

d. Go around pulley B counterclockwise for 1-1/2 turns, through the slot in pulley B, around the tab and back through the slot to pulley C.

e. Go around pulley C with the cord and loop the end on the other end of the spring.

f. Fasten the pointer to the cord, tune in a station of known frequency and adjust the pointer to correct setting.

g. Replace the panel.

5.4.4. DRUM CORD - Obtain a 15 inch length of 432 1009 00 cord and tie loops in each end so that they are 12 inches apart.

a. Turn the BAND SWITCH to the 1.5 - 2.5 mc band (pulley D to the counterclockwise stop).

b. Turn pulley E approximately one turn and hold the tension of the tension spring.

c. Loop cord in pulley D. Make approximately 3/4 turn around pulley D.

d. Extend the cord around pulley E and hook to the tab. Release the tensions spring.

e. Replace the panel.

f. Loosen the set screw in the drum hub opposite the coil tension spring and align the dial calibration to the 1.5 - 2.5 mc band then tighten the set screw.

5.5. ALIGNMENT OF 148C-1 NBFM UNIT

The NBFM unit is aligned to the exact receiver intermediate frequency. With the receiver to be in satisfactory alignment, tune in a good, steady, unmodulated carrier using the "S" meter for indication of "on the nose" tuning. Place the CW-AM-FM control in the FM position. Connect a high impedance DC voltmeter between pin 2 of E2 and ground. Align as follows:

a. Detune the secondary of T-201 (top screw).

b. Tune the primary of T-201 (bottom screw reached through a hole in the 75A chassis) for maximum DC voltage indication.

c. Tune the secondary of T-201 (top screw) for zero d-c voltage indication. NOTE: There is a possibility of three minimum indications, the correct zero indication is the one at which, within a few turns of the screw, the voltmeter swings rapidly from a positive to a negative indication.

5.6. NARROW BAND CONVERSION

5.7. GENERAL - This receiver is designed with bandwidth of 4 kc at 6 db down and 13 kc at 60 db down. It is possible to convert the 75A-2 Receiver to a maximum bandwidth of approximately 2.4 kc at 6 db down if extreme selectivity is desired. (See the curve preceding Section 6 of this book).

5.8. PROCEDURE - To convert the set, remove the bottom plate and proceed as follows:

- a. Remove the 100,000 ohm resistor R-68 from terminals A and C on T-3.
- b. Remove the 5 uuf capacitor C-108 from terminals A and D on T-4.
- c. Remove the 5 uuf capacitor C-109 from terminals A and D on T-5.
- d. Remove the 10 uuf capacitor C-110 from terminals A and D on T-6.
- e. Realign the set as outlined in paragraph 5-3 of this book. The bandwidth will be 2.4 kc at 6 db down and 9.5 at 60 db down.

5.9. BROAD BAND CONVERSION

5.10. GENERAL - To align the receiver after converting from narrow band to broad band, a slightly different procedure from that indicated in paragraph 5-3 is used. The bandwidth will be approximately 4 kc at 6 db down and 13 kc at 60 db down.

To convert to broad band, perform steps a. through d. in paragraph 5.8 above in reverse. That is, add these items rather than remove them. Then realign the i-f stages as follows:

5.11. TEST EQUIPMENT REQUIRED

- a. Signal Generator
- b. Vacuum Tube Voltmeter (Votomyst)
- c. Swamping Tool - Comprised of a .01 mf capacitor in series with a 1000 ohm resistor and having an alligator clip on each end.

5.12. REALIGNMENT

- a. SET CONTROLS -