

## SPEAKER CONNECTIONS

Audio output from the transceiver is provided at pin 12 of the Jones plug. The other speaker lead goes to the common chassis ground at pin 6. Output impedance is between 3 and 4 ohms. The SW-117AC power supply contains a high quality 5 in. by 7 in. oval speaker, which provides a pleasant voice quality. In mobile installations, the car broadcast receiver speaker may be used, in which case a double pole, double throw switch should be installed as a selector. If the car radio speaker placement is not satisfactory, a separate speaker may be desirable. Headphones may be used with the a-c supply by plugging them into the phone jack on the power supply. High impedance phones may be used--the power loss caused by the mismatch will drop the volume level to about the desired amount for headphones.

## MICROPHONE

The microphone input is designed for high impedance, low level microphones, only. DO NOT ATTEMPT TO USE CARBON MICROPHONES. The choice of microphone is important for good speech quality, and should be given serious consideration. The crystal lattice filter in the transceiver provides all the restriction necessary on audio response, and further restriction in the microphone is not required. It is more important to have a microphone with a smooth, flat response throughout the speech range. The microphone plug should be a standard 1/4 in. diameter three-contact type. The tip connection is for push-to-talk relay control, the ring connector is for the microphone terminal, and the sleeve is for the common chassis ground. The manufacturer's instructions should be followed in connecting the microphone cable to the plug. With many microphones, the push-to-talk button must be pressed to make the microphone operative, even though the panel function switch is in the transmit position. This feature may be disabled, if desired, by opening the microphone case and permanently connecting the contacts which control the microphone.

## ANTENNA

Any of the common antenna systems designed for use on the high frequency amateur bands may be used with the Swan transceiver, provided the input impedance of the transmission line is not outside the capability of the pi-output matching network. An antenna which reflects a standing wave ratio on 50 or 75 ohm transmission line, below approximately 3:1 at the proposed operating frequency, or a system that results in a transmission line input impedance that is essentially resistive and between 20 and