906 No. MS35044-143, 01121 No. GB-5635, (56232 No. 813188-091)	Divider
R(2A2)362	RESISTOR, FIXED, COMPOSITION: 150,000 ohms $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF154J, 96906 No. MS35044-153, 01121 No. GB-1545, (56232 No. 813188-101)	Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)364	RESISTOR, FIXED COMPOSITION: 82,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF823J, 96906 No. MS35043-133, 01121 No. EB-8235, (56232 No. 813186-095)	Divider
R(2A2)365	RESISTOR, VARIABLE: composition, linear taper 50,000 ohms ±20%, 28480 No. 210-18, (56232 No. 4223-09331)	Intensity Front Panel Control
R(2A2)366	RESISTOR, FIXED, COMPOSITION: 33,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF333J, 96906 No. MS35043-123, 01121 No. EB-3335, (56232 No. 813186-085)	Voltage Divider
R(2A2)368	RESISTOR, FIXED, COMPOSITION: 1meg, ±5%, 1/2w at 70 deg. C amb temp F, MIL-R-11, 81349 No. RC20GF105J, 96906 No. MS35043-159, 01121 No. EB-1055, (56232 No. 813186-121)	Filament
R(2A2)369	Same as R(2A2)350	Filter
R(2A2)370	Same as R(2A2)232	Plate

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A2)371	RESISTOR, FIXED COMPOSITION: 2.2 meg, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF225J, 96906 No. MS35043-167, 01121 No. EB-2255, (56232 No. 813186-129)	Filter
S(2A2)001	SWITCH, TOGGLE: spst vertical AC-DC switch, 28480 No. 310-11, (56232 No. 4223-09344)	Vertical Amplifier Input Selector
S(2A2)002	SWITCH ASSEMBLY, VERTICAL SENSITIVITY: 28480 No. 130B-95A, (56232 No. 4223-09345)	Vertical Sensitivity Selector
S(2A2)101	Same as S(2A2)001	Horizontal Amplifier Input Selector
S(2A2)102	SWITCH ASSEMBLY- HORIZONTAL SENSITIVITY: 28480 No. 130B-19L, (56232 No. 4223-09346)	Horizontal Sensitivity Selector
S(2A2)201	SWITCH ASSEMBLY SYNC: 28480 No. 130B-19H, (56232 No. 4223-09347)	Sync Selector Switch
S(2A2)202	SWITCH ASSEMBLY, TRIGGER LEVEL: 28480 No. 130B-19G (56232 No. 4223-09348)	Trigger Slope Selector Switch
S(2A2)204	SWITCH ASSEMBLY SWEEP TIME/CM: 28480 No. 130B- 19J, (56232 No. 4223-09349)	Sweep Time Selector Switch

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
T(2A2)001	TRANSFORMER POWER: 28480 No. 910-162 (56232 No. 4223-09350)	Power Transformer
V(2A2)001	ELECTRON TUBE: MIL-E-1, 81349 No. type 12AU7, (56232 No. 820151)	Phase Inverter Amplifier
V(2A2)002	Same as V(2A2)001	Differential Amplifier
V(2A2)003	ELECTRON TUBE: MIL-E-1, 81349 No. type 12AT7WA, (56232 No. 725485-001)	Differential Amplifier
V(2A2)004	ELECTRON TUBE: 28480 No. 212-6DJ8, (56232 No. 4223-09585)	Differential Ampl.
V(2A2)101	Same as V(2A2)001	Phase Inverter Amplifier
V(2A2)102	Same as V(2A2)001	Differential Amplifier
V(2A2)103	Same as V(2A2)003	Differential Amplifier
V(2A2)104	Same as V(2A2)004	Trigger Ampl.
V(2A2)201	Same as V(2A2)004	Trigger Ampl.
V(2A2)202	Same as V(2A2)003	Trigger Generator
V(2A2)203	ELECTRON TUBE, 94154 No. type 6U8A, (56232 No. 722007)	Sweep Start- Stop Trigger
V(2A2)204	ELECTRON TUBE: MIL-E-1B, 81349 No. type 6C4W, (56232 No. 730923)	Gate Out Cathode Follower

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE OS-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
V(2A2)205	ELECTRON TUBE: 24446 No. type 12AL5, (56232 No. 1035164)	Integrator Switch
V(2A2)206	ELECTRON TUBE: 49671 No. type 6AW8, (56232 No. 734688)	A/ Integrator Cathode Follower, B/ Feedback Integrator
V(2A2)207	ELECTRON TUBE: MIL-E-1B, 81349 No. type 12AX7, (56232 No. 823494)	A/ Retrig- gering Hold- off, B/Retrig Cont Bias
V(2A2)301	ELECTRON TUBE: 58872 No. type 12BA4 (56232 No. 1200705)	+ 300V Series Regulator
V(2A2)302	ELECTRON TUBE: JAN 1A 81350 No. type 6AU6, (56232 No. 821157)	+ 300V Control Tube
V(2A2)303	Same as V(2A2)301	+ 300V Series Regulator
V(2A2)304	ELECTRON TUBE: MIL-E-B, 81349 No. type 6B86, (56232 No. 728972)	+ 100V Control Tube
V(2A2)305	ELECTRON TUBE: JAN-1A, 81350 No. type 6X4W, (56232 No. 712224-001)	+ 150V Rectifier
V(2A2)306	Same as V(2A2)301	+ 150V Series Regulator
V(2A2)307	Same as V(2A2)304	+ 150V Control
V(2A2)308	ELECTRON TUBE: MIL-E- 1B, 81349 No. type 5651, (56232 No. 823668-001)	Reference
V(2A2)309	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5AQP1, (56232 No.615509-001)	Cathode Ray

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
OSCILLOSCOPE 0S-103/FPN (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
V(2A2)310	ELECTRON TUBE: JAN-1A 81350 No. type 5642, (56232 No. 720333-001)	High Voltage Rectifier
V(2A2)311	Same as V(2A2)310	High Voltage Rectifier
V(2A2)312	Same as V(2A2)001	High Voltage Control
V(2A2)313	ELECTRON TUBE: 79500 No. type 6AQ5, (56232 No. 806831)	R. F. Oscillator
V(2A2)314	Same as V(2A2)004	A/ + 585V Series Regulator, B/ + 585V Control
XDS(2A2)001	LAMPHOLDER ASSEMBLY: set of 4 with connecting wires, 28480 No. 145-25, (56232 No. 4223-09357)	For DS(2A2)001
XF(2A2)001	FUSEHOLDER: extractor post type, 250V, 15 amps, 03614 No. HKP. ELQ RWZ, (56232 No. 1381759)	For F(2A2)001

POWER SUPPLY ASSEMBLY PP-2541/FPN-42

(2A3)	POWER SUPPLY: 300V DC, 300 MA, 60 cycles, single phase, (56232 No. 1504973)	Power Supply
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TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A3)001 thru C(2A3)004	CAPACITOR-ELECTROLYTIC: 100uf, 350V, 4 prong plug-in base, mfg. by Sprague Mfg. Co. as part #SP-CE-51A- 1010 (4223-09545)	+300V Filter
C(2A3)005	CAPACITOR-ELECTROLYTIC: Sprague Mfg. Co., (56232 No. 4223-09546)	+ 150V Filter
C(2A3)006A	CAPACITOR-ELECTROLYTIC: 45uf, 45V, 4 prong plug-in base, purchase from Sprague Mfg. Co. as Part #SPCE52A- 450P (4223-09544)	+ 150V Output Bypass
C(2A3)006B	Same as C(2A3)006A	+ 150V Filter
C(2A3)007	Same as C(2A3)005	+ 150V Filter
C(2A3)008	Same as C(2A3)005	+ 150V Filter
C(2A3)009	Same as C(2A3)005	-150V Filter
C(2A3)010	Same as C(2A3)005	-150V Filter
C(2A3)011	Same as C(2A3)005	+ 300V Output Bypass
C(2A3)012	Same as C(2A3)005	-150V Filter
C(2A3)013A	Same as C(2A3)006A	-150V Filter
C(2A3)013B	Same as C(2A3)006A	-150V Filter
C(2A3)014	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .10uf, ±10%, insulated met. C, hermetically sealed, .625 in. dia X 1 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KE104K, (56232 No. 0645-035)	Noise Filter For V4

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A3)015	Same as C(2A3)014	+ 300V Freq. Response
C(2A3)016	Same as C(2A3)014	+ 150V Freq. Response
C(2A3)017	CAPACITOR, FIXED PAPER DIELECTRIC: 200V .47uf ±10%, insulated met. C, hermetically sealed, .625 in. dia X 1 11/16 in. lg. MIL-C-25A, 81349 No. CP09A1KC474K, (56232 No. 0645-020)	Noise Filter For V8
C(2A3)018	CAPACITOR, FIXED, PAPER DIELECTRIC: 400V, .047uf, ±10%, insulated met. C, hermetically sealed, .463 in. dia X 1 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KE473K, (56232 No. 0645-033)	Reference Tube Bypass
C(2A3)019	Same as C(2A3)018	Reference Tube Bypass
C(2A3)020	Same as C(2A3)017	Noise Filter For V8
C(2A3)021	Same as C(2A3)018	Reference Tube Bypass
C(2A3)022	Same as C(2A3)018	Reference Tube Bypass
C(2A3)023	Same as C(2A3)014	-150 Freq. Response



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A3)024	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V D. C. 10uf $\pm 10\%$ , insulated met. C, hermetically sealed, 0.463 in., dia X 1 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KC104K, (56232 No. 0645-016)	Filament Bias Bypass
C(2A3)025	Same as C(2A3)018	Grid Resistor V6A
CB(2A3)001A	CIRCUIT BREAKER, AIR ARC QUENCHING: DP, AC, 120V, 60 cycles, 5 amp, 74193 No. XAM-33, (56232 No. 1381787-001)	Power Supply #1 Circuit Breaker
CB(2A3)001B	Same as CB(2A3)001A	Power Supply #2 Circuit Breaker
CB(2A3)003	CIRCUIT BREAKER, AIR ARC QUENCHING: 2P, AC, 120V, 60 CY, 1.2 amp, 74193 No. type XAM-33, (56232 No. 1381787-004)	Blower Circuit Breaker
CR(2A3)001 thru CR(2A3)008	SEMICONDUCTOR DEVICE, DIODE: MIL-E-1B, 81349 No. type IN540, (56232 No. 631806-001)	+ 300V Rectifier
CR(2A3)009 thru CR(2A3)014	Same as CR(2A3)001	+ 150V Rectifier
CR(2A3)015 thru CR(2A3)017	Same as CR(2A3)001	+150V Ref Rectifier

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
CR(2A3)018 thru CR(2A3)026	Same as CR(2A3)001	-150V Reference Rectifier
DS(2A3)001A	LAMP, GLOW: neon, 1/4w, 108 to 132 AC, 24446 No. type NE-51H, (56232 No. 1380726)	F1A Blown Fuse Indicator
DS(2A3)001B	Same as DS(2A3)001A	F1B Blown Fuse Indicator
DS(2A3)002A	Same as DS(2A3)001A	F2A Blown Fuse Indicator
DS(2A3)002B	Same as DS(2A3)001A	F2B Blown Fuse Indicator
DS(2A3)003A	Same as DS(2A3)001A	F3A Blown Fuse Indicator
DS(2A3)003B	Same as DS(2A3)001A	F3B Blown Fuse Indicator
DS(2A3)004A	Same as DS(2A3)001A	F4A Blown Fuse Indicator
DS(2A3)004B	Same as DS(2A3)001A	F4B Blown Fuse Indicator
DS(2A3)005A	Same as DS(2A3)001A	F5A Blown Fuse Indicator
DS(2A3)005B	Same as DS(2A3)001A	F5B Blown Fuse Indicator

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
F(2A3)001A	FUSE, CARTRIDGE: 2 amp, 125V, 96906 No. MS 90078-26-1, (56232 No. 632367-011)	Pulse Gen #1 Filament Transmitter
F(2A3)001B	Same as F(2A3)001A	Pulse Gen #2 Filament Transmitter
F(2A3)002A	FUSE, CARTRIDGE: 3 amp, 125V, 96906 No. MS90078- 27-1 (56232 No. 632367-012)	Power Supply #1 Primary
F(2A3)002B	Same as F(2A3)002A	Power Supply #2 Primary
F(2A3)003A	FUSE, CARTRIDGE: 0.500 amp nor inst, MIL-F-15160C, 96906 No. MS90078-7-1 (56232 No. 632337-007)	Power Supply #1 + 150
F(2A3)003B	Same as F(2A3)003A	Power Supply #2 + 300
F(2A3)004A	FUSE, CARTRIDGE: 0.125 amp nor inst, MIL-F-15160C, 96906 No. MS90078-4-1 (56232 No. 632337-004)	Power Supply #1 + 150
F(2A3)004B	Same as F(2A3)004A	Power Supply #2 +150
F(2A3)005A	Same as F(2A3)004A	Power Supply #1 -150
F(2A3)005B	Same as F(2A3)004A	Power Supply #2 -150
K(2A3)001	RELAY-TOTALLY INCLOSED: 120V, 50/60 cycles DPDT contacts, octal base, 4- No. 6 threaded studs used for mounting, purchase from Kurman Mfg. Co. as their Part #26S20 (4223-09535)	Power Input

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
L(2A3)001	CHOKE, RADIO FREQUENCY: special requirements on 08779 No. TARC 3685, (56232, 4223-09533)	+ 300V + 150V Filter
L(2A3)002A	CHOKE-FILTER: 2 section, 1 Henry per section, 300Ma., purchase from Signal Transformer Co. as No. TARC 3686(4223-09537)	Dual Filter
L(2A3)002B	Same as L(2A3)002A	Dual Filter
R(2A3)003	RESISTOR, FIXED, COMPOSITION: 1000 ohms, ±5%, 1/2w, 81349 No. RC20GF102J, (56232 No. 813186-049)	Grid V3B
R(2A3)004	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 1/2w, 81349 No. RC20GF101J, (56232 No. 813186-025)	Grid V1A
R(2A3)005	RESISTOR, FIXED, FILM: 1 meg, +1%, 1/2w, 81349 No. 70B1004F, MS35836-506, (56232 No. 630705-680)	Plate V3B
R(2A3)006	RESISTOR, FIXED, WIREWOUND: inductive, 100 ohms, ±5%, 5w, 260 deg. max temp, 25 deg. C amb temp, MIL-R-26, 81349 No. RW55G101, (56232 No. 727241- 061)	Cathode V1
R(2A3)007	Same as R(2A3)006	Cathode V1
R(2A3)008	Same as R(2A3)004	Grid, V1B

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)009	RESISTOR, FIXED, FILM: 90,900 ohms, +1%, 1/2w 81349 No. 70B9092F, MS35836-481, (56232 No. 630705-580)	Voltage Divider For V4 Bias
R(2A3)011	Same as R(2A3)004	Grid, V2A
R(2A3)012	Same as R(2A3)006	Cathode V2
R(2A3)013	Same as R(2A3)006	Cathode V2
R(2A3)014	Same as R(2A3)004	Grid, V2B
R(2A3)015	Same as R(2A3)005	Plate V4A
R(2A3)016	RESISTOR, FIXED, FILM: 121,000 ohms, +1%, 1/2w 81349 No. 70B1213F, MS35836-484, (56232 No. 630705-592)	Plate V4B
R(2A3)019	Same as R(2A3)003	Grid, V4B
R(2A3)020	Same as R(2A3)005	Bias V4B
R(2A3)021	RESISTOR, VARIABLE: composition, 1 sect, 50,000 ohms, ±20%, 2w, std Ataper, slot. met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYSB503B, (56232 No. 625713-017)	300V Level Adj.
R(2A3)023	RESISTOR, FIXED, FILM: 100,000 ohms, +1%, 1/2w, 81349 No. 70B1003F, MS35836-482, (56232 No. 630705-584)	V4 Cathode
R(2A3)024	RESISTOR, FIXED, FILM: 60.40 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN70B60R4F, (56232 No. 630705-275)	Plate V4B

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)025	Same as R(2A3)004	Grid, V6A
R(2A3)026	Same as R(2A3)023	V4 Grid Voltage Div.
R(2A3)027	Same as R(2A3)006	Cathode V6
R(2A3)028	Same as R(2A3)006	Cathode V6
R(2A3)029	Same as R(2A3)004	Grid, V6B
R(2A3)030	RESISTOR, FIXED, WIREWOUND: inductive, 24,900 ohms, $\pm 1\%$ , 1w, 85 deg. C max temp, 20 deg. C amb temp, MIL-R-93A, 81349 No. RB19AE24901F, (56232 No. 607301-526)	Plate V8A
R(2A3)031	RESISTOR, FIXED, WIREWOUND: inductive, 4990 ohms, $\pm 1\%$ , 1w, 85 deg. max temp, 20 deg. C amb temp, MIL- R93A, 81349 No. RB19AE49900F, (56232 No. 607301-459)	Plate V8A
R(2A3)032	Same as R(2A3)023	+ 300V Output Control Volt Div.
R(2A3)033	Same as R(2A3)003	Grid V7A
R(2A3)034	Same as R(2A3)023	V8 Grid Voltage Div.
R(2A3)035	RESISTOR, FIXED, FILM: 82,500 ohms, $\pm 1\%$ , 1/2w, 81349 No. 70B8252F, MS35836-480, (56232 No. 630705-576)	Grid Bias V8B
R(2A2)036	Same as R(2A3)003	Grid, V8B
R(2A3)037	Same as R(2A3)005	Plate V8B

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)039	Same as R(2A3)005	Plate V7A
R(2A3)041	Same as R(2A3)023	V8 Cathode
R(2A3)042	Same as R(2A3)003	Grid, V8A
R(2A3)043	Same as R(2A3)005	Bias, V8A
R(2A3)044	RESISTOR, VARIABLE: composition, 1 sect, 25,000 ohms, $\pm 20\%$ , 2w, std A taper, slot, met. rd shaft, nor tor, MIL-R-94, 81349 No. RV4NAYSB253B, (56232 No. 625713-015)	+ 150 Level Assembly
R(2A3)045	RESISTOR, FIXED , FILM: 178,000 ohms, $+ 1\%$ , 1/2w, 81349 No. 70B1783F, MS35836-488, (56232 No. 630705-608)	Grid Bias V8A
R(2A3)046	RESISTOR, FIXED, COMPOSITION: 18,000 ohms, $+ 5\%$ , 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB-1835, (56232 No. 813190-079)	Current Limiting V15
R(2A3)047	RESISTOR, FIXED, WIREWOUND: inductive, 1600 ohms, $\pm 5\%$ , 5w, 260 deg. max temp, 20 deg. C amb temp, MIL-R-26, 81349 No. RW55G162, (56232 No. 727241-085)	Current Limiting V9 & V10
R(2A3)048	Same as R(2A3)005	Plate V12A
R(2A3)051	Same as R(2A3)004	Grid, V11A
R(2A3)052	Same as R(2A3)006	Cathode V11

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)053	Same as R(2A3)006	Cathode V11
R(2A3)054	Same as R(2A3)004	Grid, V11B
R(2A3)055	Same as R(2A3)030	Plate V13A
R(2A3)056	Same as R(2A3)035	Plate V13A
R(2A3)057	Same as R(2A5)047	Current Limiting V14 & V15
R(2A3)059	Same as R(2A3)023	V13 Grid Voltage Div.
R(2A3)060	Same as R(2A3)003	Grid, V12A
R(2A3)061	Same as R(2A3)003	Grid, V13B
R(2A3)062	Same as R(2A3)035	Grid Bias V13B
R(2A3)063	Same as R(2A3)005	Plate V13B
R(2A3)066	Same as R(2A3)023	V13 Cathode
R(2A3)067	Same as R(2A3)046	Current Limiting V9
R(2A3)069	Same as R(2A3)003	Grid, V13A
R(2A3)070	Same as R(2A3)005	Bias V13A
R(2A3)071	Same as R(2A3)044	-150V Level Assy
R(2A3)072	Same as R(2A3)045	Grid Bias Resistor V13A
R(2A3)073 thru R(2A3)076	RESISTOR, FIXED, COMPOSITION: 150,000 ohms + 5%, 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB1545, (56232 No. 813190-101)	Bleeder Resistor + 300V Filter



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)077	RESISTOR, FIXED, WIREWOUND: .5 ohms, +5%, 10w, 250 deg. C max, 25 deg. C amb temp, 81349 No. RW56G5RO, (56232 No. 727055-035)	Filter +300 Supply
R(2A3)078	RESISTOR, FIXED, COMPOSITION: 82,000 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF823J, 96906 No. MS35045-133, 01121 No. HB-8235, (56232 No. 813190-095)	Bleeder +150 Filter
R(2A3)079	RESISTOR, FIXED, WIRE WOUND: inductive, 2800 ohms, +5%, 5w, 260 deg. C max, 40 Deg. C amb temp, 81349 No. RW55G312, (56232 No. 727241-090)	Filter +150 Supply
R(2A3)080	Same as R(2A3)077	Filter Resistor +150 Supply
R(2A3)081	Same as R(2A3)046	Current Limiting Resistor V5
R(2A3)082	RESISTOR, FIXED, WW: inductive 10K, +10%, 20w, 63743 No. 20F10000WL (56232 No. 4223-09583)	Load -150 Supply
R(2A3)083	RESISTOR, FIXED, COMPOSITION: 560,000 ohms, +5% 1/2w, 25 deg. C amb temp, F characteristic, 01121 No. EB5645, (56232 No. 813186-115)	Voltage Divider T2-4

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)084	RESISTOR, FIXED, COMPOSITION: 100,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF104J, 96906 No. MS35043-135, 01121 No. EB-1045, (56232 No. 813186-097)	Voltage Divider T2-4
R(2A3)085	RESISTOR, FIXED, WIRE WOUND: inductive 20K + 10% 20w, (56232 No. 4223-09582)	Load + 300 Supply
R(2A3)086	Same as R(2A3)079	Filter -150 Supply
R(2A3)087	Same as R(2A3)078	Bleeder -150 Filter
R(2A3)088	RESISTOR, FIXED, COMPOSITION: 270,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF274J, 96906 No. MS35044-159, 01121 No. GB-2745, (56232 No. 813188-107)	Plate Voltage Dropping For DS3A
R(2A3)089	RESISTOR, FIXED, COMPOSITION: .12 meg ohms, $\pm 5\%$ , 1w, 81349 No. RC 32GF124J, (56232 No. 813188-099)	Voltage Dropping For DS4A
R(2A3)090	Same as R(2A3)089	Voltage Dropping For DS5A

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A3)091	Same as R(2A3)089	Voltage Dropping For DS1B
R(2A3)092	Same as R(2A3)089	Voltage Dropping For DS2B
R(2A3)093	Same as R(2A3)088	Voltage Dropping For DS3A
R(2A3)094	Same as R(2A3)089	Voltage Dropping For DS4B
R(2A3)095	Same as R(2A3)089	Voltage Dropping For DS5B
R(2A3)096	Same as R(2A3)089	Voltage Dropping For DS2A
R(2A3)097	Same as R(2A3)089	Voltage Dropping For DS2A
R(2A3)098	Same as R(2A3)077	Filter +150 Supply
R(2A3)099	Same as R(2A3)082	Load +150 Supply
T(2A3)001	TRANSFORMER-POWER: primary adjusted for 115-120- 125V AC, 50/60 cycles 3 secondaries, designed for full wave rectifier circuit (4223-09534)	Power

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
T(2A3)002	TRANSFORMER-FILAMENT: input 120V, 50/60 cycles AC, 2 secondaries, center tapped, 6.3V at 12 amps 6.3V at 7 amps, (56232 No. 4223-09536)	Filament
TB(2A3)001	TERMINAL BOARD: 14 term incl. slr type, 04430 No. 14GD14L-SBP, (56232 No. 618223-014)	Primary Power
TB(2A3)002	Same as TB(2A3)001	Power Supply #2 to T. B.
TB(2A3)003	TERMINAL BOARD: 11 term, incl scr type 04430 No. 11GD14L-5BP, (56232 No. 618223-011)	Primary Power
V(2A3)001	ELECTRON TUBE: MIL-E-1, 86684 No. 6080 WA, (56232 No. 611297-001)	Gate Tubes+ 300 Supply
V(2A3)002	Same as V(2A3)001	Gates Tubes+ 300 Supply
V(2A3)003	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5751, (56232 No. 671114-001)	Amplifier in+ 300 Reg. Circuit
V(2A3)004	Same as V(2A3)003	Amplifier In+ 300 Reg. Circuit
V(2A3)005	ELECTRON TUBE: MIL-E-1B, 81349 No. type 5651, (56232 No. 823668-001)	V. R. Tube In+ 300 Supply
V(2A3)006	Same as V(2A3)001	Gates Tubes+ 150 Supply
V(2A3)007	Same as V(2A3)003	Amplifier In+ 150 Reg. Circuit

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## POWER SUPPLY ASSEMBLY PP-2541/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
V(2A3)008	Same as V(2A3)003	Amplifier In+ 150 Reg. Circuit
V(2A3)009	Same as V(2A3)005	V. R. Tube In+ 300 Supply
V(2A3)010	ELECTRON TUBE: MIL-E-1B, 81349 No. type 0A2WA, (56232 No. 738627-001)	V. R. Tube In+ 150 Supply
V(2A3)011	Same as V(2A3)001	Gates Tube 150 Supply
V(2A3)012	Same as V(2A3)003	Amplifier In- 150 Reg. Circuit
V(2A3)013	Same as V(2A3)003	Amplifier In- 150 Reg. Circuit
V(2A3)014	Same as V(2A3)010	V. R. Tube In+ 150 Supply
V(2A3)015	Same as V(2A3)005	Cathode Follower
XDS(2A3)001A	LIGHT, INDICATOR: clr amb lens incl, MIL-L-3661, 72619 No. 95410-933, (56232 No. 739130-003)	F1A Blown Fuse Indicator
XDS(2A3)001B	Same as XDS(2A3)1A	For DS(2A3)1B
XDS(2A3)005A	Same as XDS(2A3)1A	For DS(2A3)5A
XDS(2A3)005B	Same as XDS(2A3)1A	For DS(2A3)5B
XF(2A3)001B	FUSEHOLDER: accomodates style F0200F03 fuses, 03614 No. HKPELQRWZ, (56232 No. 1381759)	For F(2A3)001

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## CONTROL PANEL

REF. DESIG.	DESCRIPTION	FUNCTION
(2A5)	CONTROL PANEL: (56232 No. 1504543)	Panel Control
C(2A5)001	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 100 uuf, $\pm 5\%$ , plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C101J, 96906 No. MS35036-17, (56232 No. 610793-023)	Dummy Load Terminating Cap.
C(2A5)002	Same as C(2A5)001	Same as C(2A5)001
DS(2A5)001	LAMP, INCANDESCENT: 28V, 1.2-1.6 W, .035 amp dsgn cur, 24455 No. type T bulb, (56232 No. 0174-031)	PG1 B+ON Indicator
DS(2A5)003	Same as DS(2A5)001	Interlock Indicator
DS(2A5)004	Same as DS(2A5)001	Transmitter No. 1 Ready Indicator
DS(2A5)005	Same as DS(2A5)001	Transmitter #1(ON) Indicator
DS(2A5)006	Same as DS(2A5)001	Transmitter #2 Ready Indicator
DS(2A5)007	Same as DS(2A5)001	Transmitter #2 (ON) Indicator
DS(2A5)008	Same as DS(2A5)001	Interlock Disable Indicator

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## CONTROL PANEL (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
DS(2A5)009	Same as DS(2A5)001	Low Voltage Indicator
DS(2A5)010	Same as DS(2A5)001	Transmitter #1 Overload Indicator
DS(2A5)011	Same as DS(2A5)001	Low Voltage Indicator
DS(2A5)012	Same as DS(2A5)001	Transmitter #2 Overload Indicator
DS(2A5)016	Same as DS(2A5)001	Transmitter #1 Operate Indicator
DS(2A5)017	Same as DS(2A5)001	Transmitter #2 Operate Indicator
E(2A5)001 thru E(2A5)022	INSULATOR, STANDOFF: dielectric matl, 91663 No. TMT-12, (56232 No. 839118)	Standoff
K(2A5)001	RELAY, ARMATURE: 2 pdt, AC, 160V AC max at 5 amps, 78277 No. type 42RJ-4000- ACG-SIL, (56232 No. 1381664)	Transmitter #1 Overload
K(2A5)002	Same as K(2A5)001	Transmitter #2 Overload
MP(2A5)001	NUT, SELF-LOCKING, LATCH: 53705 No. LN-10, (56232 No. 1240720)	

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 CONTROL PANEL (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(2A5)002	Same as MP(2A5)001	
MP(2A5)003	SPACER: teflon, (56232 No. 1200976)	
MP(2A5)004	Same as MP(2A5)003	
MP(2A5)005	PAWL STOP: 94222 No. 45, (56232 No. 1240719)	
MP(2A5)006	Same as MP(2A5)005	
MP(2A5)007 thru MP(2A5)009	KNOB: SS type, bakelite body, 75376 No. S-308-64BB-40282, (56232 No. 252945)	
R(2A5)001	RESISTOR, FIXED, COMPOSITION: 200 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF201J, 96906 No. MS35044-84, 01121 No. GB-2015, (56232 No. 813188-032)	Terminating
R(2A5)002	Same as R(2A5)001	Terminating
R(2A5)003	RESISTOR, FIXED, COMPOSITION: 1,000 ohms, ±5%, 1/2W at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF102J, 96906 No. MS35043-87, 01121 No. EB-1025, (56232 No. 813186-049)	Dummy Load
R(2A5)004	Same as R(2A5)003	Dummy Load
R(2A5)005 thru R(2A5)032	RESISTOR, FIXED, COMPOSITION: 4700 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF472J, 96906 No. MS35045-103, 01121 No. HB-4725, (56232 No. 813190-065)	Indicator Lamp Dropping



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## CONTROL PANEL (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A5)033	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF223J, 96906 No. MS35044-133, 01121 No. GB-2235, (56232 No. 813188-081)	Terminating
R(2A5)034	Same as R(2A5)033	Terminating
S(2A5)001	SWITCH, ROTARY: 4 section, 71590 No. series 20, (56232 No. 600876-408)	Signal Selector Switch
S(2A5)002	SWITCH, PUSH: 110-125V, spdt 05608 No. CR2940- UJ2020, (56232 No. 1380766)	Emergency, stop, XMTR 1
S(2A5)003	Same as S(2A5)002	Emergency Stop Transmitter #2
S(2A5)004	SWITCH, ROTARY: 3 sections, 71590 No. series 20, (56232 No. 601190-302)	Pulse Generator #1 Excitation
S(2A5)005	Same as S(2A5)004	Pulse Generator #2 Excitation
S(2A5)006	SWITCH, TOGGLE: 4pdt, AC, 115V max, 20 amp res cur rating, MIL-S-3950, 96906 No. MS25068-23, (56232 No. 1034916-002)	Pulse Generator Selector Scope Display

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
CONTROL PANEL (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(2A5)007	SWITCH, TOGGLE: DPDT, AC, DC, 250V max, 9 amp AC .5 amp DC, res cur rating, 30 amp max nom cur, 30V, JAN-S-23, 81350 No. ST52N, (56232 No. 0233-004)	Transmitter Selector
S(2A5)008	SWITCH, ROTARY: 2 sections, 71590 No. series 20, (56232 No. 601190-202)	Pulse Generator Selector
S(2A5)009	SWITCH, TOGGLE: spdt, AC, DC, 250V max, 6 amp AC .5 amp DC, res cur rating 20 amp max nom cur, 30V, JAN-S-23, 81350 No. ST420, (56232 No. 0232-004)	Pulse Generator #1 + B
S(2A5)010	Same as S(2A5)009	Pulse Generator #2 B+
S(2A5)011	Same as S(2A5)007	Transmitter #1 B+
S(2A5)012	Same as S(2A5)007	Transmitter #2 B+
S(2A5)013	Same as S(2A5)007	Interlock Disable
S(2A5)014	SWITCH, TOGGLE: spst, AC, DC, 250V max, 6 amp AC .5 amp DC, res cur rating, 20 amp max nom cur, 30V, JAN-S-23, 81350 No. ST42C, (56232 No. 0232-003)	Low Voltage Reset Transmitter #1
S(2A5)015	Same as S(2A5)014	Low Voltage Reset Transmitter #2

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## CONTROL PANEL (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(2A5)016	SWITCH, PUSH: 28 V DC, 17 amps res, 10 amps ind, 115V AC, 15 amps res, 81640 No. C3100P3-DB, (56232 No. 721198-011)	Overload Reset XMTR1
S(2A5)017	Same as S(2A5)016	Overload Reset Transmitter #2

## BLOWER ASSEMBLY

(2A6)	BLOWER, CABINET: (56232 No. 1501556)	Blower, Cooling For Pulse Control
BL(2A6)001A	MOTOR: part of 1501556, 115V, single phase, 50/60 cycle 3300 RPM nominal, 83w, full load, purchase from Rotron Mfg. Co. as dai frame-136A series	Pulse Control Cabinet Blower
BL(2A6)001B	AIR FILTER: part of 1501556, cleanable, non- loading, aluminum, anodized, per MIL-A-8625, 16 in. X 6 in. X 2 in.	Pulse Control Cabinet
BL(2A6)001C	CAPACITOR: part of 1501556, motor starting, fixed, paper, dielectric, 2 uf, 115V AC, Rotron Part #MM-12225-1	Pulse Control Cabinet Blower Motor Starting

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

PULSE GENERATOR: 0-706/FPN-42 (UD2A7) Same as UD2A1, Page 7-6.

ELECTRICAL PULSE ANALYZER TS-1360/FPN-42

REF. DESIG.	DESCRIPTION	FUNCTION
(2A9)	PULSE ANALYZER: (56232 No. 1501491)	PULSE ANALYZER
C(2A9)001	CAPACITOR, FIXED, MICA DIELECTRIC: 300V DC, 10,000 uuf, ±10%, plstc C 51/64 X 51/64 X 1/4 in., MIL-C-5A, 81349 No. CM35B103K, (56232 No. 0162-014)	V1A Input Coupling Trans. Trigger
C(2A9)002	CAPACITOR, FIXED, MICA DIELECTRIC, 300 V DC, 1000 uuf, ±10%, plstc C, 47/64 X 3/16 X 7/16 in., MIL-C-5A, 81349 No. CM20B102K, (56232 No. 0156-028)	Coupling J1 to V6
C(2A9)003	CAPACIOTR, FIXED, MICA DIELECTRIC: 300 V DC, 6800 uuf, ±5%, plstc C, 51/64 X 51/64 X 5/16 in. MIL-C-5A, 81349 No. CM35D682J, (56232 No. 015-021)	Coupling V1A to V1B

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A9)004	CAPACITOR, FIXED, MICA DIELECTRIC: 300 V DC, 150 uuf, ±5%, plstc C, 33/64 X 19/64 X 3/16 in., MIL-C-5A, 81349 No. CM15C151J, 96906 No. MS35036-20, (56232 No. 610793-027)	Coupling V1B to V8
C(2A9)005	Same as C(2A9)004	Coupling V1B to V3A
C(2A9)006	CAPACITOR, FIXED, MICA DIELECTRIC: 500 V DC, 4700 uuf, ±5%, plstc C, 51/64 X 51/64 X 5/16 in., MIL-C-5A, 81349 No. CM35D472J, (56232 No. 015-017)	Coupling V3A to V3B
C(2A9)007	CAPACITOR, FIXED, MICA DIELECTRIC: 500 V DC, 2200 uuf, ±10%, plstc C, 51/64 X 51/64 X 1/4 in., MIL-C-5A, 81349 No. CM30B222K, (56232 No. 0162-006)	Coupling V1A to V1B
C(2A9)008	Same as C(2A9)007	Coupling V3B to V4
C(2A9)009	CAPACITOR, FIXED, MICA DIELECTRIC: 500V DC, 2700 uuf, ±5%, plstc C, 51/64 X 51/64 X 1/4 in., MIL-C-5A, 81349 No. CM20D272J, (56232 No. 015-011)	V4 Feedback

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A9)010	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, .10 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .463 in. dia X 1 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KC104K, (56232 No. 0645-016)	Coupling V4A to V6
C(2A9)011	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, .22 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .625 in. dia X 1 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KC224K, (56232 No. 0645-018)	Bias V6 Filter
C(2A9)012	Same as C(2A9)011	V6 Grid Bias Filter
C(2A9)013	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, 1 uf, $\pm 10\%$ , insulated met. C, hermetically sealed, .813 in. dia X 2 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KC105K, (56232 No. 0645-022)	V6 Screen Grid By Pass
C(2A9)015	Same as C(2A9)002	Coupling V7A to V7B
C(2A9)016	Same as C(2A9)001	Coupling V7B to S2
C(2A9)017	Same as C(2A9)007	Coupling V1B to V8

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(2A9)018	CAPACITOR, FIXED, MICA DIELECTRIC: 300 VDC, 820 uuf, ±5%, plstc C, 47/64 X 7/16 X 3/16 in., MIL-C-5A 81349 No. CM20D821J, (56232 No. 011-053)	V9B Feedback
C(2A9)019	Same as C(2A9)018	Coupling V9A to V9B
C(2A9)020	CAPACITOR, FIXED, MICA DIELECTRIC: 500 VDC, 100 uuf, ±5%, plstc C, 47/64 X 7/16 X 3/16 in., MIL-C-5A 81349 No. CM20C101J, (56232 No. 011-031)	Coupling J3 to V12
C(2A9)021	Same as C(2A9)013	K1 Filter
C(2A9)022	Same as C(2A9)010	R55 By Pass
C(2A9)023	Same as C(2A9)010	V11B Cathode By Pass
C(2A9)024	Same as C(2A9)013	V11 + 150 Filter
C(2A9)025	Same as C(2A9)002	Coupling J1 to J2
C(2A9)026	Same as C(2A9)004	Coupling V6 to V5
C(2A9)027	CAPACITOR, FIXED, MICA DIELECTRIC: 500 VDC, 5600 uuf, ±5%, plstc C, 51/64 X 51/64 X 5/16 in., MIL-C-5A, 81349 No. CM35D562J, (56232 No. 015-019)	Coupling V3A to V3B

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
CR(2A9)001	SEMICONDUCTOR DEVICE DIODE: MIL-E-1/1028, 81349 No. type IN459, (56232 No. 623124-001)	DC Clamping V1A Grid
CR(2A9)002	Same as CR(2A9)001	DC Clamping V1A Grid
DS(2A9)001	LAMP, INCANDESCENT: 28V 1.2-1.6w, .035 amp dsgn cur, 24455 No. type T bulb, (56232 No. 0174-031)	Power On Indicator
F(2A9)001	FUSE, CARTRIDGE: 1,50 amp hor. inst, MIL-F-151600, 96906 No. MS90078-10-1 (56232 No. 632337-010)	Power Input
F(2A9)002	Same as F(2A9)001	Power Input
J(2A9)001	CONNECTOR, RECEPTACLE, ELECTRICAL: L loss plstc dielectric, MS35183-1, 96906 No. UG-912/1, (56232 No. 724102)	Trans. Trigger In
J(2A9)002	Same as J(2A9)001	Scope Trigger Out
J(2A2)003	Same as J(2A9)001	Pulse In
J(2A2)004	Same as J(2A9)001	Output
K(2A9)001	RELAY, ARMATURE: DC., 15 V max, 6 ma min., res. current rating., 15 ma max res current rating. 08664 Cat. No. C1441-50, (56232 No. 1380737)	XMTR Pulse To Output



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(2A9)001 thru MP(2A9)004	PAWL STOP: 94222 No. 45, (56232 No. 1240719)	
MP(2A9)005 thru MP(2A9)008	SPACER: teflon, (56232 No. 1200976)	
MP(2A9)009	DIAL, CONTROL KNOB: type dial, unlimited turns, 76487 No. K10007, (56232 No. 1240653)	
MP(2A9)010	LIGHT, INDICATOR: clr amb lens incl, MIL-L-3661, 72619 No. 95410-933, (56232 No. 739130-003)	
MP(2A9)012	CLAMP, LOOP: MS21919DG, 96906 No. MS21919DG-6, (56232 No. 0310-008)	
MP(2A9)013	NUT, SELF-LOCKING, LATCH: 53705 No. LN-10, (56232 No. 1240720)	
R(2A9)001	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF223J, 96906 No. MS35043-119, 01121 No. EB-2235, (56232 No. 813186-081)	V1A Parasitic Suppressor
R(2A9)002	RESISTOR, FIXED, COMPOSITION: 15,000 ohms, ±5%, 1/2 w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF153J, 96906 No. MS35043-115, 01121 No. EB-1535, (56232 No. 813186-077)	V1A Grid Leak

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)003	RESISTOR, FIXED, COMPOSITION: 120,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF124J, 96906 No. MS35043-137, 01121 No. EB-1245, (56232 No. 813186-099)	V1A Plate Load
R(2A9)004	RESISTOR, FIXED, COMPOSITION: 33,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF333J, 96906 No. MS35044-137, 01121 No. GB-3335, (56232 No. 813188-085)	V1B Plate Load
R(2A9)005	RESISTOR, FIXED, COMPOSITION: 5600 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF562J, 96906 No. MS35043-105, 01121 No. EB-5625, (56232 No. 813186-067)	V1 Cathode Bias
R(2A9)006	RESISTOR, FIXED, COMPOSITION: 1.2 meg, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF125J, 96906 No. MS35043-161, 01121 No. EB-1255, (56232 No. 813186-123)	V1B Grid Leak

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)007	RESISTOR, FIXED, COMPOSITION: 100,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF104J, 96906 No. MS35043-135, 01121 No. EB-1045, (56232 No. 813186-097)	V2A Plate Load
R(2A9)008	Same as R(2A9)002	V3A Grid Sig Limiting
R(2A9)009	RESISTOR, FIXED, COMPOSITION: 33,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF333J, 96906 No. MS35043-123, 01121 No. EB-3335, (56232 No. 813186-085)	V3A Grid Leak
R(2A9)010	Same as R(2A9)007	V3A Plate Load
R(2A9)011	RESISTOR, FIXED, COMPOSITION: 56,000 ohms, $\pm 5\%$ , 1 w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF563J, 96906 No. MS35044-143, 01121 No. GB-5635, (56232 No. 813188-091)	V3B Plate Load
R(2A9)012	RESISTOR, VARIABLE: composition, 1 sect, 5,000 ohms, $\pm 10\%$ , 2w, std A taper, slot., met. rd shaft, nor tor, MIL-R-94A, 81349 No. RV4LAYS502A, (56232 No. 1015763-008)	V3 Cathode Delay Adjust

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)013	RESISTOR, FIXED, COMPOSITION: 6800 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF682J, 96906 No. MS35043-107, 01121 No. EB-6825, (56232 No. 813186-069)	V3 Cathode Bias
R(2A9)015	RESISTOR, FIXED, FILM: 51,100 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN20X5112F, (56232 No. 614599-5561)	V3B 2nd pulse Grid Leak
R(2A9)016	RESISTOR, FIXED, FILM: 130,000 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN20X1303F, (56232 No. 614599-595)	V3B 3rd Pulse Grid Leak
R(2A9)017	RESISTOR, FIXED, FILM: 210,000 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN20X2103F, (56232 No. 614599-615)	V3B 4th Pulse Grid Leak
R(2A9)018	RESISTOR, FIXED, FILM: 280,000 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN20X2803F, (56232 No. 614599-627)	V3B 5th Pulse Grid Leak
R(2A9)019	RESISTOR, FIXED, FILM: 357,000 ohms, ±1%, 1/2w, MIL-R-10509A, 81349 No. RN20X3573F, (56232 No. 614599-637)	V3B 6th Pulse Grid Leak

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)020	RESISTOR, FIXED, FILM: 442,000 ohms, $\pm 1\%$ , 1/2w, MIL-R-10509A, 81349 No. RN20X4423F, (56232 No. 614599-646)	V3B 7th Pulse Grid Leak
R(2A9)021	RESISTOR, FIXED, FILM: 511,000 ohms, $\pm 1\%$ , 1/2w, MIL-R-10509A, 81349 No. RN20X5113F, (56232 No. 614599-652)	V3B 8th Pulse Grid Leak
R(2A9)022	Same as R(2A9)007	V1A Output Sig Limiter To V7A
R(2A9)023	RESISTOR, FIXED, COMPOSITION: 68,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF683J, 96906 No. MS35043-131, 01121 No. EB-6835, (56232 No. 813186-093)	V4A Grid Leak
R(2A9)024	Same as R(2A9)004	V4A Plate Load
R(2A9)025	RESISTOR, FIXED, COMPOSITION: 56,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF563J, 96906 No. MS35043-129, 01121 No. EB-5635, (56232 No. 813186-091)	V4B Plate Load
R(2A9)026	RESISTOR, FIXED, COMPOSITION: 10,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF103J, 96906 No. MS35043-111, 01121 No. EB 1035,(56232 No.813186-073)	V4 Cathode Bias

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)027	Same as R(2A9)007	V4B Grid Leak
R(2A9)028	RESISTOR, FIXED, COMPOSITION: 47,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF473J, 96906 No. MS35043-127, 01121 No. EB-4735, (56232 No. 813186-089)	V6 Suppressor Grid Leak
R(2A9)029	Same as R(2A9)028	V6 Suppressor Grid Bias Volt Divider
R(2A9)030	RESISTOR, FIXED, COMPOSITION: 150,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF154J, 96906 No. MS35043-139, 01121 No. EB-1545, (56232 No. 813186-101)	V6 Suppressor Grid Bias Volt Divider
R(2A9)031	Same as R(2A9)028	V6 Grid Leak
R(2A9)032	Same as R(2A9)002	V6 Control Grid Bias Volt Divider
R(2A9)033	Same as R(2A9)003	V6 Control Grid Bias Volt Divider
R(2A9)034	Same as R(2A9)004	V6 Plate Decoupling
R(2A9)035	Same as R(2A9)013	V6 Plate Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)036	RESISTOR, FIXED, COMPOSITION: 300,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF304J, 96906 No. MS35043-146, 01121 No. EB-3045, (56232 No. 813186-108)	V7A Grid Leak
R(2A9)037	RESISTOR, FIXED, COMPOSITION: 22,000 ohms, $\pm 5\%$ , 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF223J, 96906 No. MS35044-133, 01121 No. GB-2235, (56232 No. 813188- 081)	V7A Plate Load
R(2A9)038	Same as R(2A9)005	V7B Cathode Bias
R(2A9)039	Same as R(2A9)028	V7B Grid Leak
R(2A9)040	RESISTOR, FIXED, COMPOSITION: 220,000 ohms, $\pm 5\%$ , 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF224J, 96906 No. MS35043-143, 01121 No. EB-2245, (56232 No. 813186-105)	V7B Bias Voltage Divider
R(2A9)041	Same as R(2A9)040	V8A Plate Load
R(2A9)042	Same as R(2A9)040	V9A Grid Leak
R(2A9)043	Same as R(2A9)004	V9A Plate Load
R(2A9)044	Same as R(2A9)004	V9B Plate Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)045	RESISTOR, FIXED, COMPOSITION: 18,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF183J, 96906 No. MS35043-117, 01121 No. EB-1835, (56232 No. 813186-079)	V9 Cathode Bias
R(2A9)046	Same as R(2A9)040	V9B Grid Bias Voltage Divider
R(2A9)047	Same as R(2A9)040	V9B Grid Leak
R(2A9)048	RESISTOR, FIXED, COMPOSITION: 100,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF104J, 96906 No. MS35044-149, 01121 No. GB-1045, (56232 No. 813188-097)	V10 Grid Bias Voltage Divider
R(2A9)049	Same as R(2A9)048	V10 Grid Leak
R(2A9)051	RESISTOR, VARIABLE: composition, 1 sect, 5 meg, ±10%, 2w, std A taper, slot., met. rd shaft, nor tor, MIL-R-94A, 81349 No. RV4LAYS505A, (56232 No. 1015763-017)	Coarse Pulse Adj
R(2A9)052	RESISTOR, VARIABLE: composition, 1 sect, 500,000 ohms, ±10%, 2w, std A taper, slot., met. rd shaft, nor tor MIL-R-94A, 81349 No. RV4NAYS504A, (56232 No. 1015926-053)	Fine Pulse Adj



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)053	RESISTOR, FIXED, COMPOSITION: 1000 ohms, ±5%, 1w at 70 deg. C amb tem, F, MIL-R-11, 81349 No. RC32GF102J, 96906 No. MS35044-101, 01121 No. GB-1025, (56232 No. 813188-049)	V10 Plate Decoupling
R(2A9)054	Same as R(2A9)009	V12 Grid Leak
R(2A9)055	RESISTOR, VARIABLE: ww, 1 sect, 50,000 ohms, ±5%, 5w, lin taper, slot, met. rd shaft, nor tor, 73138 No. Model A 50K(1)L.5, (56232 No. 1200086)	Percent Amp. Adj.
R(2A9)056	Same as R(2A9)026	Trans. Pulse Limiter
R(2A9)057	RESISTOR, FIXED, COMPOSITION: 3300 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF332J, 96906 No. MS35043-99, 01121 No. EB-3325, (56232 No. 813186-061)	V11B Cathode Load
R(2A9)058	Same as R(2A9)007	V11B Cathode+ 150 Volt Divider
R(2A9)059	RESISTOR, FIXED, COMPOSITION: 220 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF221J, 96906 No. MS35043-71, 01121 No. EB-2215, (56232 No. 813186-033)	V11B Cathode Decoupling

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)060	Same as R(2A9)026	V12 Cathode Bias
R(2A9)062	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 1/2w, 81349 No. RC20GF101J, (56232 No. 813186-025)	Secondary, T1
R(2A9)063	Same as R(2A9)062	Secondary, T1
R(2A9)064	RESISTOR, FIXED, COMPOSITION: 680,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF684J, 96906 No. MS35043-155, 01121 No. EB-6845, (56232 No. 813186-117)	V1A Output Sig. Limiter
R(2A9)065	RESISTOR, FIXED, COMPOSITION: 4700 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF472J, 96906 No. MS35045-103, 01121 No. HB- 4725, (56232 No. 813190-065)	DS1 Current Limiter
R(2A9)066	Same as R(2A9)065	DS1 Current Limiter
R(2A9)067	RESISTOR, FIXED, COMPOSITION: 27,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF273J, 96906 No. MS35043-121, 01121 No. EB-2735, (56232 No. 813186-083)	V1 DC Clamping Voltage Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(2A9)068	RESISTOR, FIXED, COMPOSITION: 1000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF102J, 96906 No. MS35043-87, (56232 No. 813186-049)	V1 DC Clamping Voltage Divider
R(2A9)069	RESISTOR, FIXED, COMPOSITION: 470,000 ohms, ±5%, 1/2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC20GF474J, 96906 No. MS35043-151, 01121 No. EB-4745, (56232 No. 813186- 113)	V8 Cathode Bias
R(2A9)070	RESISTOR, FIXED, COMPOSITION: 180,000 ohms, ±5%, 1w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC32GF184J, 96906 No. MS35044-155, 01121 No. GB-1845, (56232 No. 813188-103)	V10 Cathode Bias
R(2A9)071	Same as R(2A9)007	Plate Load Resistor
S(2A9)001	SWITCH, ROTARY: 3 sections 71590 no. series 20, (56232 No. 600876-308)	Pulse Selector
S(2A9)002	SWITCH, TOGGLE: DPDT, AC, DC, 250V max, 9 amp AC.5 amp DC. res cur rating, 30 amp max nom cur, 30V, JAN-S-23, 81350 No. ST52N, (56232 No. 0233-004)	Scope Trig. Sel.

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(2A9)003	SWITCH, TOGGLE: 4PDT, AC, 115V max, 20 amp res cur rating, MIL-S-3950, 96906 No. MS25068-23, (56232 No. 1034 916-002)	Power Supply Sel.
S(2A9)004	SWITCH, TOGGLE: SPST, 30 amp, 30V DC, 81350 No. ST42A, (56232 No. 0232-001)	Pulse Spacing
T(2A9)001	TRANSFORMER, STEPDOWN: 105V, 115V, 125V, 60 cps, 6.3V.10 amps 81349 No. TF4RX01JB00B MS90022-2, (56232 No. 1381547)	Filament Transformer
TB(2A9)001	TERMINAL BOARD: 10 term. incl. scr Type, 04430 No. 10GD14L-5BP, (56232 No. 618223-010)	Power Input
V(2A9)001	ELECTRON TUBE: MIL-E-1, 81349 No. Type 5814A, (56232 No. 716841-001)	PRR MV
V(2A9)002	ELECTRON TUBE: MIL-E-1B, 81349 No. Type 5726/6AL5W (56232 No. 716857-001)	Clamping Diode
V(2A9)003	Same as V(2A9)001	Delay MV
V(2A9)004	Same as V(2A9)001	Gate Gen.
V(2A9)005	Same as V(2A9)002	Trigger Clamping
V(2A9)006	ELECTRON TUBE: MIL-E-1, 81349 No. Type 5725/6AS6W (56232 No. 716948-001)	Trigger Gate

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
 MAINTENANCE PARTS LIST (Cont)  
 ELECTRICAL PULSE ANALYZER TS 1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
V(2A9)007	Same as V(2A9)001	Trigger Amplifier And Cathode Follower
V(2A9)008	Same as V(2A9)002	PRR Gate
V(2A9)009	Same as V(2A9)001	1/2 PRR MV
V(2A9)010	Same as V(2A9)001	Relay Driver
V(2A9)011	Same as V(2A9)002	Pulse Clamping
V(2A9)012	Same as V(2A9)001	Pulse Cathode Follower
XVE(2A9)001	SHIELD, ELECTRON TUBE: stet (56232 No. 752889-001)	For XV(2A9)001
XVE(2A9)002	SHIELD, ELECTRON TUBE: stet (56232 No. 752696-001)	For XV(2A9)002
XVE(2A9)003	Same as XVE(2A9)001	For XV(2A9)003
XVE(2A9)004	Same as XVE(2A9)001	For XV(2A9)004
XVE(2A9)005	Same as XVE(2A9)002	For XV(2A9)005
XVE(2A9)006	Same as XVE(2A9)002	For XV(2A9)006
XVE(2A9)007	Same as XVE(2A9)001	For XV(2A9)007
XVE(2A9)008	Same as XVE(2A9)002	For XV(2A9)008
XVE(2A9)009	Same as XVE(2A9)001	For XV(2A9)009
XVE(2A9)010	Same as XVE(2A9)001	For XV(2A9)010
XVE(2A9)011	Same as XVE(2A9)002	For XV(2A9)011
XVE(2A9)012	Same as XVE(2A9)001	For XV(2A9)012
XV(2A9)001	SOCKET, ELECTRON TUBE: copper base alloy contacts, nonplated, (56232 No. 752890-001)	For V(2A9)001

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ELECTRICAL PULSE ANALYZER TS-1360/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
XV(2A9)002	SOCKET, ELECTRON TUBE: copper base alloy contacts, nonplated, 81349 No. TS102P01, (56232 No. 752695-001)	For V(2A9)002
XV(2A9)003	Same as XV(2A9)001	For V(2A9)003
XV(2A9)004	Same as XV(2A9)001	For V(2A9)004
XV(2A9)005	Same as XV(2A9)002	For V(2A9)005
XV(2A9)006	Same as XV(2A9)002	For V(2A9)006
XV(2A9)007	Same as XV(2A9)001	For V(2A9)007
XV(2A9)008	Same as XV(2A9)002	For V(2A9)008
XV(2A9)009	Same as XV(2A9)001	For V(2A9)009
XV(2A9)010	Same as XV(2A9)001	For V(2A9)010
XV(2A9)011	Same as XV(2A9)002	For V(2A9)011
XV(2A9)012	Same as XV(2A9)001	For V(2A9)012

## AMPLIFIER ASSEMBLY AM-2481/FPN-42

(3A)	POWER AMPLIFIER: (56232 No. 1504536) with cabinet assembly, (56232 No. 1504546)	Amplifier and Cabinet
B(3A)003	FAN, CENTRIFUGAL: 115 VDC, 60 cps, 20uf, 220V AC (56232 No. 1505299)	Cooling Blower
C(3A)001	CAPACITOR, VARIABLE, VACUUM DIELECTRIC: 25uuf max cap., tun characteristic, 20,000V max RF peak voltage at 20 amp max rms, 73905 No. TC-525, (56232 No. 1382108)	Neutralizing

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(3A)002	Same as C(3A)001	Neutralizing
C(3A)003 thru C(3A)006	CAPACITOR, FIXED, MICA DIELECTRIC, <i>0.5 ufd 1000 WVDC, +10% oil filled, metal case 1 1/16" x 2 1/8" x 1 3/16" (N5910-198-9686)</i>	RF Bypass
C(3A)007	CAPACITOR, VARIABLE, VACUUM DIELECTRIC: 50uuf max cap., 10uuf min cap. str-line cap. tun characteristic, 30,000V max RF peak voltage at 2 amp max rms, 73905 No. ATC10-50, (56232 No. 1382082)	Neutralizing
C3A)008	Same as C(3A)007	Neutralizing Cap.
C(3A)009	CAPACITOR, FIXED, ELECTROLYTIC: 16,000V D.C., 4uf, +20% -10%, 0 deg. C to 65 deg. C, /1/N/A, /2/N/A, insulated, hermetically sealed, MIL-C-25B, 72928 No. 9549, (56232 No. 1380806)	Energy Storing Cap.
C(3A)010	Same as C(3A)009	Energy Storing Cap.
C(3A)013 thru C(3A)016	Same as C(3A)003	Fil. Bypass
C(3A)017	Same as C(3A)009	Energy Storing
C(3A)018	Same as C(3A)009	Energy Storing

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(3A)021	Same as C(3A)003	Fil Bypass
C(3A)022 thru C(3A)024	Same as C(3A)003	Fil Bypass
C(3A)025	Same as C(3A)009	Energy Storing
C(3A)026	Same as C(3A)009	Energy Storing
C(3A)029 thru C(3A)032	Same as C(3A)003	Fil Bypass
C(3A)033	Same as C(3A)009	Energy Storing
C(3A)034	Same as C(3A)009	Energy Storing
C(3A)037	Same as C(3A)003	Coupling
C(3A)038 thru C(3A)040	Same as C(3A)003	Fil Bypass
C(3A)041	CAPACITOR, FIXED, PAPER DIELECTRIC: 10,800V D.C., 0.07uf, +5%, (56232 No. 1505364)	Tank Tuning
C(3A)042	Same as C(3A)041	Tank Tuning
C(3A)043	CAPACITOR, FIXED, PAPER DIELECTRIC: 1000V DC 15uf, ±10%, met. C, hermetically sealed, 3-3/16 X 3-3/4 X 4-3/4 in. MIL-C-25A 81349 No. CP70B1EG156K, (56232 No. 040-031)	Filter



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(3A)044	CAPACITOR, FIXED, PAPER DIELECTRIC: 10,000V 5uf ±10% uninsulated metal C, 98141 No. 10ES12, (56232 No. 1382224)	Energy Storing
C(3A)045	Same as C(3A)009	Energy Storing
C(3A)046	Same as C(3A)043	Filter
C(3A)047	Same as C(3A)043	Filter Cap
C(3A)048 thru C(3A)065	Same as C(3A)043	Filter Bias Supply
C(3A)066	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V, 1uf, ±10%, insulated met. C, hermetically sealed, .813 in. dia X 2 3/16 in. lg, MIL-C-25A, 81349 No. CP09A1KC105K, (56232 No. 0645-022)	Meter RF Bypass
C(3A)067	Same as C(3A)066	Meter RF Bypass
C(3A)068	CAPACITOR, FIXED, PAPER, DIELECTRIC: 400V, 2.0 uf, ±10%, met. C, insulated, hermetically sealed, 1 in. dia X 1 7/8 in. lg, 56289 No. 118P20594S4, (56232 No. 632313-427)	Blower Motor Start.
C(3A)069	Same as C(3A)041	Tank Tuning
C(3A)070	Same as C(3A)041	Tank Tuning

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(3A)071	CAPACITOR, FIXED, ELECTROLYTIC: .005uf, 10,000V D.C., 00853 No. F3-825, (56232 No. 1383203)	Tank Tuning
C(3A)072 thru C(3A)078	Same as C(3A)071	Plate Load
C(3A)079 thru C(3A)082	Same as C(3A)003	2nd IPA Bias Bypass
C(3A)083	Same as C(3A)071	P.A. Grid Bypass
DS(3A)001 thru DS(3A)004	INDICATOR, LIGHT: clear lens, 1 1/8 dia. bayonet base, 72619 No. 513202-437, (56232 No. 1200409-007)	Illumination light
E(3A)021	INSULATOR, BOWL: No. 436B- MIL-C-15328, JAN-P-735, MIL-E-15090, Type 2, Cl. 2, 2 coats, 74970 No. 135-15-3, (56232 No. 1505307)	Standoff
E(3A)022	Same as E(3A)021	Standoff
E(3A)023 thru E(3A)094	INSULATOR, STANDOFF, steatite, JAN-I-8, 81350 No. NS5W0316, (56232 No. 0352-027)	Standoff
E(3A)095	INSULATOR, STANDOFF: dielectric matl, 91663 No. TMT-12, (56232 No. 839118)	Standoff

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
E(3A)097	Same as E(3A)021	Standoff
E(3A)098 thru E(3A)112	Same as E(3A)095	Standoff
E(3A)113 thru E(3A)122	INSULATOR, STANDOFF: cer, 72656 No. NS5W053Z, (56232 No. 1200126)	Standoff
E(3A)123 thru E(3A)156	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0324, (56232 No. 0352-029)	Standoff
E(3A)158 thru E(3A)169	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0320, (56232 No. 0352-028)	Standoff
E(3A)170	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0310, (56232 No. 0352-025)	Standoff
E(3A)171 thru E(3A)217	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0308, (56232 No. 0352-024)	Standoff
E(3A)218	Same as E(3A)048	Standoff
FL(3A)001	FILTER, BAND PASS: special requirements on (56232 No. 1505700)	High Pass
J(3A)001	CONNECTOR, PLUG, ELECTRICAL: 2 cont, 1 conn mating end, 02660 No. SC-264, (56232 No. 1200138)	Monitor Scope Input Jack
J(3A)002	Same as J(3A)001	Spare
J(3A)003	Same as J(3A)001	Transmitter Pulse Input

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
J(3A)004	Same as J(3A)001	Spare
L(3A)001	INDUCTANCE STANDARD: fixed, 1.0 mh inductance, 100kc, special requirements on 73386 inductor, (56232 No. 1382229)	Decoupling Coil
L(3A)002	Same as L(3A)001	Decoupling Coil
L(3A)003	COIL, RADIO FREQUENCY: single layer wound type, inductance 29uhY+10% (Q) min 185, capacitance 390uuf+ 39uuf, (56232 No. 1382111)	Parasitic Suppressor
L(3A)004	Same as L(3A)003	Parasitic Suppressor
L(3A)005	Same as L(3A)001	Decoupling Coil
L(3A)006	Same as L(3A)001	Parasitic Suppressor
L(3A)007	Same as L(3A)003	Parasitic Suppressor
L(3A)008	Same as L(3A)003	Parasitic Suppressor
L(3A)009	Same as L(3A)001	Decoupling Coil
L(3A)010	Same as L(3A)001	Decoupling Coil
L(3A)011	Same as L(3A)003	Parasitic Suppressor
L(3A)012	Same as L(3A)003	Parasitic Suppressor

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
L(3A)013	Same as L(3A)001	Decoupling Coil
L(3A)014	Same as L(3A)001	Decoupling Coil
L(3A)015	Same as L(3A)003	Parasitic Suppressor
L(3A)016	Same as L(3A)003	Power Amplifier Grid Suppressor Choke
L(3A)017	Same as L(3A)001	Decoupling Coil
L(3A)018	Same as L(3A)001	Decoupling Coil
M(3A)001	AMMETER: DC type, 0 to 500 MA, 81349 No. MR36W500DCMAR, (56232 No. 720691-027)	Individual Cathode Cur.
M(3A)002	AMMETER: DC, amp, 96906 No. MR36W005DCAAR, (56232 No. 739109-005)	Total Cathode Current
MP(3A)001 thru MP(3A)006	COLLAR, SHAFT: stainless steel, (56232 No. 1241231)	Switch Stop
MP(3A)007 thru MP(3A)142	WASHER: nonmettalic, nylon fabric, (56232 No. 304738)	Washer
MP(3A)144 thru MP(3A)195	CLAMP: resistor, (56232 No. 1380798-004)	Resistor Clamp
MP(3A)196 thru MP(3A)215	WASHER, NONMETALLIC: fbr, nylon, (56232 No. 1200130)	

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(3A)216 thru MP(3A)223	SPACER: teflon, (56232 no. 1200976)	
MP(3A)224 thru MP(3A)231	PAWL STOP: 94222 No. 45, (56232 No. 1240719)	
MP(3A)232 thru MP(3A)269	BUS BAR: leaded brs, (56232 No. 1241207)	
MP(3A)270 thru MP(3A)273	CLAMP, RIM CLENCHING: cres, .390 in. dia, slot., incl MS35233-15 scr, mach, Timber Top Inc., Freeport, N.Y. No. 109074-337, (56232 No. 1034574-005)	
MP(3A)274	ROD: plstc, 1/2 in. dia, (56232 No. 1241220)	
MP(3A)275 thru MP(3A)280	BLOCK: (56232 No. 1241216)	
MP(3A)281 thru MP(3A)286	BRACKET, DOUBLE ANGLE: S.S, (56232 No. 1381638)	
MP(3A)287 thru MP(3A)306	PIN, STRAIGHT: sst, (56232 No. 1200986)	Feedthru Stud
MP(3A)307	GASKET: syn rub. sh type GPA, (56232 No. 1200988)	Feedthru Stud
MP(3A)308	Same as MP(3A)307	Feedthru Stud
MP(3A)309 thru MP(3A)317	HOOK, GROUNDING ASSEMBLY: (56232 No. 1382117)	

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(3A)318	GASKET: rub, (56232 No. 1241243)	
MP(3A)319	Same as MP(3A)318	
MP(3A)320	KNOB: SS type, bakelite body, 75376 No. S-308-64BB-40282, (56232 No. 252945)	
MP(3A)321	Same as MP(3A)320	
MP(3A)322 thru MP(3A)353	INSULATOR: washer, muscovite mica, (56232 No. 0171-005)	
MP(3A)354 thru MP(3A)385	BRACKET, ANGLE: stl, cad plated, slot., 44655 No. 6101, (56232 No. 174824)	
R(3A)001	RESISTOR, FIXED, WIREWOUND: 500 ohms, $\pm 5\%$ , 26w, 81349 No. RW33V501, (56232 No. 0738-075)	Pulse Driver Load
R(3A)003	RESISTOR, FIXED, COMPOSITION: 27 ohms, $\pm 5\%$ , 2w, 81349 No. RC42GF270J, (56232 No. 813190-011)	Primary T3
R(3A)004	RESISTOR, FIXED, COMPOSITION: 33 ohms, $\pm 5\%$ , 2w, 81349 No. RC42GF330J, (56232 No. 813190-013)	Cathode
R(3A)005	RESISTOR, FIXED, COMPOSITION: 300 ohms, $+5\%$ , 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB3015, (56232 No. 813190-036)	Cathode

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A)006	Same as R(3A)005	Cathode
R(3A)007	RESISTOR, FIXED, WW: non-ind, 200 ohms 175w Type RW11, (56232 No. 1380789-005)	Interlock Disch.
R(3A)008	RESISTOR, FIXED, WW: non-ind 2,500 ohms, 175w (56232 No. 1380789-002)	B+ Decoupling
R(3A)009	RESISTOR, FIXED, WW: non-ind, 400 ohms, 175w, 07716 No. RW11 (56232 No. 1380789-004)	Damping
R(3A)010	Same as R(3A)009	Damping
R(3A)013	RESISTOR, FIXED, WW: non-ind 710 ohms, 175w, type RW11, (56232 No. 1380789-003)	Bias Isolation
R(3A)014	RESISTOR, FIXED, COMPOSITION: 200 ohms, +20% special requirements on 10646 resistor, (56232 No. 1241691-001)	Decoupling
R(3A)016	RESISTANCE ELEMENT: 300 ohms + 2%, 300w, 02922 type C, (56232 No. 1505701-001)	Damping
R(3A)017	Same as R(3A)016	Interlock Discharge
R(3A)018 thru R(3A)021	RESISTOR, FIXED COMPOSITION: 1200 ohms, +10%, non-inductive, (56232 No. 1241712)	Plate Decoupling



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A)022	RESISTOR, FIXED, WW: non-ind, 2.5 ohms 175w type RW11, (56232 No. 1380789- 006)	V5 Plate Load
R(3A)023	Same as R(3A)022	V1 Plate Load
R(3A)024 thru R(3A)027	RESISTOR, FIXED: composition, 220 ohms, ±5%, 2w at 70 deg C amb temp, F, MIL-R-11, 81349 No. RC42GF221J, 96906 No. MS35045-71, 01121 No. HB-2215, (56232 No. 813190-033)	Parasitic Suppressor
R(3A)028 thru R(3A)031	RESISTOR, FIXED, COMPOSITION: 2 ohms, 80 watts, 63743 type 80 RFB, (56232 No. 1505361-001)	Current Balancing
R(3A)032 thru R(3A)035	Same as R(3A)018	Plate Decoupling
R(3A)036	Same as R(3A)022	V6 Plate Load
R(3A)037	Same as R(3A)022	V2 Plate Load
R(3A)038 thru R(3A)041	Same as R(3A)024	Parasitic Suppressor
R(3A)042 thru R(3A)045	Same as R(3A)028	Current Balancing
R(3A)046 thru R(3A)049	Same as R(3A)018	Plate Decoupling
R(3A)050	Same as R(3A)022	V7 Plate Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A)051	Same as R(3A)022	V3 Plate Load
R(3A)052 thru R(3A)055	Same as R(3A)024	Parasitic Suppressor
R(3A)056 thru R(3A)059	Same as R(3A)028	Current Balancing
R(3A)060 thru R(3A)063	Same as R(3A)018	Plate Decoupling
R(3A)064	Same as R(3A)022	V8 Plate Load
R(3A)065	Same as R(3A)022	V5 Plate Load
R(3A)066 thru R(3A)069	Same as R(3A)024	Parasitic Suppressor
R(3A)070 thru R(3A)073	Same as R(3A)028	Current Bal.
R(3A)074	RESISTANCE ELEMENT: 10 ohms, +2%, 300w, 02922 type C, (56232 No. 1505701-002)	Current Bal.
R(3A)075	Same as R(3A)074	Current Bal.
R(3A)076	Same as R(3A)007	Interlock Discharge
R(3A)077	Same as R(3A)007	Interlock Discharge
R(3A)078	RESISTOR, FIXED, COMPOSITION: 47 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF470J, 96906 No. MS35045-55, 01121 No. HB-4705, (56232 No. 813190- 017)	Line Term

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A)079	Same as R(3A)078	Line Term
R(3A)080 thru R(3A)089	Same as R(3A)016	Damping
R(3A)090 thru R(3A)119	Same as R(3A)074	Damping
R(3A)120	RESISTOR, FIXED, COMPOSITION: 1,100 ohms, +5%, 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB1125 (56232 No. 813190-050)	Second I.P.A. Monitor Divider
R(3A)121	RESISTOR, FIXED, COMPOSITION: 200 ohms, +5%, 2w 25deg. C amb tem, F characteristic, 01121 No. HB2015, (56232 No. 813190-032)	Second I.P.A. Monitor Divider
R(3A)122 thru R(3A)124	RESISTOR, FIXED, WIREWOUND: 1200 ohms, ±5%, 175w, 75042 No. RW11, (56232 No. 1380789-008)	Plate load V9
R(3A)126 thru R(3A)128	Same as R(3A)122	Plate load Resistor, V10
R(3A)130	RESISTOR, FIXED, WIREWOUND: inductive, 16,000 ohms, ±5%, 145w 275 deg. C max temp, 25 deg. C amb temp, 81349 No. RW47G163, (56232) No. 1200097-002)	Pulse Driver Plate Voltage Divider

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A)131	RESISTOR, FIXED, WIREWOUND: inductive, 250,000 ohms, $\pm 5\%$ , 145w, 275 deg. C max temp, 25deg. C amb temp, 81349 No. RW47G253, (56232 No. 1200097-001)	Pulse Driver Plate Voltage Divider
R(3A)132	Same as R(3A)131	Pulse Driver Plate Voltage Divider
R(3A)133 thru R(3A)137	Same as R(3A)122	Grid Bias
R(3A)138 thru R(3A)141	RESISTOR, FIXED, WIREWOUND: inductive, 16 ohms $\pm 5\%$ , 26w, 325deg. C max temp. 25 deg. C amb temp, MIL-R-26, 81349 No. RW33V160, (56232 No. 0738-045)	Pulse Driver Plate Voltage Divider
R(3A)142	Same as R(3A)005	Damping
R(3A)143	Same as R(3A)005	Damping
R(3A)144 thru R(3A)159	Same as R(3A)024	Power Amplifier Grid Parasitic Suppressors
R(3A)160 thru R(3A)175	Same as R(3A)138	Pulse Driver Plate Voltage Divider
R(3A)176	RESISTOR, FIXED, COMPOSITION: 91 ohms, $\pm 5\%$ , 2w, 81349 No. RC42GF910J, (56232 No. 813190-024)	Hi-pass Filter Load

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
<del>R(3A)177</del> <del>thru</del> <del>R(3A)107</del>	<del>Same as R(3A)022</del>	<del>D. A. Filament</del> <del>Dropping</del>
S(3A)001	SWITCH, INTERLOCK: AC, DC, 10 amp, 1/2 amp, 1/4 amp, 250V max, spdt, 74059 No. 2AC6, (56232 No. 849511)	Interlock Control
S(3A)002	Same as (3A)001	Interlock Control
S(3A)004 thru S(3A)009	Same as S(3A)001	Interlock Control
S(3A)010	SWITCH, AIRFLOW: special req on 96502 No. type 113MF-E, (56232 No. 1380722)	XMTR 1 Air
S(3A)011 thru S(3A)016	SWITCH: c/o 1 switch, 1 bracket, 1 shaft, 1 collar, 2 springs, 3 studs, and 1 coupling, (56232 No. 1505264)	Door Interlock
S(3A)017	SWITCH, ROTARY: 2 sections, 71590 No. CRL PA242- series, (56232 No. 1200286)	Tube Selector
S(3A)018	SWITCH, ROTARY: 2 sections, 71590 No. series 20, (56232 No. 601076-207)	Signal Selector
S(3A)019	SWITCH, PUSH: 95403 No. CR2940-UK202C, (56232 No. 1200411)	Emergency Stop
T(3A)001	TRANSFORMER, POWER, STEPDOWN: 105V, 115V, 210V, 220V input, 10V, 10 amp output, 80223 No. H-135 TF4RV01HA, (56232 No. 1382063)	Filament 1st I. P. A.

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
T(3A)002	Same as T(3A)001	Filament 1st I. P. A.
T(3A)003	TRANSFORMER, POWER, STEPDOWN: 2.5.1, center tap 7500V D.C. secondary 2000V DC, 15 amps, 400 ohms, amb temp 0-60 deg. C, +5% at 100 KC, 73386 No. 33309, (56232 No. 1505096)	Interstage
T(3A)004	TRANSFORMER, AUDIO: 3.33. 1 turns ratio, 73386 transformer, (56232 No. 1381572)	Interstage
T(3A)005	TRANSFORMER, OUTPUT: 30 KV, 360A primary current, 10 KV, 1170A secondary current, (56232 No. 1505362)	P.A. Output
T(3A)006	COAXIAL PICK-UP ASSEMBLY (56232 No. 1505260)	Current Output Mon. XFMR
T(3A)007	TRANSFORMER, PULSE, 0.45: 0.45, 0.45KV, 1.0 to 6.0 usec, (56232 No. 606836-002)	Signal Coupling
T(3A)008 thru T(3A)012	TRANSFORMER: 60 cps 208V primary, MIL-T-27 class 4: <i>TEN TAP PRIMARY, PROCURED ON CG 58,692-A</i>	P.A. Filament
TB(3A)001	TERMINAL BOARD: 16 term. incl, scr type, 71785 No. 16-142A-B2P, (56232 No. 618263-016)	Term Board
TB(3A)002	TERMINAL BOARD: 10 term incl, scr type 71785 No. 10-142A-132P, (56232 No. 618263-007)	Term Board

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## AMPLIFIER ASSEMBLY AM-2481/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
TB(3A)003	TERMINAL BOARD: scr type, (56232 No. 1505140)	Terminal Board
TB(3A)004	TERMINAL BOARD: 6 term. incl, scr type, 71785 No. 6-152-B2, (56232 No. 765750-006)	Term Board
TB(3A)005	TERMINAL BOARD: 10 term. incl scr type, 71785 No. 10-142A-B2P, (56232 No. 618263-010)	Term Board
TB(3A)006	Same as TB(3A)005	Term Board
TB(3A)007	Same as TB(3A)001	First I.P.A. Terminal Board
V(3A)001 thru V(3A)010	ELECTRON TUBE: freq. 100KC duty factor 2.4%, input 8500w, output 4,500w, grid bias 500V DC 73445 type 7800, (56232 No. 1383362)	Power Ampl.
V(3A)011	ELECTRON TUBE: 10V, 12.5 amperes, 72092 type 304th, (56232 No. 1383157)	Second I. P. A.
V(3A)012	Same as V(3A)011	Second I. P. A.
XV(3A)011	SOCKET, ELECTRON TUBE: (56232 No. 1383156)	For V(3A)011
XV(3A)012	Same as XV(3A)011	For V(3A)012

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER

REF. DESIG.	DESCRIPTION	FUNCTION
(3A1)	PULSE DRIVER: alum No. 30, special shape, 1/8 in thk (56232 No. 1504544)	Pulse Driver
C(3A1)001	CAPACITOR, FIXED, PAPER DIELECTRIC: 200V D.C., 12uf, +10%, 10.8uf to 13.2uf, metal, N/A, insulated, paper, hermetically sealed, 1-1/2 in., .016 in., .016 in., MIL-C-25A, 56289 No. 118P1269252, (56232 No. 626942)	V1, V2 Screen Grid Bypass
C(3A1)002	CAPACITOR, FIXED, PAPER DIELECTRIC: 15uf, 1,000V D.C. +10%, 13.5uf to 16.5 uf, metal, uninsulated, 4-3/4 in. lg. 1-15/16 in. 3-3/16 in., 81349 No. CP70B1EG156K, (56232 No. 040-031)	V1 Cathode Bypass
C(3A1)003	Same as C(3A1)001	Bias Adjust Bypass
C(3A1)004	CAPACITOR, FIXED, PAPER DIELECTRIC: 4uf + 20% 4000V DC w/brkt CP07SE5 (56232 No. 706711)	V1, V2 Grid Bias Filter
C(3A1)005	Same as C(3A1)002	V1, V2 Screen B+ Filter
C(3A1)006	Same as C(3A1)001	Cathode Bypass
C(3A1)007	Same as C(3A1)001	Cathode Bypass
C(3A1)008	CAPACITOR, FIXED, ELEC-TROLYTIC: 50VDC, 60uf, ±25%, 81349 No. CL25BJ600UP3, (56232 No. 617625-051)	Cathode Bypass



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
C(3A1)009	Same as C(3A1)008	Cathode Bypass
CR(3A1)001	SEMICONDUCTOR, DEVICE, DIODE: 01295 No. 1N539, (56232 No. 1200139)	Cathode Bypass
E(3A1)001	CONNECTOR, ELECTRON TUBE: 72092 No. Type HR-8 (56232 No. 1200723-003)	Standoff
E(3A1)002	Same as E(3A1)001	Standoff
E(3A1)003	INSULATOR: bushing, steatite, JAN-I-8, 81350 No. NS3W4104, (56232 No. 0253-004)	Standoff
E(3A1)004	Same as E(3A1)003	Standoff
E(3A1)005	INSULATOR: bushing, steatite, JAN-I-8, 81350 No. NS3W4204, (56232 No. 0253-014)	Standoff
E(3A1)006	Same as E(3A1)005	Standoff
E(3A1)007	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0104, (56232 No. 0352-001)	Standoff
E(3A1)008 thru E(3A1)012	Same as E(3A1)007	Standoff
E(3A1)013 thru E(3A1)020	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0308, (56232 No. 0352-024)	Standoff
E(3A1)021	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0316, (56232 No. 0352-027)	Standoff

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
F(3A1)001	FUSE, CARTRIDGE: 1 amp, nor, inst, MIL-F-151600, 81349 No. MS90078-9-1, (56232 No. 632337-009)	Power Input
F(3A1)002	Same as F(3A3)001	Power Input
J(3A1)001	CONNECTOR, PLUG, ELECTRICAL: 3 cont, 1 conn mating end, 02660 No. SC-264, (56232 No. 1200138)	Pulse Input
MP(3A1)001	INSULATOR, WASHER: muscovite mica, (56232 No. 0171-012)	
MP(3A1)002	Same as MP(3A1)001	
R(3A1)001	RESISTOR, FIXED, COMPOSITION: 150 ohms, $\pm 5\%$ 2w, 25 deg. C amb temp, F, characteristic, 01121 No. HB-1515 (56232 No. 813190-029)	V1, V2, Grid Bias Decoupling
R(3A1)002	Same as R(3A1)001	V1, Grid Leak
R(3A1)003	RESISTOR, FIXED, COMPOSITION: 100 ohms, $\pm 5\%$ , 2w, 25 deg. C amb temp, F characteristic, 01121 No. HB1015 (56232 No. 813190-025)	V2, Grid Leak
R(3A1)004	RESISTOR, FIXED, WIREWOUND: 2500 ohms, $\pm 5\%$ , 55w, 81349 No. RW35V252, (56232 No. 0739-089)	V1, Parasitic Suppressor

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A1)008	RESISTOR, VARIABLE: wirewound, 10,000 ohms ±10%, .09 amp. 75w. 300 deg. C max temp 25 amb temp, 81349 No. RP201AS103KK, (56232 No. 601541-058)	V1, V2 Screen Grid Voltage Dropping
R(3A1)009	RESISTOR, FIXED, COMPOSITION: 47 ohms, ±5%, 2w at 70 deg. C amb temp, F, MIL-R-11, 81349 No. RC42GF470J (56232 No. 813190-017)	Screen Divider
R(3A1)010	Same as R(3A1)009	V1, V2 Screen Grid Voltage Divider
R(3A1)011	RESISTOR, VARIABLE: composition, 1 section, 100 ohms, +20%, 2w, linear taper A, single shaft, flatted, 2 1/2 in lg., .140 in. w, spst, .14 amp, 14V, NC at CCW pos of shaft, opr at start of rot, 3 term, wire lead type, 81349 No. RV4NAYF- 101B, (56232 No. 625713-181)	V1, V2 Screen Voltage Adjust
R(3A1)012	RESISTOR, FIXED, COMPOSITION: 100 ohms, ±5%, 2w, 81349 No. RC42GF101J, (56232 No. 813190-025)	V1, V2 Screen Voltage Decoupling
R(3A1)013	Same as R(3A1)004	V1 Grid Leak
R(3A1)014	<del>RESISTOR, FIXED, WIREWOUND: 2,000 ohms +10% 25w (56232 No. 712804-008)</del> Potentiometer, Slotted shaft: 2500 ohms, 50 Watts (FSN N 5905-251-9132)	V1 Grid Leak

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
R(3A1)015	RESISTOR, FIXED, WIREWOUND: inductive, 2,000 ohms $\pm 5\%$ , 26w, 325 deg. C max 25 deg. C amb temp, MIL-R-26, 81349 No. RW33V202, (56232 No. 0738-087)	V2 Grid Leak
R(3A1)020	Same as R(3A1)015	First I.P.A. Bias Divider
R(3A1)021	RESISTOR, FIXED, COMPOSITION: 470 ohms, $\pm 5\%$ , 2w, 81349 No. RC42GF471J, (56232 No. 813190-041)	Monitor Voltage Divider
R(3A1)022	Same as R(3A1)021	Monitor Voltage Divider
R(3A1)023	Same as R(3A1)012	Cathode
R(3A1)024	RESISTOR, FIXED, WIREWOUND: 16 ohms, $\pm 5\%$ , 14w, 81349 No. RW31V160, (56232 No. 0737-045)	Filament Dropping
T(3A1)001	TRANSFORMER, PULSE: 0.14KV, 73386 No. 32844, (56232 No. 1380836)	Pulse Input
T(3A1)002	TRANSFORMER, PULSE: 1.0KV, 0.7KV, MIL-T-27A grade 4, 73386 No. 32845, (56232 No. 1380837)	V1, V2 Filament
T(3A1)003	TRANSFORMER, PULSE: special requirements on 73386 No. 32235, (56232 No. 1383171)	Pulse Output

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## PULSE DRIVER (Cont)

Ref. DESIG.	DESCRIPTION	FUNCTION
T(3A1)004	TRANSFORMER, POWER, STEPDOWN: 208V, 60cps input, 26V, 5 amp, output, 73386 No. 32845, (56232 No. 1380838)	Pulse Output
T(3A1)005	TRANSFORMER, POWER, STEPDOWN: 105V, 115V 125V, 60 cps, 6.3V, 5 amps, 81349 No. TF4RX01GB007, MS90021-2, (56232 No. 1381546)	Filament Transformer
TB(3A1)001	TERMINAL BOARD: 12 term. incl, scr type, 04430 No. 12GD14L-5BP, (56232 No. 618223-012)	Pulse Driver Terminal Board
V(3A1)001	ELECTRON TUBE: uhf planar triode ceramic type, MIL-E-1, 24446 No. 3CX100A5 (56232 No. 632298)	First Pulse Driver Amplifier
V(3A1)002	Same as V(3A1)001	First Pulse Driver Amplifier
V(3A1)003	ELECTRON TUBE: MIL-E-1B, 81349 No. type 4PR60A, (56232 No. 600198-001)	Pulse Amplifier
V(3A1)004	Same as V(3A1)003	Pulse Amplifier

OSCILLOSCOPE 0S-103/FPN (UD3A2), Same as UD2A2 Page 7-32

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## ANTENNA COUPLER CU-807/FPN-42

REF. DESIG.	DESCRIPTION	FUNCTION
(4A)	COUPLING AND LOAD: (56232 No. 1505194)	Coupling
CR(4A)001	RECTIFIER, METALLIC: 115V. AC, 90V, D.C. out, resistive load type, 81840 No. B-6162-B, (56232 No. 1380801)	XMTR Function Switch Relay Coil Power Supply.
DS(4A)001	INDICATOR, LIGHT: green lens, 72619 No. 513202, (56232 No. 1200409-002)	XMTR 1 to ANT
DS(4A)002	Same as DS(4A)001	XMTR 2 to ANT
DS(4A)003	INDICATOR, LIGHT: red lens, 72619 No. 513202-431, (56232 No. 1200409-001)	Local Operation
DS(4A)004	INDICATOR, LIGHT: amber lens, 72619 No. 513202-433, (56232 No. 1200409-003)	Remote Operation
DS(4A)005	INDICATOR, LIGHT: clear lens, 72619 No. 513202-437, (56232 No. 1200409-007)	Meter Light
DS(4A)006	Same as DS(4A)003	Warning- Remote Operation
E(4A)001	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0332, (56232 No. 0352-030)	Standoff
E(4A)002	Same as E(4A)001	Standoff

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## ANTENNA COUPLER CU-807/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
E(4A)003	INSULATOR, STANDOFF: steatite( spec. JAN-I-10), Grade L-3, 81350 No. NS5W0212, (56232 No. 0352-015)	Standoff
E(4A)005 thru E(4A)010	INSULATOR, STANDOFF: steatite, JAN-I-8, 81350 No. NS5W0212, (56232 No. 0352-016)	Standoff
J(4A)001	CONNECTOR, PLUG, ELECTRICAL: 2 cont, 1 conn mating end, 02660 No. SC-264, (56232 No. 1200138)	Ant Pulse Sampling To Scope
J(4A)002	Same as J(4A)001	Dummy Load Pulse Sampling To Scope
K(4A)001	STARTER, MOTOR: remotely controlled, ovld protection type, 63743 No. type No. 4111-D 3110, (56232 No. 1200119)	Blower Control
K(4A)002	RELAY, THERMAL: spst, normally open, 115V, 4w, 93929 type TF-06-NO-115, (56232 No. 1241476)	Blower Control
M(4A)001	AMMETER: 100 amp, 3 1/2 in face, 65092 No. 1533, (56232 No. 1504638)	Antenna Current
MP(4A)001 thru MP(4A)008	CLAMP, CABLE: (56232 No. 0318-008)	

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

ANTENNA COUPLER CU-807/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
MP(4A)009 thru MP(4A)032	WASHER, NONMETALLIC: fbr, nylon, (56232 No. 1200130)	
MP(4A)033 thru MP(4A)042	WASHER, NONMETALLIC: nylon fabric, (56232 No. 304738)	
MP(4A)043 thru MP(4A)054	INSULATOR, STANDOFF: cer, 72656 No. NS5W053Z, (56232 No. 1200126)	
MP(4A)055	WINDOW, METER: gl, (56232 No. 1241224)	Safety Glass
R(4A)001 thru R(4A)048	RESISTOR, FIXED, WW: non-inductive, 2,500 ohms 175w, type RW11, (56232 No. 1380789-001)	Dummy Load
R(4A)049	RESISTOR, FIXED, WIREWOUND: inductive, 50 ohms, $\pm 5\%$ , 5w, 260 deg. max temp, 25 deg. C amb temp, MIL-R-26, 81349 No. RW55G500, (56232 No. 727241-055)	T3 Balance
R(4A)050	Same as R(4A)049	T3 Balance
R(4A)051	Same as R(4A)049	T4 Balance
R(4A)052	Same as R(4A)049	T4 Balance
S(4A)001	SWITCH: spdt, momentary power, (56232 No. 1505323)	Antenna Current Operate
S(4A)002	RELAY, SOLENOID: 12 pos. 7 wafers 81840 Model BD5 (56232 No. 1380802)	XMTR Function



TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

## ANTENNA COUPLER CU-807/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(4A)003	RELAY, SOLENOID: spdt, AC, 115V, 3.8 amps max, .5 amps min., 17w, 73905 No. type R-2 (56232 No. 1380800)	XMTR 1 Load
S(4A)004	Same as S(4A)003	XMTR 2 Load
S(4A)005	SWITCH, AIRFLOW: special req on 96502, No. Type 113MF-F, (56232 No. 1380722)	XMTR 1 Air
S(4A)006	Same as S(4A)005	XMTR 2 Air
S(4A)007	SWITCH, TOGGLE: dpdt, AC, 115V max, 20 amp res cur rating, MIL-S-3950, 96906 No. MS25068-23, (56232 No. 1034916-002)	Local-Remote
S(4A)008	SWITCH, INTERLOCK: AC, DC, 10 amp, 1/2 amp, 1/4 amp, 250V max, spdt, 74059 No. 2AC6, (56232 No. 849511)	Interlock
S(4A)009	Same as S(4A)008	Interlock
S(4A)010	Same as S(4A)008	Interlock Cab XMTR 1
S(4A)011	Same as S(4A)008	Interlock cab XMTR 1
S(4A)012	Same as S(4A)008	Ant SW Interlock
S(4A)013	Same as S(4A)008	Ant SW Interlock
S(4A)014	Same as S(4A)008	Interlock Cab XMTR 2

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)  
ANTENNA COUPLER CU-807/FPN-42 (Cont)

REF. DESIG.	DESCRIPTION	FUNCTION
S(4A)015	Same as S(4A)008	Interlock Cab XMTR 2
T(4A)001	TRANSFORMER, POWER, STEPDOWN: 300V, duty cycle 0.03, single phase, 2 holes spaced .166 in ctoc. 73386 No. 32537, (56232 No. 1381774)	Ant. Pulse Sampling Isolation
T(4A)002	Same as T(4A)001	Dummy Load Pulse Sampling Isolation
T(4A)003		
T(4A)004	Same as T(4A)001	Dummy Load Load Monitor
TB(4A)001	TERMINAL BOARD: 16 term. incl, scr type, 71785 No. 16-142A-B2P, (56232 No. 618263-016)	Power And Control XMTR 1
TB(4A)002	Same as TB(4A)001	Power and Control XMTR 2
TB(4A)003	TERMINAL BOARD: 7 term. incl, scr type, 71785 No. 7--42A-B2P, (56232 No. 618263-007)	

## CENTRIFUGAL FAN ASSEMBLY HD-399/FPN-42

(5A)	BLOWER ASSEMBLY: (56232 No. 1504538)	Blower
MP(5A)001	SLEEVE, COMPRESSION: tub-hose fitting, (56232 No. 1504991)	Flexible Sleeve Inlet

TABLE 7-2. LORAN TRANSMITTING SET AN/FPN-42  
MAINTENANCE PARTS LIST (Cont)

SUPPORT EQUIPMENT - UD6A - This is an auxiliary unit; no parts listing.
TEST EQUIPMENT - UD6A1 - This is an auxiliary unit; no parts listing.
SPECIAL TOOLS - UD6A2 - This is an auxiliary unit; no parts listing.

INSTALLATION EQUIPMENT

REF. DESIG.	DESCRIPTION	FUNCTION
(6A3)	INSTALLATION EQUIPMENT: (56232 No. 1504996)	Installation
E(6A3)005 thru E(6A3)020	INSULATOR, STANDOFF: 75539 catalog No. 1382079 14761 D6, 6 in. height, type D cap, (56232 No. 1382079)	Standoff
MP(6A3)001 thru MP(6A3)016	CLAMP, LOOP: (56232 No. 1382365)	
MP(6A3)017 thru MP(6A3)044	COUPLING, COPPER: tubing, (56232 No. 1382359)	
MP(6A3)045 thru MP(6A3)048	CLAMP, LOOP: al, ASTM 50520, H34 temper, (56232 No. 1241367)	
MP(6A3)049 thru MP(6A3)052	CLAMP, RIM CLENCHING: (56232 No. 138225)	

INTER-UNIT CABLES - UD8A - This is an auxiliary unit; no parts listing.

CABLES - UD8A1 - This is an auxiliary unit; no parts listing.

CABLES - UD8A2 - This is an auxiliary unit; no parts listing.

TABLE 7-3. LORAN TRANSMITTING SET AN/FPN-42  
LIST OF MANUFACTURERS

CODE	NAME	ADDRESS
00853	Sangamo Electric Co.	Marion, Illinois
01121	Allen Bradley Co.	Milwaukee, Wisconsin
01295	Texas Instruments Transistor Products Division	Dallas, Texas
02660	American Phenolic Corp.	Chicago, Illinois
02922	Ohmweve Co.	West Hartford, Connecticut
03614	Bussmann Fuse Division of McGraw Edison Co.	Los Angeles, California
04430	Excellex Electronics, Inc.	Cedarhurst, New York
05608	General Electric Supply Corp.	Chicago, Illinois
07716	International Resistance Co.	Burlington, Iowa
08664	The Bristol Co.	Waterbury, Connecticut
08779	Signal Transformer Co.	Brooklyn, New York
12697	Clarostat Mfg. Co., Inc.	Dover, New Hampshire
14655	Cornell Dubilier Electric Corp	South Plainfield, New Jersey
15909	Daven Co.	Newark, New Jersey
19701	Electra Mfg. Co.	Kansas City, Missouri
22119	Ferranti Electric, Inc.	New York, New York
24446	General Electric Co.	Schenectady, New York
24455	General Electric Co.	Nela Park, Cleveland, Ohio
28480	Hewlett and Packard Co.	Palo Alto, California
32537	Joy Mfg. Co.	Pittsburgh, Pennsylvania
37942	P. R. Mallory & Co., Inc.	Indianapolis, Indiana
44655	Ohmite Mfg. Co.	Chicago, Illinois

TABLE 7-3. LORAN TRANSMITTING SET AN/FPN-42  
LIST OF MANUFACTURERS

CODE	NAME	ADDRESS
49671	Radio Corp. of America	New York, New York
49956	Raytheon Mfg. Co.	Waltham, Massachusetts
53705	Scovill Mfg. Co.	Waterbury, Connecticut
56232	Sperry Gyroscope Co. Division of Sperry Rand Corp.	Great Neck, New York
56289	Sprague and Carleton	Keene, New Hampshire
63743	Ward Leonard Electric Co.	Mount Vernon, New York
70309	Allied Control Co., Inc.	New York, New York
71400	Bussmann Mfg. Co.	St. Louis, Missouri
71450	Chicago Telephone Supply Co.	Elkhart, Indiana
71590	Centralab Division of Globe Union, Inc.	Milwaukee, Wisconsin
71785	Cinch Mfg. Corp.	Chicago, Illinois
72092	Eitel McCullough, Inc.	San Bruno, California
72619	Dial Light Co. of America, Inc.	New York, New York
72656	General Ceramics and Steatite Corp.	Keasbey, New Jersey
72928	Gudeman Co.	Chicago, Illinois
72982	Erie Resistor Corp.	Erie, Pennsylvania
73138	Helipot Corp.	South Pasadena, California
73386	Freed Transformer Co.	New York, New York
73905	Jennings Radio Mfg. Co.,	San Jose, California
74059	Micro Switch Corp.	Freeport, Illinois
74193	Heinemann Electric Co.	Trenton, New Jersey
74970	E.F. Johnson Co.	Waseca, Minnesota
75042	International Resistance Co.	Philadelphia, Pennsylvania
75539	Lapp Insulator Co., Inc.	Le Roy, New York



