



Double Pulse Modification Kit for Loran Transmitting Set AN/FPN-45

FUNCTIONAL DESCRIPTION

The Double Pulse Modification Kit for Loran Transmitting Set AN/FPN-45 provides increased power capabilities needed by the loran transmitting set in a double pulse Loran-C ground station. The kit contains power supply components which enable the loran transmitting set to operate at nearly twice the average power output of one that is used in a standard single pulse Loran-C ground station.

RELATION TO OTHER EQUIPMENT

The Double Pulse Modification Kit for Loran Transmitting Set AN/FPN-45 is similar in function to the Double Pulse Modification Kit for Loran Transmitting Set AN/FPN-44. The transmitter modification kit is integrally related to a kit for modifying two Timer-Synchronizer Sets AN/FPN-46 for double pulse operation.

EQUIPMENT REQUIRED BUT NOT SUPPLIED

The following equipment is required to enable a single pulse station to function as a double pulse station:

- Loran Transmitting Set AN/FPN-45.
- Two Timer-Synchronizer Sets AN/FPN-46.
- Timer-synchronizer set double pulse modification kit.

DESCRIPTION OF COAST GUARD ELECTRONIC EQUIPMENT**ELECTRICAL AND MECHANICAL CHARACTERISTICS**

The electrical and mechanical characteristics resulting from the modification of a standard loran transmitting set by a double pulse modification kit are identical to those on the description sheets for the standard Loran Transmitting Set AN/FPN-45 except for the following:

POWER OUTPUT:

3000 KW (peak), 93 KW (average) depending on the pulse repetition rates.

PEAK POWER REQUIREMENTS:

Double pulse operation with one timer-synchronizer set operating at any basic S rate and the other timer-synchronizer set operating at any basic SH rate.

- (1) 208 VAC, 50-60 CPS, 3 phase, 235 KVA.
- (2) 440 VAC, 50-60 CPS, 3 phase, 1314 KVA.

ADDITIONAL POWER SUPPLY OUTPUT:

+21.5 KV at 11 amp

MANUFACTURER'S OR CONTRACTOR'S DATA

ITT Federal Laboratories, 500 Washington Avenue, Nutley, New Jersey. Contract Tcg-41848 Purchase Description Number EEE-1-62.

DOUBLE PULSE KIT
FOR AN/FPN-45

UNCLASSIFIED

Loran Transmitting Set AN/FPN-45 Double
Pulse Modification Kit drawing number is H1088567.

EQUIPMENT SUPPLIED

TUBE COMPLEMENT

TYPE	QUANTITY
857B	24

DOUBLE PULSE MODIFICATION KIT FOR LORAN
TRANSMITTING SET AN/FPN-45

QUANT. PER EQUIP.	NOMENCLATURE	
	NAME	DESIGNATION
1	Double Pulse Modification Kit for Loran Transmitting Set AN/FPN-45	H1088567*

REFERENCE DATA AND LITERATURE

Technical Manual for Loran Transmitting Sets AN/FPN-44 and AN/FPN-45, Modified for Double Pulse Operation. Publications number is CG-273-103-1.

* Manufacturer's designation.

SHIPPING DATA

DOUBLE PULSE MODIFICATION KIT FOR LORAN TRANSMITTING SET AN/FPN-45							
BOX NO.	NOMENCLATURE		*OVERALL DIMENSIONS			*VOLUME	*WEIGHT
	NAME	DESIGNATION	HEIGHT	WIDTH	DEPTH		
J1	Voltage Regulator	CN-944/FPN-45	95	34	52	98	5200
J2	Voltage Regulator	CN-944/FPN-45	95	34	52	98	5200
J3	Power Supply	PP-3816/FPN-45	96	53	82	250	5600
J4	Tubes		42	38	57	53	192
J5	Tubes		42	38	57	53	192
J6	Power Supply	PP-3816/FPN-45	96	53	82	250	5600
J7	Tubes		42	38	57	53	192
J8	Tubes		42	38	57	53	192
J10	Assorted Items		55	55	83	150	1220
J11	Assorted Cables		38	39	45	38	1308

*Unless otherwise noted, dimensions are in inches, volume in cubic feet, and weight in pounds.