

## CONTROLS AND FUNCTIONS

The following table details the controls and their functions as an aid to a thorough understanding of the transceiver operation. "Reduced" B+ is power supply

output during receive conditions, "Normal" B+ is power supply output during transmit condition.

CONTROL	FUNCTION
TRANSMITTER tuning control	Rotates the VFO tuning capacitor and VFO plate circuit tuning capacitor, and the multiplier grid circuit tuning capacitor. The three tuned circuits are properly tracked for single-shaft tuning. The multiplier plate and power amplifier grid circuits are broad-band, requiring no tuning when the operating frequency is changed.
RECEIVER tuning control	Rotates the antenna coil tuning capacitor, the RF amplifier plate circuit tuning capacitor, and the high-frequency oscillator tuning capacitor. The three tuned circuits are properly tracked for single-shaft tuning. All other receiver tuned circuits are fixed-tuned.
GRID-PLATE-MOD switch	Selects circuit to be monitored by the front panel meter during TRANSMIT function, as follows:  GRID position Meter reads relative grid current of power amplifier (6146) by measuring voltage drop across metering resistor (R-11) in 6146 grid return.  PLATE position: Meter reads relative current through power amplifier (6146) by measuring voltage drop across metering resistor (R-14) in 6146 cathode return.  MOD position: Meter reads relative modulation percentage by measuring rectified audio voltage built up by 6L6 audio power amplifiers across low-impedance winding on audio transformer T3 during transmission. Normal voice modulation of the proper level will cause the meter to peak at approximately mid-scale (5), while sinusoidal modulation (whistling, etc.), of the proper level results in a meter reading of 9 or more. Either type of audio represents a modulation percentage of more than 90%.