

SECTION II (Contd)

section be studied thoroughly before any attempt is made to place the transmitter in operation.

DESCRIPTION OF CONTROLS.

OSCILLATOR. Tunes oscillator plate circuit to fundamental, second or third harmonic of crystal or VFO frequency.

EXC. BAND SW. Selects proper amount of inductance in both oscillator and buffer plate circuits.

BUFFER. Tunes buffer plate circuit to oscillator frequency or selected harmonic.

METER SW. Places EXCITER meter into any one of the following four circuits. OSC. PLATE, BUFF. PLATE, FINAL GRID or FINAL SCREEN.

FUNCTION SW. Serves three purposes. Inserts high resistance in power amplifier screen grid circuit for tune-up, shorts modulation choke for CW operation, inserts modulation choke into power amplifier screen grid circuit for AM operation.

F. GRID DRIVE. Controls screen voltage of buffer stage, thereby, controlling power amplifier grid current and RF drive.

ANT. COUPLING. Inserts added inductance or capacity into the output circuit for proper antenna match.

FINAL PL. TUNE. Tunes plate circuit of power amplifier stage to resonance. Must be retuned after any adjustment of either ANT. LOAD control or ANT. COUPLING control.

FINAL BAND SW. Inserts proper amount of inductance into the pi-network to resonate on selected band.

ANT. LOADING. Varies amount of loading by matching power amplifier plate circuit to antenna circuit. Always start with this control in the "MIN" position. This corresponds to maximum capacity of condenser, and at this setting, will match lowest impedance.

SB-AM SWITCH. Changes class of operation of the power amplifier tube from class "C" to class "B". Also removes all low B plus voltages from oscillator and buffer stages for SB operation of the power amplifier.

GAIN. Controls level of modulation in AM operation.