Part 2.947 Measurement Procedure Employed

## Bandwidth Occupied Test:

The transceiver and the associated test equipment were set up as shown in Figure 6.10 (Page 6-12). The initial tune-up was in the SSB (2K80J3E) mode. In all, ten J3E mode tests were run, one for each marine band. Additional tests were made which demonstrate operation in both H3E and R3E modes. The H3E test was run at 2182.0 kHz. The R3E test was run at 8204.0 kHz.

2K80J3E and 2K80R3E: The transceiver was modulated by two tones of equal amplitude, one at 400 Hz and one at 1800 Hz. The modulating signal was set to the correct level to drive the transceiver up to the ALC threshold (ALC threshold was set to 150 watts PEP) and then increased by 16 dB. In the 2K80R3E mode, the above procedure was employed and the carrier was inserted to a level corresponding to a -16 dB below PEP at 150 watts.

On 2182.0 kHz, the 2K80J3E tests were run with the ALC level set to hold the transmitter output to 150 watts PEP. An additional test was run on 2182.0 kHz demonstrating transmitter operation in the 2K80H3E mode. ALC was set to hold the transmitter output to 150 watts PEP and the test signal consisted of the reinserted carrier and one 1500 Hz tone.

The results of the above tests are documented in the following figures:

1619.0 kHz, J3E	Figure 6.11, Page 6-13
2182.0 kHz, J3E	Figure 6.12, Page 6-14
2182.0 kHz, H3E	Figure 6.13, Page 6-15
4125.0 kHz, J3E	Figure 6.14, Page 6-16
6215.0 kHz, J3E	Figure 6.15, Page 6-17
8291.0 kHz, J3E	Figure 6.16, Page 6-18
8204.0 kHz, R3E	Figure 6.17, Page 6-19
12290.0 kHz, J3E	Figure 6.18, Page 6-20
16420.0 kHz, J3E	Figure 6.19, Page 6-21
18840.0 kHz, J3E	Figure 6.20, Page 6-22
22159.0 kHz, J3E	Figure 6.21, Page 6-23
25115.0 kHz, J3E	Figure 6.22, Page 6-24

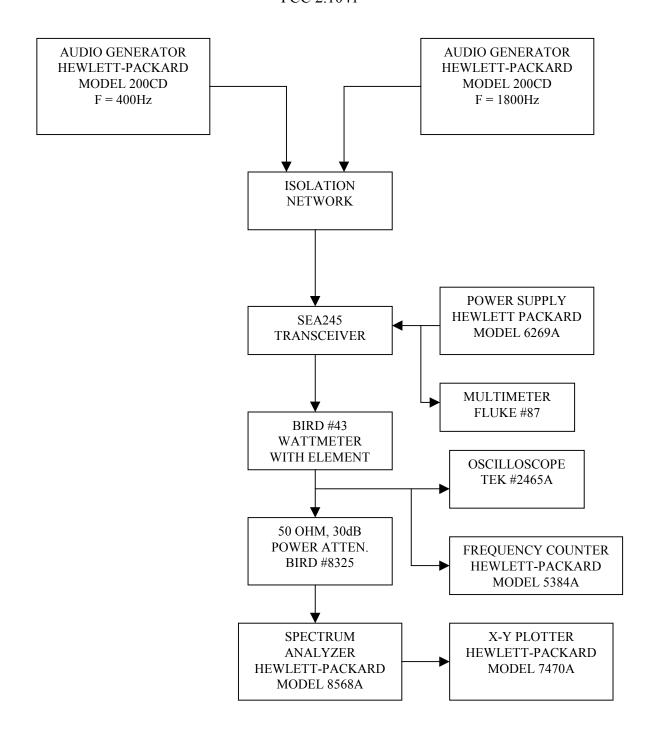


FIGURE 6.10 OCCUPIED BANDWIDTH TEST SETUP FOR VOICE (2K80XXE MODES) IN ACCORDANCE WITH SECTION 2.1049 (c)

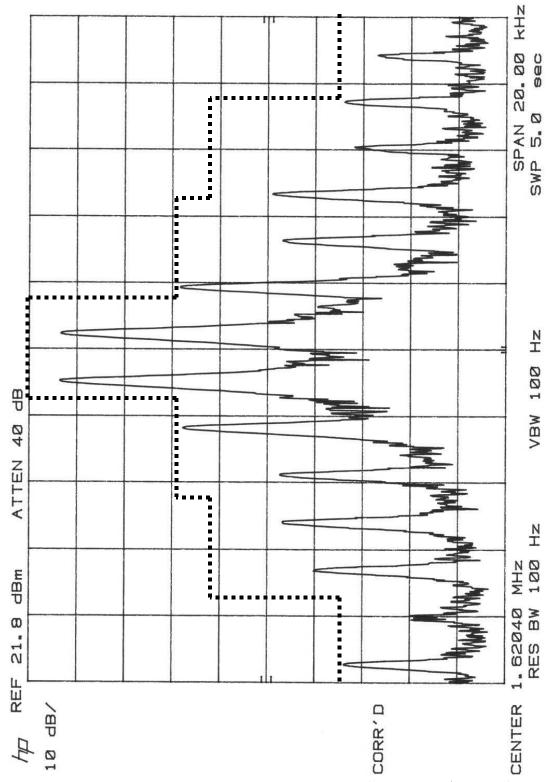


FIGURE 6.11 OCCUPIED BANDWIDTH TEST DATA ( $F_0 = 1619.0 \text{ kHz}$ , J3E)

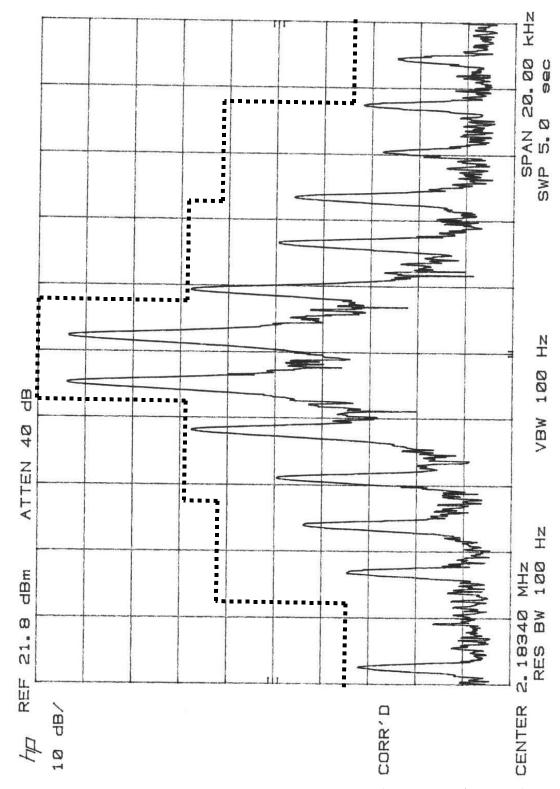


FIGURE 6.12 OCCUPIED BANDWIDTH TEST DATA ( $F_0 = 2182.0 \text{ kHz}$ , J3E)

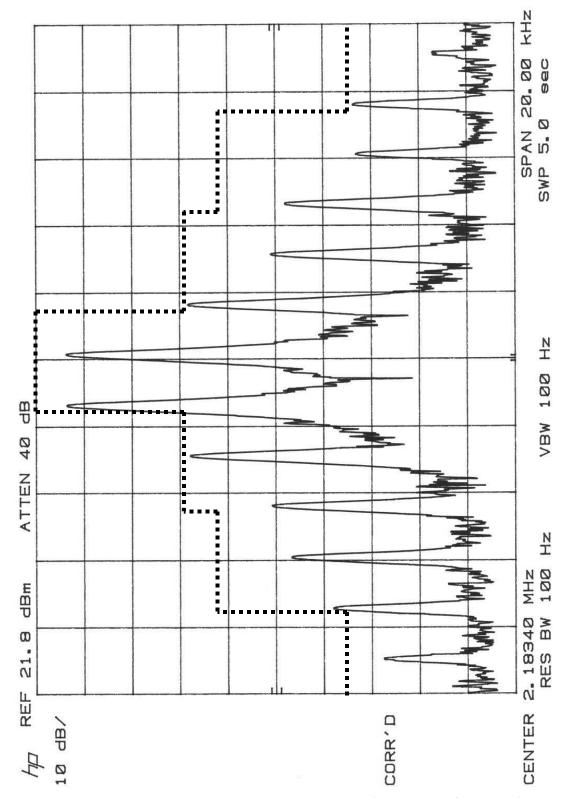


FIGURE 6.13 OCCUPIED BANDWIDTH TEST DATA ( $F_0 = 2182.0 \text{ kHz}, \text{H3E}$ )

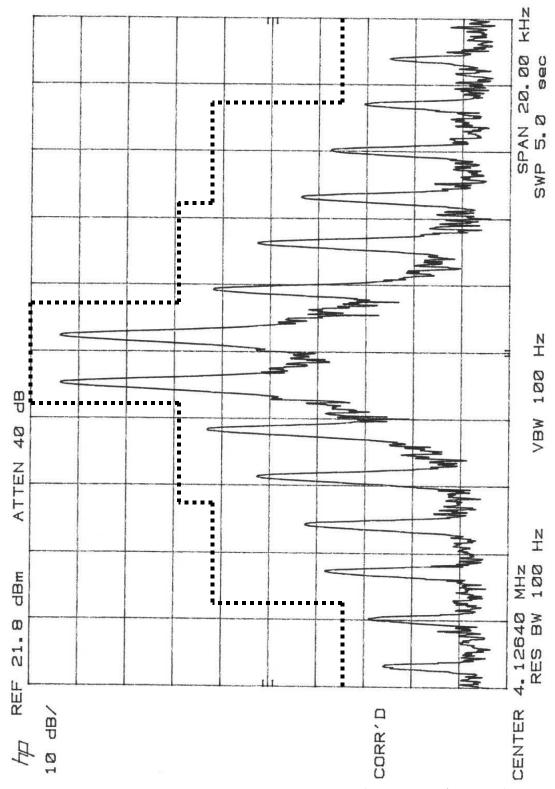


FIGURE 6.14 OCCUPIED BANDWIDTH TEST DATA ( $F_0 = 4125.0 \text{ kHz}$ , J3E)

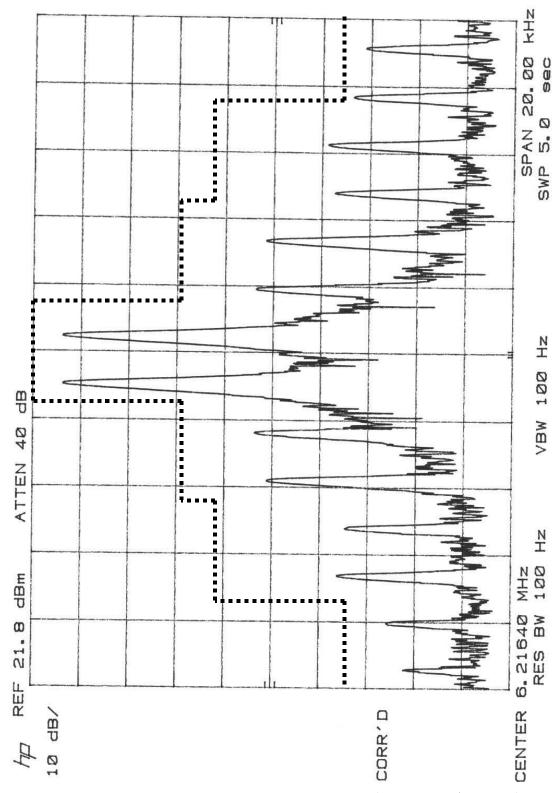


FIGURE 6.15 OCCUPIED BANDWIDTH TEST DATA ( $F_0 = 6215.0 \text{ kHz}$ , J3E)