Tune-up Procedure

I) Transmitting Section

1) TX VCO ADJUSTMENT
   A. connect high resistance voltage meter to TP4
   B. adjust L9 inductor, so that (Channels 1-0, A, b, C, d) would be in transmitting and receiving mode ranging from 0.5-2.0V

2) CHECK TRANSMITTING FREQUENCY, POWER, HARMONIC, TRANSMITTING CURRENT
   A. connect the synthesizing testing equipment to the output end of the antenna
   B. adjust C50, so that Channel 1 is 462.5625Mhz
   C. observe transmitting frequency at 220mW±50mW
   D. observe harmonic restrain > 50dB
   E. observe operating current during transmission < 300mA

3) MODULATION
   A. connect the synthesizing testing equipment to the output end of the antenna. Connect the low-frequency signal generator to the input end of MIC
   B. Input low frequency 7mV 1KHz signal from MIC. Adjust VR2 so that the modulation frequency deviation is at 1.5Khz. After that, increase the low frequency signal output level by 20dB. Then observe the modulation frequency deviation. It should be < 2.5Khz.

II) Receiving Section

1) MID-FREQUENCY SENSITIVITY
   A. connect the synthesizing testing equipment to the speaker output end and the mid-frequency output end (XF1 testing point of 21.6Mhz filter)
   B. adjust T1, so that the audio output is maximized. Distortion is minimized.
   C. observe the audio output at 12 dB S/N, the mid-frequency input should be < 20dBemf.
   D. Observe audio output power ≧ 120mW
2) HIGH FREQUENCY RECEIVING SENSITIVITY
   A. connect the synthesizing testing equipment to the speaker output end and the mid-frequency output end
   B. adjust L6 so the receiving sensitivity is ≦ -4dBu emf, mirror restrain is > 60dB
   C. adjust VR1 so that the squelch sensitivity = -2±2dBu emf.

III) Other

1) press MON key to receive weak signal
2) press UP and DOWN keys to see if the corresponding channel no. is displayed.
3) inspect the appearance and the communication