

4.24 The signal generator should be tuned to 456 kilocycles and the output attenuator adjusted to provide a signal of approximately 100 microvolts. The I. F. tuning adjustments referred to in Par. 4.22 should each be carefully adjusted to give a maximum reading on the output meter. The order in which the adjustments are made is not important. While making these adjustments, it will be necessary to retard the attenuator of the signal generator if the readjustment increases I.F. amplifier gain to the point where overload occurs.

4.25 The performance of the I.F. amplifier and audio circuits may be checked against the stage gain data in Section 5.3, after alignment has been completed. Selectivity may be checked against the data in Dwg. No. 9.3.

4.26 After alignment of the I.F. amplifier has been completed, the modulation of the signal generator should be turned off; the CONTROL SWITCH should be set at CWO; and the C.W. OSC. control should be set at 0, at which setting the CW oscillator should be at zero beat with the test signal. If zero beat does not occur at 0, readjust capacitor C-157 of transformer T-104, as shown on Photo No. 7.3.

#### 4.3 H.F. Oscillator Alignment

4.31 If, after I.F. alignment is completed, tests compared with the data in Section 9 indicate that alignment of any high frequency circuit is necessary, the procedure is as outlined in the following paragraphs.

4.32 The coil group which is plugged into the circuit at any time is the one directly underneath the three-gang tuning capacitor at the center of the chassis. The coil nearest the front of the receiver is in the high frequency oscillator circuit, the middle coil is in the first detector circuit, and the coil nearest the antenna-ground binding post strip E-101 is in the R.F. amplifier circuit. As shown in the photographs, there are two holes in each coil compartment; of each pair, the one nearest the front of the receiver is directly over the trimmer capacitor.

4.33 Set the tuning dial near the high frequency end of the range and check the dial reading against the calibration curve by means of an accurate signal generator or a signal of known frequency. Readjustment should be made if the dial reading is in error by more than plus or minus 2 per cent.

4.34 Errors in frequency calibration at the high frequency end of the dial scale are corrected by adjustment of the H.F. oscillator trimmer capacitor of the band in question. The five H.F. oscillator trimmer capacitors carry symbol numbers from C-161 to