

SECTION III (Contd)

p. Place EXCITER switch in XTAL OPERATE position and TRANSMIT switch to ON position. Carefully adjust FINAL PL. TUNE for minimum final current. This indicates resonance in the final plate circuit, dial setting of FINAL PL. TUNE control should correspond closely with the setting in TABLE III.

q. Advance the ANT. LOADING control slowly clockwise, final plate current should increase. When plate current has increased to 190 Ma, re-tune the FINAL PL. TUNE control for minimum plate current again. Repeat the procedure of advancing ANT. LOADING control and re-tuning the FINAL PL. TUNE control to resonance until the minimum plate current dip is 190 Ma.

r. Place FUNCTION switch to the CW position. This should cause an increase in final plate current up to approximately 300 Ma. Re-tune OSC. and BUFFER controls for maximum final grid current, then re-adjust the F. GRID DRIVE control so that 11 Ma of grid current is indicated. When the full voltage is applied to the final stage, normal loading will decrease grid current 10 to 20%, so re-adjusting of the BUFFER and F. GRID DRIVE control is necessary.

s. Repeat the loading procedure by advancing ANT. LOADING control and re-tuning the FINAL PL. TUNE control, until the minimum plate current dip of 300 MA is obtained. This is full load for the final stage and it should not be exceeded or a reduction in power output will result. Do not exceed 11 Ma grid current or shortened tube life will result. The ANT. LOADING control may be advanced until sufficient final loading is obtained. Should the dial indications differ greatly from the typical table readings, a defective antenna or a high reactance is indicated and should be corrected.

t. Re-check all meter readings for safety sake. The screen grid current of the power amplifier has the widest allowable tolerance as its value depends on the plate current. A reading of 15-50 Ma is reasonable. Also, if the final is loaded below 500 watts, the screen grid current will be considerably higher.

TUNE-UP PROCEDURE - VFO OPERATION.

Tune-up procedure for VFO operation varies somewhat from crystal operation tune-up. Proper procedure is as follows:

a. Place all power and control switches in the OFF position. Place the power supply EXCITER switch to VFO OPERATE.

b. Insert AC line cord plug into a 110-115 volt, 60 cycle, single phase current source.

c. Connect antenna feed line to coax connector marked ANT. (Rear of RF chassis).