

## SECTION 2.1033(b)

SECTION 2.1033(b) (2a). For Part 15 a statement describing how the device operates.

The 6150RFT consists of a single chip transmitter (U4) under control of the microprocessor (U5), the transmitters FDE is crystal (YL2;  $10.78125 \text{ MHz} \times 32 = 345 \text{ MHz}$ ) and its output is matched to 50 ohms (by: L1, C19, L2, etc.). This output is fed via the transmit / receive switch (SW2) to the diversity antenna switch (CR25, CR27, etc.) which in turn feeds ANT1 and ANT2 via their respective matching circuits (C31, L7 etc, and C37, L6 etc.) that microprocessor (U5) also controls the T/R and antenna switches. During receive the same diversity antenna system and transmit / receive switch feeds filter (FL2) and the single chip receiver (U9) the receiver is a single conversion 'superhet' with an internal phase locked LO whose FDE is crystal (YL5;  $20.89375 \text{ MHz} \times 16 = 334.3 \text{ MHz}$ , i.e.,  $345 - 334.3 = 10.7 \text{ MHz}$  IF) IF band pass is provided by the 10.7 MHz filter (FL1) the raw base-band is processed by the processing circuit (U7, U8, etc.) and sent to microprocessor (U5) for final processing.