

CAUTION

Do not apply modulation unless the Power Amplifier is fully loaded and the FUNCTION switch is in the PHONE position. Do not attempt to change bands while either the high or low B / voltages are on: always place TRANSMIT switch in OFF position, or release press-to-talk lever first. Failure to heed this precaution may result in extensive damage to the equipment.

2-37. SSB OPERATION.

2-38. After the Transmitter has been properly tuned up it may be placed into SSB operation as follows:

- a. Place TRANSMIT, Modulator PLATE and Modulator FILAMENT switches in OFF position.
- b. Place SSB-AM switch in SSB position.
- c. Connect SSB signal source to VFO connector on rear of chassis, SSB signal source must produce between 10 and 15 watts RF power.
- d. Place FUNCTION switch in TUNE position.
- e. Place TRANSMIT switch in ON position.
- f. Feed a steady audio tone into the audio input of the SSB Exciter. A signal generator is excellent for this purpose. Should no signal generator be available, the operator may whistle into the microphone, holding the tone steady as possible.
- g. Tune the BUFFER tuning control until maximum Power Amplifier plate current is indicated; then immediately proceed to tune and load the Power Amplifier as described in paragraph 2-32, steps r and s. Grid current for SSB operation should not exceed 5 MA. The Power Amplifier grid and plate current swings are now fully controlled by the amount of audio impressed on the SSB Exciter. Power Amplifier plate current swing for full input should not exceed 260 MA. The resting plate current for the Power Amplifier in Class B operation is 90 MA and this dissipation is evidenced by a very slight color on the plate of the tube, however, this disappears with modulation.

2-39. SPECIAL NOTICE -- EMERGENCY SHUT-OFF

2-40. For emergency shut-off place FILAMENT switch (Power Supply Panel) in OFF position. This action removes all voltages.

2-41. INSTRUMENT READINGS

TABLE III. TYPICAL CURRENT READINGS - PHONE OR CW.

| | | | | |
|----------|-----------|-----------|-------------|------------|
| Osc. Pl. | Buff. Pl. | P.A. Grid | P.A. Screen | P.A. Plate |
| 20 MA. | 25 MA. | 15 MA. | 42 MA. | 350 MA. |

2-42. Typical instrument readings for SSB operation: Power Amplifier grid peak swing 5 MA., P.A. Screen 30 MA., Power Amplifier plate swing 90 MA. to 260 MA.

2-43. PRECAUTIONS TO BE OBSERVED.

2-44. All meter readings should be noted periodically during operation. Should meter readings fall below, or rise above, typical readings shown in TABLE III and paragraph 2-42 operation of the Transmitter should be suspended and the cause for improper readings should be determined. Failure to cease operation when improper meter readings are observed may result in damage to the equipment, poor quality of modulation, or carrier splatter.