

## TM-941A REPEATER CROSS-BAND MODIFICATION (PRELIMINARY)

To operate the TM-941A in the repeater cross-band mode, chip resistor R58 on the Control unit (X53-3310-00) (A/2) must be removed.

This modification requires the ability to desolder a surface mounted micro-miniature chip resistor from the Control board. Seek qualified assistance to avoid damaging the transceiver.

### MODIFICATION PROCEDURE

1. Disconnect the power supply and antenna from the transceiver.
2. Remove the bottom cover from the transceiver.
3. Desolder and remove the blue colored chip resistor (R58) from the Control board. Use a wedge shaped soldering tip so you can melt the solder on both sides of the resistor at one time.
4. Install the bottom cover and connect the transceiver to the antenna and power supply.

### OPERATING PROCEDURES

The repeater cross-band operation allows the TM-941A to receive on one band and re-transmit the signal on another band. The third band will still be able to receive, but will not be involved in the repeater cross-band operation.

1. Set transceiver to the desired operating frequencies.
2. Adjust the squelch controls to threshold.
3. You may want to set the Time-Out Timer to 3 minutes to protect the transmitter (page 23 of instruction manual).
4. Select one of the three bands to be involved in the repeater cross-band operation by pressing the BAND SELECT key for that band. The PTT indicator will light in the display by this band.
5. Select another band to be involved in the repeater cross-band operation by pressing the CONTROL SELECT key for that band. The green light on the key will illuminate.

NOTE:

Although it has not been confirmed, if step 5 is skipped, the transceiver should work in a FIXED BAND operation. In this condition, the band selected in step 4 will be dedicated to re-transmitting the received signals from the other two bands. The band selected in step 4 would not be able to pass it's received signals to another band for re-transmission (one way repeat).

- 6. To turn the repeater cross-band function on or off, press the F key for longer than one second and then press the mute key.

The following functions have not been confirmed at this time, but it appears that:

- A. Both bands can contain shift information.
- B. Only one band can include an encode/decode tone.

