

EMISSION DESIGNATORS AND BANDWIDTH CALCULATIONS

The subject transmitter uses multiple (3) FM Sub-carriers modulated with 3 level FSK. The positioning of the sub-carriers for three sub-carrier operation will be 0 KHz and ± 12.5 KHz from the carrier. In the event the subject transmitter is required to transmit three sub-carriers, P0 to P2 will be used.

THREE sub-carriers: 33K0F2D (Figure 2.)

- The sub-carriers are offset from f_c at -12.5 KHz, 0 KHz and +12.5 KHz.
- The Lower sub-carrier' LSB (Lower Side Band) has a BW of 4 KHz ($\frac{1}{2}$ the BW of a single sub-channel).
- The Upper sub-carrier' USB (Upper Side Band) has a BW of 4 KHz ($\frac{1}{2}$ the BW of a single sub-channel).
- The lower and upper sub-carriers are spaced 25 KHz apart.

$$\begin{aligned}\text{BW} &= 4 \text{ KHz} + 25 \text{ KHz} + 4 \text{ KHz} \\ &= 33 \text{ KHz}\end{aligned}$$

Note: Previous sub-carrier configurations will remain the same.