test, the receiver should be tuned to a frequency near the low frequency end of the band. Tracking and calibration at any point up to the low frequency limit may be checked by adjusting the signal generator to the proper frequency and testing the settings of high frequency circuit trimmers. After such a test, all trimmers checked should be reset at the high frequency end of the band. A simpler and quicker tracking check may be made by bending the outside rotor plates of each section of the main tuning capacitor C-105 in turn so that the maximum capacity of each circuit may be increased or decreased by a small amount. The rotor plates must not be bent so much that they will not return to their original positions when pressure is removed. Any change in capacity in any section of this capacitor should decrease the sensitivity of the receiver.

4.52 Series padding capacitor C-147 is used to obtain correct calibration at the low frequency end of the 200 to 400 kilocycle range. If the dial reading is too low, the capacity of C-147 should be increased, and vice versa.

4.53 In order to determine if one or more sections of the main tuning capacitor C-105 are the cause of any mistracking present, it is necessary to make the check described in Par. 4.51 on two or more different bands. If the same tracking error appears on all bands, the main tuning capacitor is definitely at fault. The error should be corrected by permanently bending the rotor or stator plates to provide the proper capacity.

4.54 If the tracking error appears only in the H.F. oscillator, first detector or R.F. amplifier stage and on only one band, the inductance of the tuned circuit of that stage is incorrect. If the tracking check of Par. 4.51 shows that more capacity is needed for correct alignment, the inductance in question is too low and vice versa. After any adjustment of inductance, the associated trimmer capacitor must be readjusted at the high frequency end of the band, as explained under Par. 4.41. Tracking should then be checked again at the low frequency end of the band.

4.55 After alignment has been completed, the antenna feed-line should be connected to the receiver and final adjustment of the R.F. amplifier trimmer should then be made.

4.6 S-Meter Adjustment

4.61 The S-meter balancing resistor R-135 is used to obtain zero meter reading in the absence of signal input to the receiver. The adjustment is as follows: Set the R.F. GAIN at 10, CONTROL SWITCH at MVC, and disconnect the antenna leads; adjust R-135 until the S-meter reads zero.