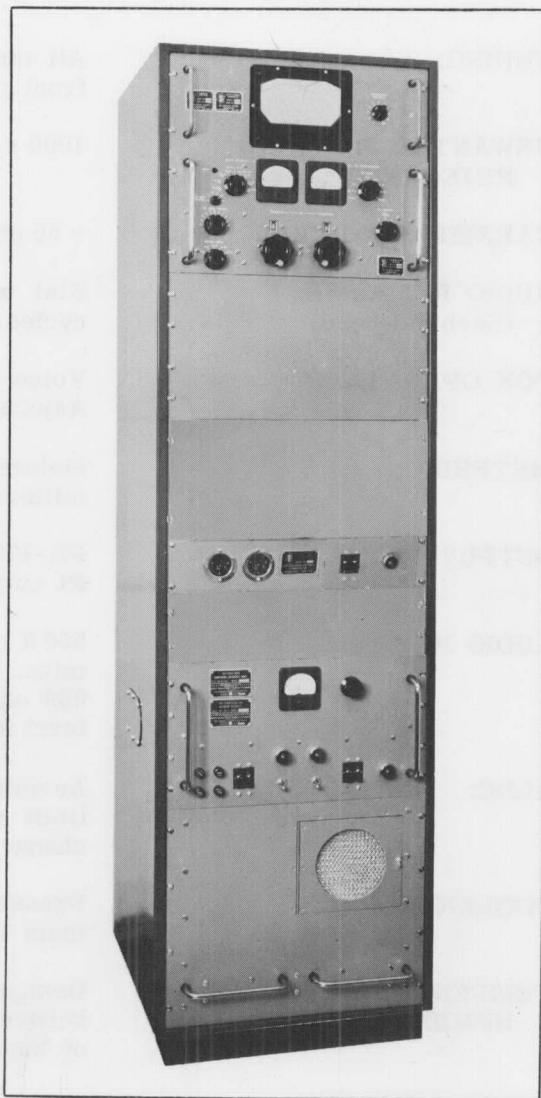


Radio Transmitter  
TMC Model SBT-1K-Q  
AN/FRT-56

The TMC Model SBT-1K-Q is a conservatively rated general purpose transmitter capable of 1000 watts output throughout the frequency range 2 to 32 megacycles. The transmitter is designed to accept external or internal excitation and, depending on the exciters used, the unit permits operation in the following modes: CW - AM - SSB - ISB - DSB - FS - FAX. For example: addition of the 0-5()/FR, Frequency Shift Exciter and a multiplier provides for FS keying of the transmitter throughout its frequency range. Addition of the AN/URA-28, Modulator-Power Supply Group, permits sideband operation with up to -55 db carrier suppression. (For sideband operation, see Sales Service Bulletin Number 257 which describes AN/FRT-57, TMC Model SBT-1KL).

The unit is completely bandswitched and is continuously tuneable with all controls on the front panels. All units are slide mounted so that they slide out and tilt over for easy internal adjustments or maintenance. This linear amplifier is housed in a semi-pressurized rack with filtered forced air cooling for rapid heat dissipation.



A Standing Wave Ratio Indicator is included to accurately indicate Forward Power, Reflected Power and SWR. Also furnished is an Auxiliary Power Panel to provide convenience outlets.

#### TECHNICAL SPECIFICATIONS:

<b>FREQUENCY RANGE:</b>	2 to 32 megacycles
<b>OUTPUT POWER:</b>	1000 watts PEP 1000 watts CW, FS
<b>OPERATING MODES:</b>	CW, AM, SSB, ISB, DSB, FS, FAX (with appropriate exciter)

**STABILITY:** SBE-3 - Crystal controlled. 1 part in  $10^6$ .  
 VOX - Better than 20 PPM for  $30^\circ$  change in ambient.

**FREQUENCY CONTROL:** VOX - Continuously tunable, direct reading VFO.  
 SBE - 10 oven controlled crystal positions plus provision for external VFO.

**TUNING:** All tuning and bandswitching controls are on the front panels. (No plug-in components)

**UNWANTED SIDEBAND REJECTION:** 1000 cycle single tone, 60 db down.

**CARRIER INSERTION:** - 55 db to full output.

**AUDIO RESPONSE:** Flat within plus or minus 1.5 db, 350 to 7500 cycles.  
 (Each Sideband)

**VOX OPERATION:** Voice control with anti trip features. Adjustable gain and squelch.

**METERING:** Meters accurately monitor operation of the transmitter.

**OUTPUT STAGE:** PL-172 tube. (TV-100)  
 Pi output network.

**AUDIO INPUT:** 500 K ohms for high impedance crystal or dynamic mike. -50 db for full RF Output. Two independent 600 ohm channels, balanced or unbalanced -20 db level for full output.

**ALDC:** An automatic load and drive control is provided to limit distortion during high drive peaks or load changes.

**COOLING:** Pressurized cabinet forced air system for maximum heat dissipation.

**TEMPERATURE AND HUMIDITY:** Designed to operate in any ambient temperature between the limits of 0-50 degrees C for any value of humidity up to 90%.

**SAFETY FEATURES:** Full interlock protection.  
 Full overload and fuse protection.

**COMPONENTS AND CONSTRUCTION:** All equipment manufactured in accordance with JAN/MIL Specifications wherever practicable.

**SIZE:** 72" high x 20-1/2" wide x 21-1/2" deep.

**POWER REQUIREMENTS:** 115/230 Volts  
 Single Phase  
 50/60 Cycle AC  
 2120 Watts Average  
 2140 Watts Peak

**WEIGHT:** 1100 lbs.

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