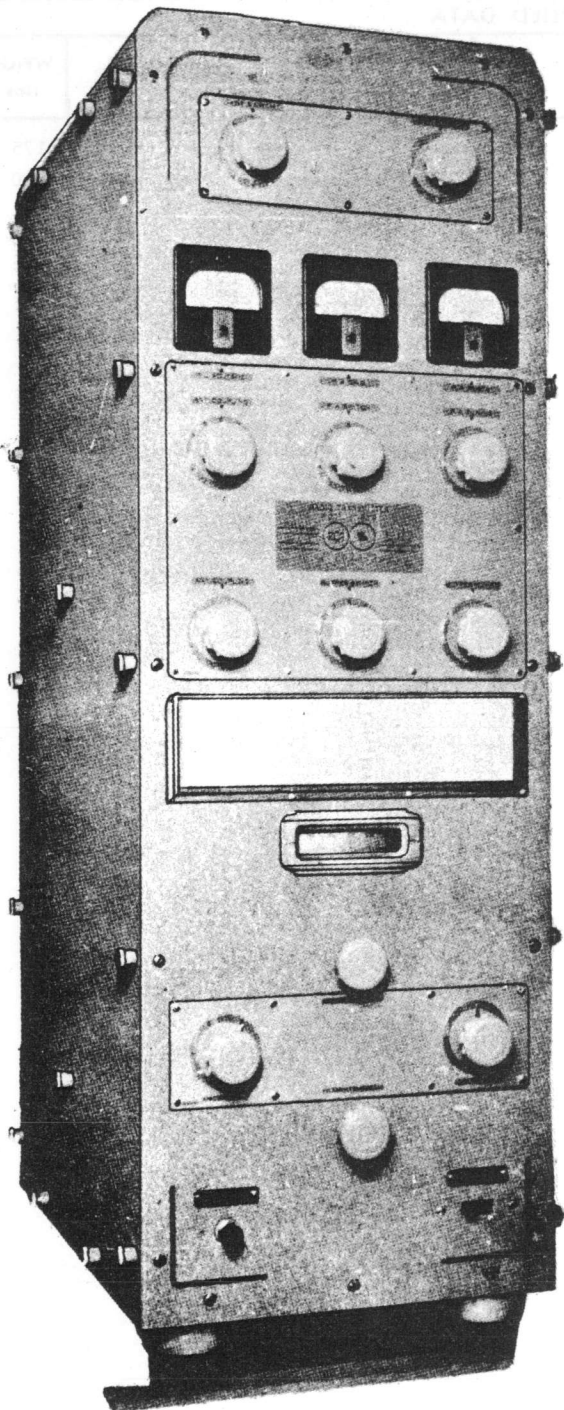


March 1957

RADIO TELEGRAPH TRANSMITTING EQUIPMENT

TDB



Radiotelegraph Transmitter TDB

FUNCTIONAL DESCRIPTION

The TDB is a high-frequency radiotelegraph transmitter designed primarily for marine applications to provide A1 (continuous wave) and A2 (modulated wave) emission in the frequency range of 2000 to 22140 kilocycles. It can be crystal controlled with a maximum of ten quartz crystals that may be installed, and it also has provisions, by means of front panel adjustments, to cover continuously the frequency range for which it is designed.

No field changes in effect at time of preparation (16 August 1956).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

FREQUENCY RANGE: 2000 to 22140 kc in 4 bands.
EMISSION: A1, A2.

POWER OUTPUT(A2): 200 W between 2000 and 17000 kc, 150 W above 17000 kc.

CONTROL: Crystal or dial.

MODULATION DATA (A2)

FREQUENCY: 500 cycles

PERCENTAGE: 70%.

FREQUENCY TOLERANCE

MASTER OSCILLATOR OPERATION: $\pm 0.05\%$.

CRYSTAL-CONTROL OPERATION: $\pm 0.02\%$.

POWER REQUIREMENTS: 110 or 230 v DC, 1300 W.

ANTENNA DATA

TYPE: 30 to 40 ft vertical wire for low frequencies; ships main antenna for higher frequencies.

MANUFACTURER'S OR CONTRACTOR'S DATA

Radiomarine Corporation of America, New York, N.Y.

Approximate Cost: \$3000.00 with equipment spares.

TUBE AND/OR CRYSTAL COMPLEMENT

(2) 807 (2) 813
Total Tubes: (4)

REFERENCE DATA AND LITERATURE

Technical Manual for Radiotelegraph Transmitting Equipment TDB.

TYPE CLASSIFICATION
DESIGN COGNIZANCE BUSHIPS
PROCUREMENT COGNIZANCE
STOCK NO.

TDB

RADIO TELEGRAPH TRANSMITTING EQUIPMENT

UNCLASSIFIED

March 1957

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	Radiotelegraph Transmitter TDB	12-1/4 x 19-1/4 x 45-3/16	150
1	Motor Generator ET-8010		
1	Motor Starter CR-4052-Y1		
1	Control Unit ET-8019		
1	Switch, Antenna Transfer ATS-7		
1	Telegraph Key CQ		
1	Set of Quartz Crystals(as specified in contract)		
1	Filter, Type 20		
1	Set of Vacuum Tubes		
1	Capacitor 9CE6A14		
1	Snubber Bracket		
5	Calibration Card		
1	Set of Spare Parts		

HIGH FREQUENCY RADIO-TELEGRAPH TRANSMITTING EQUIPMENT

FUNCTIONAL DESCRIPTION

The Model TDB-2 Radiotelegraph Equipment comprises a compact medium High Frequency (HF) transmitter and power supply for marine installations. The transmitter is designed to provide A-1 (continuous wave) and A-2 (modulated wave) emission. For A-2 emission, the modulation frequency is 500 cycles, and the modulated percentage is approximately seventy (70) percent. The transmitter is designed to cover a continuous frequency range of 2,000 to 22,140 kilocycles (KC).

No field changes in effect at time of preparation (1 August 1958).

ELECTRICAL AND MECHANICAL CHARACTERISTICS

TYPE OF EMISSION: A1 and A2 type.

POWER OUTPUT: 150 to 200 W.

POWER UNIT

MOTOR GENERATOR: 1.25 HP, 2500 RPM, 115 v DC, 1200 v, 0.45 amps DC generator, 110 v, 1.5 amps, 500 cycle alternator.

OPERATING FREQUENCY RANGE

BAND ONE: 2000 to 2400 kc.

BAND TWO: 2400 to 3200 kc.

BAND THREE: 3200 to 4200 kc.

BAND FOUR: 4200 to 5600 kc.

OPERATING POWER REQUIREMENTS: 220 v DC, 230 v DC, 1 ph, 50 to 60 cycles and 200 v, 3 ph, 60 cycles differ for transmitter, motor-generator, magnetic controller, control unit and line filter unit (not used for AC supply).

MANUFACTURER'S OR CONTRACTOR'S DATA

Radiomarine Corporation of America, New York, N.Y.

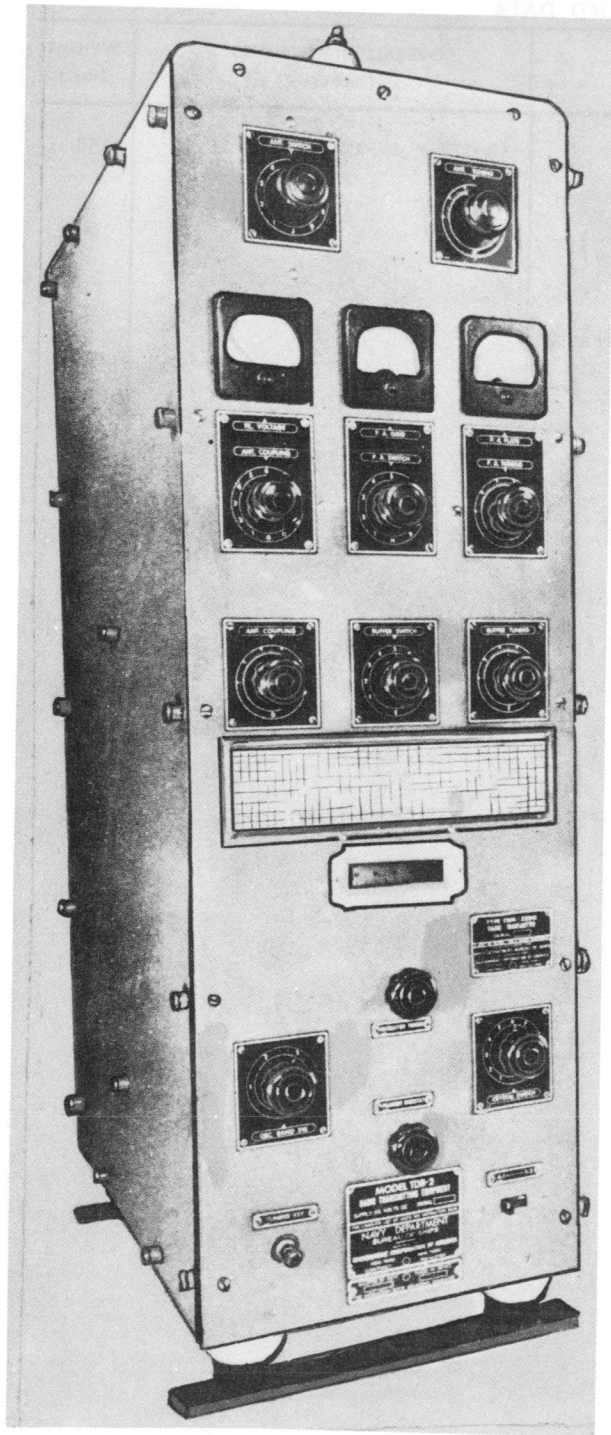
Contract NXsr-LL-47403, dated 29 January 1944.

TUBE AND/OR CRYSTAL COMPLEMENT

(2) RCA 807 (2) RCA 813

Total Tubes: (4)

No Crystals used.



Transmitter Unit, TDB-2

April 1959

Radio-Transmitters

TDB-2

HIGH FREQUENCY RADIO-TELEGRAPH TRANSMITTING EQUIPMENT

REFERENCE DATA AND LITERATURE

Technical Manual TDB-2 for the High Frequency
Radio Telegraph Transmitting Equipment.

TYPE CLASSIFICATION DESIGN COGNIZANCE BUSHIPS PROCUREMENT COGNIZANCE STOCK NO.

EQUIPMENT SUPPLIED DATA

QUANTITY PER EQUIPT	NAME AND NOMENCLATURE	OVERALL DIMENSIONS (inches)	WEIGHT (lbs.)
1	High Frequency Radio Telegraph Transmitting Equipment TDB-2 Including:		
	(1) Transmitter type CRM-52341	14-1/4 X 20-3/4 X 45	135
	(1) Motor-Generator type CG-211137	10-3/4 X 14-1/8 X 28	225
	(1) Magnetic Controller type CG-211138		
	(1) Control Unit type CRM-23435		
	(1) Line Filter Unit type CRM-53193		
	(1) Set of Vacuum tubes Including: (2)-807 and (2)-813		
	(1) Telegraph Key type CQ		
	(1) Antenna Transfer Switch CRM-24301		
	(1) Capacitor, Key Contacts No. 9CE6A14		
	(1) Snubber Bracker		
	(5) Calibration Card		
	(1) Set of Equipment Spares		
	(2) Instruction Book TDB-2	1/4 X 8-1/2 X 11	