

SPECIFICATIONS

RECEIVER

Sensitivity: Less than 0.35 microvolt for 10 dB signal-plus-noise to noise ratio for SSB operation. **SSB Selectivity:** 2.1 kHz minimum at 6 dB down, 5 kHz maximum at 60 dB down (3.395 MHz filter). (2:1 nominal shape factor at 60:6 dB.) **CW Selectivity (With SBA-301-2 CW Filter Installed):** 400 Hz minimum at 6 dB down, 2.0 kHz maximum at 60 dB down. **Input:** Low impedance for unbalanced coaxial input. **Output Impedance:** 8 Ω speaker, and high impedance headphone. **Power Output:** 2 watts with less than 10% distortion. **Spurious Response:** Image and IF rejection better than 50 dB. Internal spurious signals below equivalent antenna input of 1 microvolt.

TRANSMITTER

DC Power Input: SSB: (A3J emission) 180 watt P.E.P. (normal voice: continuous duty cycle). CW: (A1 emission) 170 watts (50% duty cycle). **RF Power Output:** 100 watts on 80 through 15 meters: 80 watts on 10 meters (50 Ω nonreactive load). **Output Impedance:** 50 Ω to 75 Ω with less than 2:1 SWR. **Oscillator Feedthrough Or Mixer Products:** 55 dB below rated output. **Harmonic Radiation:** 45 dB below rated output. **Transmit-Receive Operation:** SSB: PTT or VOX. CW: Provided by operating VOX from a keyed tone, using grid-block keying. **CW Side-Tone:** Internally switched to speaker or headphones, in CW mode. Approximately 1000 Hz tone. **Microphone Input:** High impedance with a rating of -45 to -55 dB. **Carrier Suppression:** 50 dB down from single-tone output. **Unwanted Sideband Suppression:** 55 dB down from single-tone output at 1000 Hz reference. **Emissions not possible or not recommended:** A0, A2, A3, A3b, A4 through A9, F0 through F9, and P0 through P9. **Third Order Distortion:** 30 dB down from two-tone output. **RF Compression (TALC*):** 10 dB or greater at .1 mA final grid current.

GENERAL

Frequency Coverage: 3.5 to 4.0; 7.0 to 7.3; 14.0 to 14.5; 21.0 to 21.5; 28.0 to 28.5; 28.5 to 29.0; 29.0 to 29.5; 29.5 to 30.0 (megahertz). **Frequency Stability:** Less than 100 hertz per hour after 10 minutes warmup from normal ambient conditions. Less than 100 Hz for $\pm 10\%$ line voltage variations. **Modes Of Operation:** Selectable upper or lower sideband (suppressed carrier) and CW. **Visual Dial Accuracy:** Within 200 Hz on all bands. **Electrical Dial Accuracy:** Within 400 Hz after calibration at nearest 100 kHz point. **Dial Mechanism Backlash:** Less than 50 Hz. **Calibration:** 100 kHz crystal. **Audio Frequency Response:** 350 to 2450 Hz. **Phone Patch Impedance:** 8 Ω receiver output to phone patch; high impedance phone patch input to transmitter. **Front Panel Controls:** Main (LMO) tuning dial. Driver tuning and Preselector. Final tuning. Final loading. Mic and CW Level control. Mode switch. Band switch. Function switch. Freq Control switch. Meter switch. RF Gain control. Audio Gain control. Filter switch. **Internal Controls:** VOX Sensitivity. VOX Delay. Anti-Trip. Carrier Null (control and capacitor). Meter Zero control. CW tone volume. Relative Power Adjust control. Bias. Phone Vol (headphone volume). Neutralizing. **Tube Complement:** OA2 Regulator (150 V). 6HS6 RF amplifier. 6AU6 1st receiver mixer. 6AU6 Isolation amplifier. 6AU6 1st IF amplifier. 6AU6 2nd IF amplifier. 6BN8 Product detector and AVC. 6CB6 2nd transmitter mixer. 6CL6 Driver. 6EA8 Speech Amplifier and cathode follower. 6EA8 1st transmitter mixer and crystal oscillator. 6EA8 2nd receiver mixer and relay amplifier. 6EA8 CW side-tone oscillator and amplifier. 6GW8 Audio amplifier and audio output. 12AT7 Heterodyne oscillator and cathode follower. 12AT7 VOX amplifier and calibrator oscillator. 12AU7 Sideband oscillator. 6146 Final amplifiers (2). **Diode Complement:** 6 Germanium Diodes: Balanced modulator, RF sampling, and crystal calibrator harmonic generation. 10 Silicon Diodes: ALC rectifiers, Anti-Trip rectifiers, and DC blocking. LMO Power Supply. 2 Zener Diodes: Cathode bias, LMO Power Supply. **Transistor:** 2N3567 LMO Power Supply. **Rear Apron Connections:** CW Key jack. 8 Ω output. Phone patch input. ALC input. Power and accessory plug. RF output. Driver output. Spare A. Spare B. **Power Requirements:** 700 to 850 volts at 250 mA with 1% maximum ripple. 300 volts at 150 mA with .05% maximum ripple. -115 volts at 10 mA with .5% maximum ripple. 12 volts AC/DC at 4.76 amperes. **Cabinet Dimensions:** 14-7/8" wide x 6-5/8" high x 13-3/8" deep. **Net weight:** 17-1/2 lbs.