

- (1) Turn the BAND switch to a position that includes the desired frequency. For example, the 20 meter amateur band is from 14 to 14.35 MHz. This is between 10 and 23 MHz. Therefore, the switch must be set to the 10-23 position.
- (2) When a signal is received, peak it by adjusting the TUNE control for maximum swing on the transceiver's S-meter, or maximum volume if no meter is used. As the transceiver is tuned over a band, it may be necessary to adjust the TUNE control of the PT-3 fairly frequently. For example, at 4 MHz., the TUNE control may have to be readjusted every 50 kHz. At 50 MHz., it may have to be readjusted every 200 kHz.
- (3) The PT-3 adds considerable amplification (approximately 20 dB) to the receiver section of the transceiver. The receiver section may already have sufficient gain, especially on the lower frequency bands. The additional gain of the preamplifier may cause overloading, which, in turn, can result in cross-modulation or desensitization, or both. For this reason, a manual GAIN control is included on the front panel of the PT-3. Normally, this control should be turned clockwise. However, under strong local signal conditions, it may often be found desirable to turn this control counterclockwise to a point where the local signals tune considerably sharper and therefore, occupy less space on the band. Although this will reduce the gain, it will often be found, particularly when the desired signals are strong, that this reduction will provide a more usable signal than when the preamplifier is not in the circuit. This is especially true in those transceivers having considerable front-end gain without provisions for separate RF gain and IF gain controls.
- (4) It is sometimes difficult to tune the PT-3 when it is being used with a transceiver that has fast AVC action, especially on strong signals. This can be overcome by watching the S-meter very carefully while peaking the PT-3, or by peaking the PT-3 on a weak signal or by peaking up on the background noise without a signal. The true worth of the PT-3 will be more fully realized when the band conditions are poor and the signals are very weak.
- (5) It has been pointed out that there is a built-in sensing circuit and relay that causes the preamplifier to be by-passed out of the circuit as soon as RF power is transmitted. When the RF power ceases to be transmitted, the sensing circuit activates the relay and the preamplifier automatically goes into the receive mode. As this cycle continues, there will be excessive chattering of the relay and the LEDs will go on and off. An adjustable DELAY control will be found on the front panel of the PT-3. The setting of the DELAY control determines how long the PT-3 will stay in the transmit mode before returning to the receive mode after the operator stops transmitting. This control can normally be set at minimum. However, when operating SSB, the DELAY should be increased until the PT-3 stays in the transmit mode long enough to cover speech pauses. This will prevent the annoying chattering of the relay.

#### **ADDING SECOND RECEIVER CAPABILITY TO THE PT-3**

The PT-3 has been designed so that a second receiver capability can be added. This is an optional feature of the PT-3. A jack and some additional parts are needed to add this feature. Instructions on installing the additional parts may be obtained from Ameco by requesting an addendum sheet entitled "2nd RECEIVER MODIFICATION CAPABILITY FOR THE PT-3". A stamped, self-addressed envelope should be included in order to speed up the processing of this request.

A qualified technician, or an amateur with adequate training, will be required to do this modification.

#### **ADDING SEPARATE RECEIVING ANTENNA CAPABILITY TO THE PT-3**

The PT-3 has been designed so that a separate receiving antenna can be switched in and out. This is an optional feature of the PT-3. Additional parts are necessary to do this. Instructions on adding the second antenna may be obtained from Ameco by requesting an addendum sheet entitled "SEPARATE RECEIVING ANTENNA CAPABILITY MODIFICATION FOR THE PT-3". A stamped, self-addressed envelope should be included in order to speed up the processing of this request.