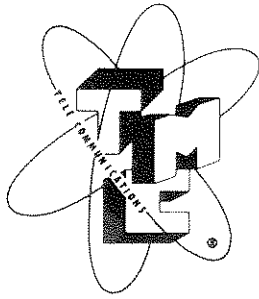
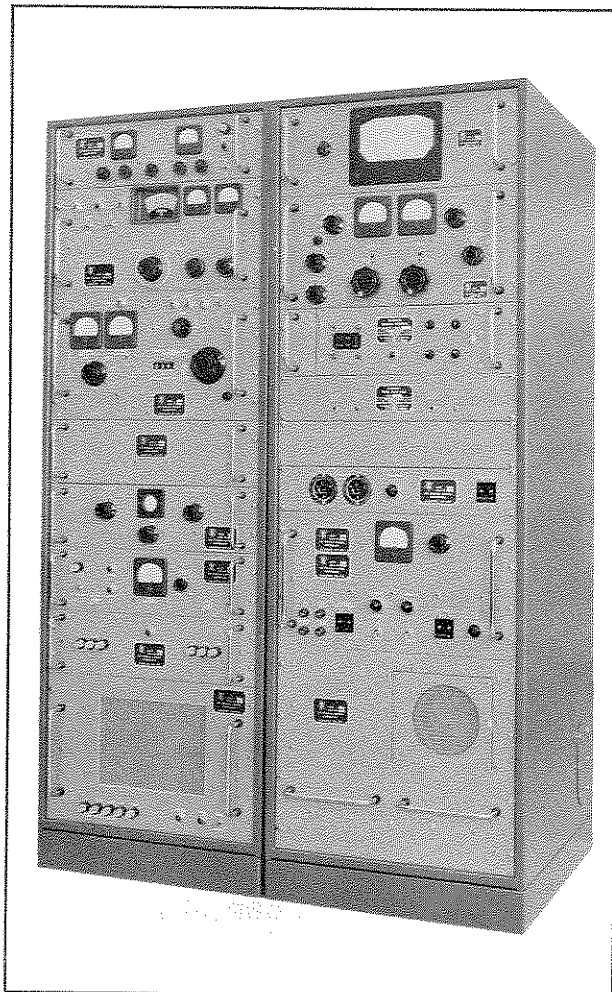


ADDENDUM TO  
SALES SERVICE BULLETIN NUMBER 237



Single Sideband Transmitter  
TMC Model SBT-1K

(Series E, F, G, H)



SPECIFICATION FILES

- 1000 WATTS PEP
- 320,000 CHANNELS
- SYNTHESIZER CONTROLLED  
(1 part in  $10^8$ )
- COMPLETELY BANDSWITCHED
- CONTINUOUSLY TUNEABLE  
(2 to 32 mc in 100 cycle steps)

The TMC Model SBT-1K (series E through H) is a general purpose radio transmitter providing SSB, ISB, DSB, AM, CW and FS operation throughout the frequency range 2 to 32 megacycles in 100 cps steps, (320,000 channels) with a stability of 1 part in  $10^8$  per day. The unit also provides an emergency standard of 1 part in  $10^6$  per day.

Each model is supplied with a coaxial antenna changeover relay and a directional coupler as standard items.

The ATS-2, Antenna Tuning System, or the SWR-1K, Standing Wave Ratio Indicator are optional, as are the Models TIS-2 or TIS-3.

## TECHNICAL SPECIFICATIONS:

**FREQUENCY RANGE:** 2 to 32 megacycles.

**OUTPUT POWER:** At least 1000 watts PEP.  
1000 watts CW-FS.

**OUTPUT IMPEDANCE:** With ATS-2 50 or 70 ohm system: will match a  
35 foot whip antenna with an R of 2 - 650 ohms.  
With SWR-1K - 50 or 70 ohms unbalanced.

**INPUT CONNECTIONS:** Type UHF Coaxial.

**OUTPUT CONNECTIONS:** Type QDS Coaxial.

**SIGNAL/DISTORTION RATIO:** 40 db down from full PEP output.

**HARMONIC SUPPRESSION:** Second: at least 40 db down from PEP output.  
Third: at least 50 db down from full PEP output.

**STABILITY:** Synthesizer controlled 1 part in  $10^8$  per day.  
Non-synthesizer controlled 1 part in  $10^6$  per day.

**FREQUENCY CONTROL:** Model SBG-1 Sideband Generator.

**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:** A. Flat within plus or minus 1.5 db, 350 to 3300  
(each sideband) cycles.\*  
B. Flat within plus or minus 1.5 db, 350 to 7500  
cycles.\*  
\* Depending upon the Model CBE ordered.

**METERING:** Large size illuminated meters accurately indicate  
operation of all circuits.

**OUTPUT STAGE:** PL-172 ceramic tube.  
Pi output network.

**AUDIO INPUT:** 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:** Semi-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:**

Equipment is manufactured in accordance with JAN/MIL specifications wherever practicable.

**POWER REQUIREMENTS:**

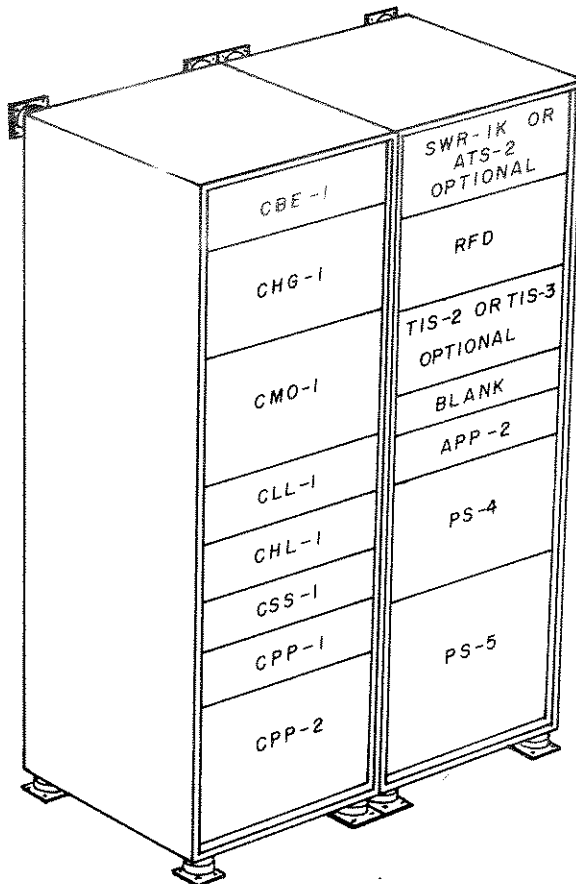
115/230 volts, single phase 50/60 cycle AC.

**SIZE:**

41 1/4" wide x 62 5/8" high w/base x 22 1/2" deep.

The Model TIS-2 provides a CW tone of 1500 cycles and frequency shifted tones of 2125 and 2975 cycles. These tones may be applied to the 600 ohm input of the transmitter. Voice modulation, additional FS/CW tone signal, or other audio intelligence may be applied to the unused sideband.

The Model TIS-3 provides a CW tone of 1105 cycles and frequency shifted tones of 1575 and 2425 cycles. These tones may be applied to the 600 ohm input of the associated transmitter. The frequency of the frequency shifted tones is necessary when utilized with 1 Kc incremental frequency tuning, resulting in compatible transmission of sideband FS and conventional FS.



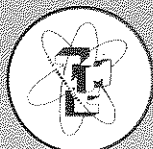
MODEL	OPTIONAL EQUIPMENT	
E	TIS-2	SWR-1K
F	TIS-2	ATS-2
G	TIS-3	SWR-1K
H	TIS-3	ATS-2

# THE TECHNICAL MATERIEL CORPORATION

700 FENIMORE ROAD

MAMARONECK, NEW YORK

CABLE  
TEPEI  
MAMARONECK, N.Y.



COMMUNICATION ENGINEERS

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