- 1-10. The microphone amplifier consists of a 6SJ7 tube which is capacity coupled to the following speech amplifier stage. Two 6C5 tubes are utilized as speech amplifiers, these are capacity coupled into the 6L6G driver stage. Couplates are used for coupling the aforementioned audio stages. They have a restricted audio range and allow full use of useable audio power, also, they discriminate against power wasting high and low audio frequencies. The 6L6G driver stage is transformer coupled to the modulator stage. All speech and driver stages are thoroughly decoupled and all DC voltages applied to them are well filtered. Two 5514 tubes with zero bias operate as push-pull class B Modulators. Modulator plate current is monitored constantly by a meter in the plate circuit. High voltage for the modulator stage is supplied by two 816 tubes operating in a full wave rectifier circuit. A 5Y3GT tube, operating as a full wave rectifier, supplies the low voltage for the speech and driver stages.
- 1-11. The high voltage power supply employs two 866A tubes operating as full wave rectifiers. The filter section utilizes choke input. The low voltage supply employs a 5U4G tube in a full wave rectifier circuit with a single section choke input filter. A Hi B + Io B + switch has been incorporated into the high voltage supply to enable tuning up the power amplifier stage, or for testing purposes, without the danger of burning up the meter or damaging the tubes. This switch places a resistor in series with the primary of the plate transformer thus reducing the voltage. A terminal strip at the rear provides 115 V AC when the TRANSMIT switch is turned on. This voltage may be used to operate an external relay. The AC input circuit to the transmitter is fused for protection in the event of a component failure.