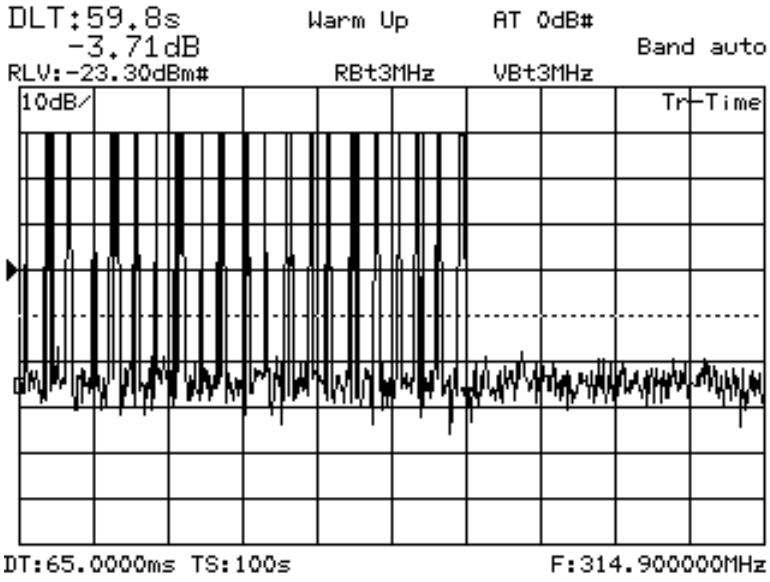
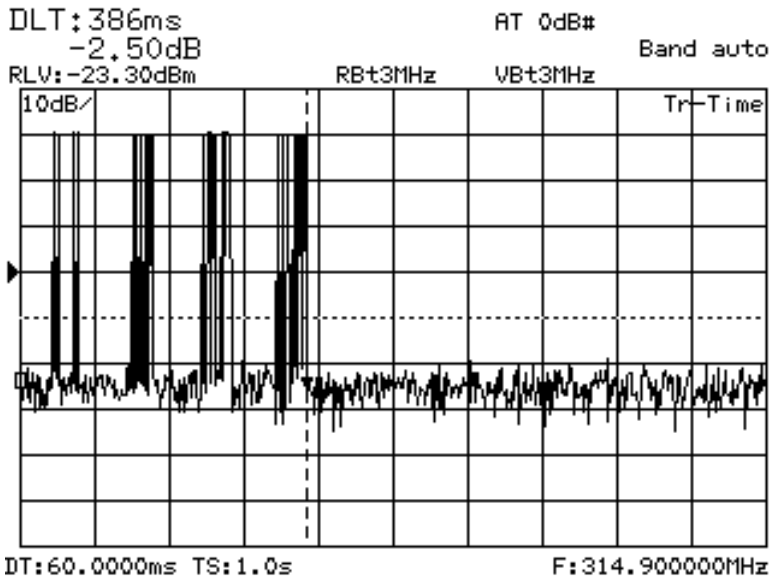
# Periodic operation characteristics

Manually operated transmitter deactivation

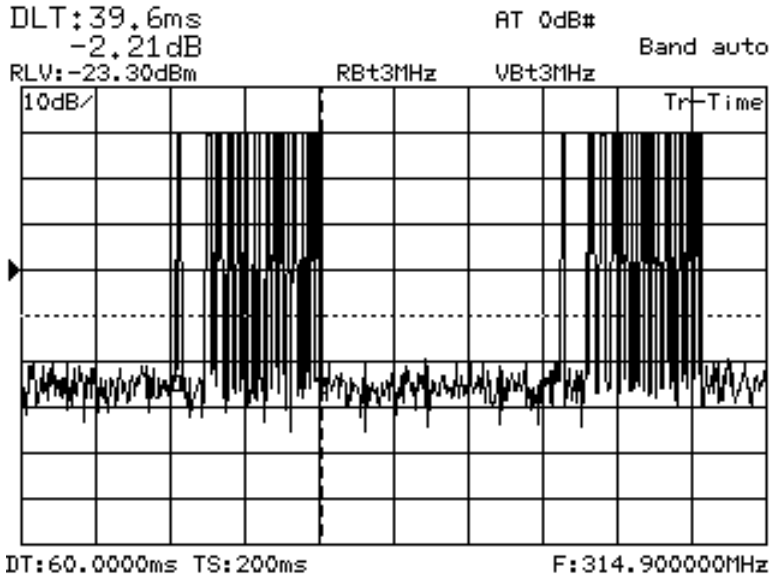
15.231 (a) (1) A manually operated transmitter shall employ a switch that will automatically deactivate the transmitter within not more than 5 seconds of being released.

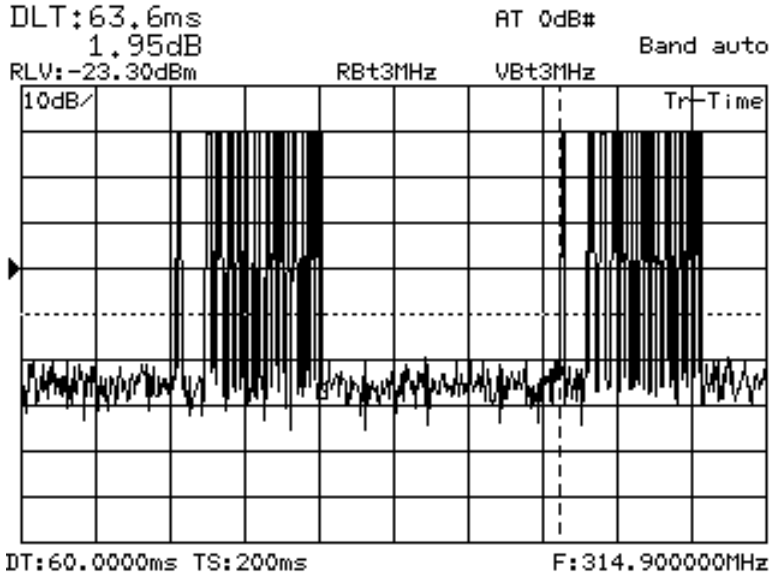


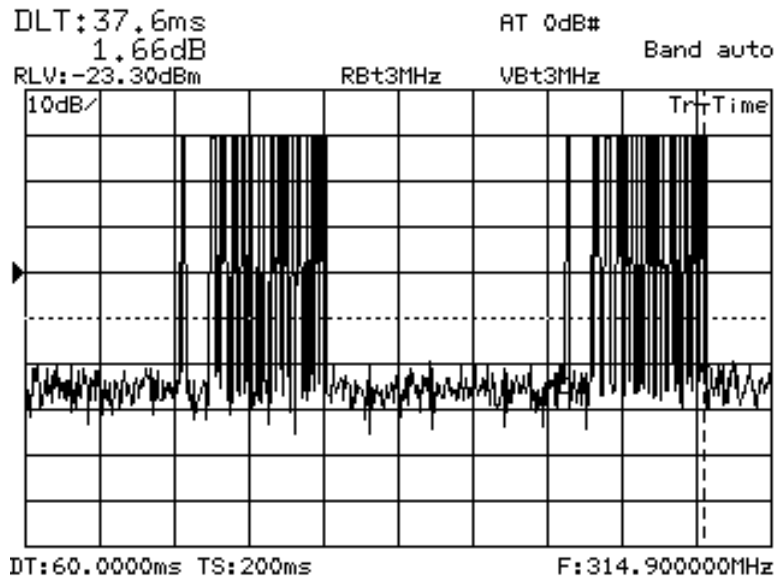

Total transmission time for a blocked button (**Transmission time out)**




Total transmission duration after release a button (equal for all buttons)

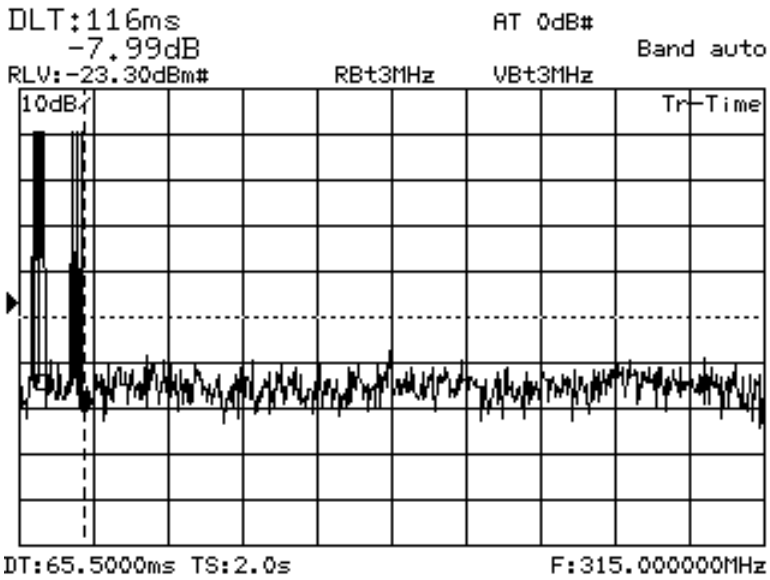


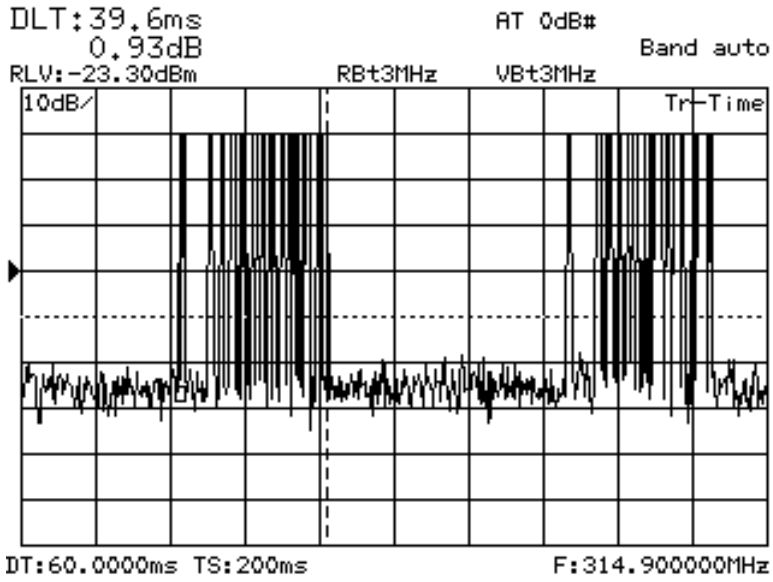



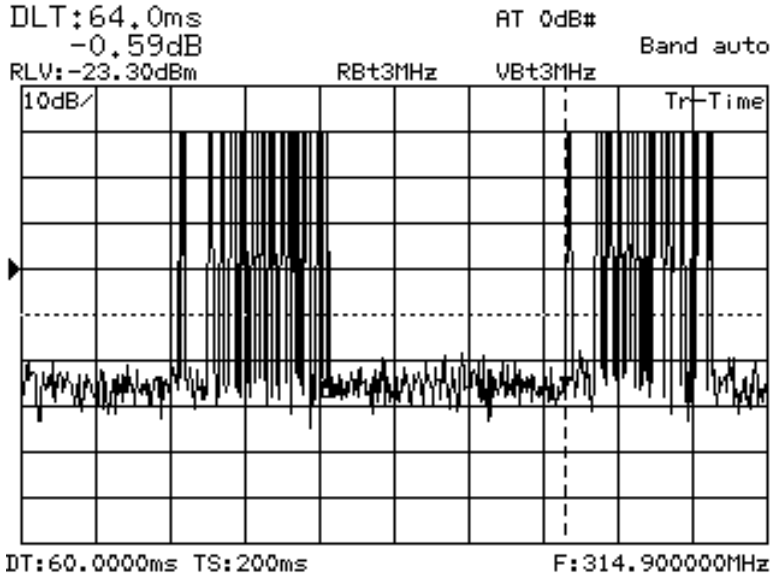

Pulse duration and pause duration for a single burst. (manually operated transmitter)

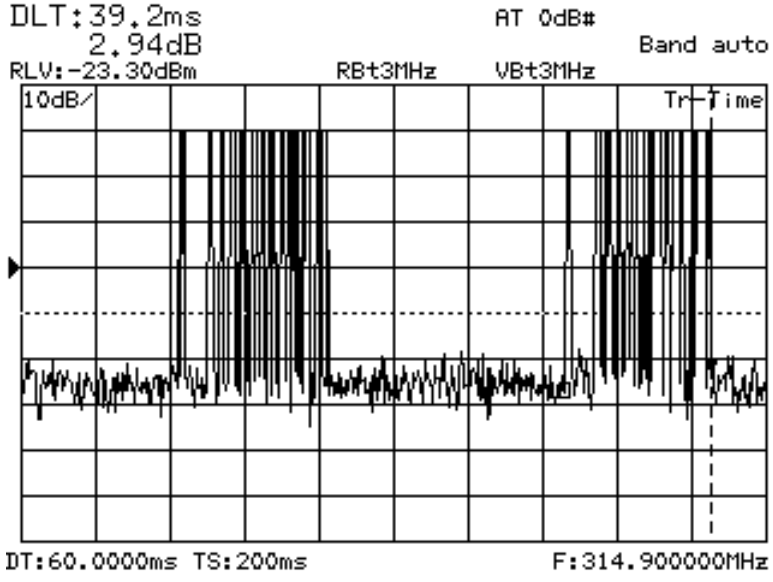
15.231 (a) (2) A transmitter activated automatically shall cease transmission within 5 seconds after activation.




Total transmission duration after automatically activation.



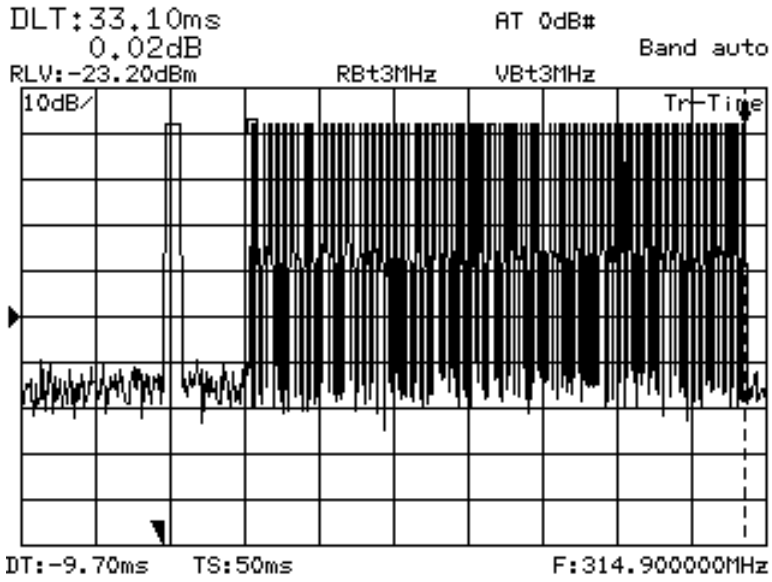



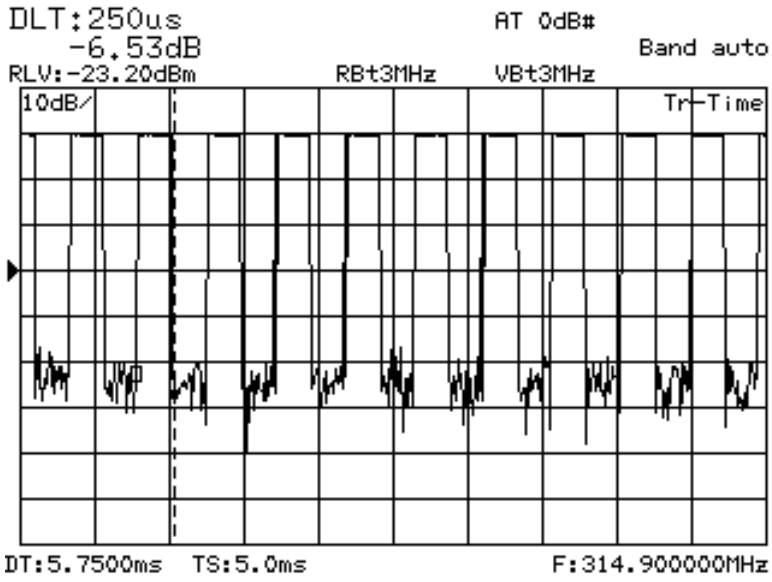

Pulse duration and pause duration for a single burst. (automatically operated transmitter)

Calculation of the average correction factor

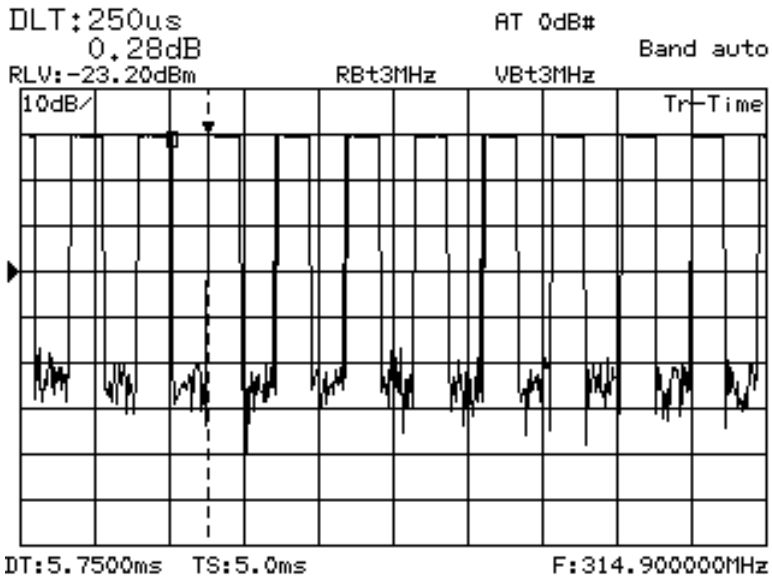
The average correction factor is computed by analyzing the "worst case" on time in any 100msec time period and using the formula: Corrections Factor + 20*log (worst case on time/100msec). Analysis of the remote transmitter worst case on time in any 100msec time period is an on time of 50msec, therefore the correction factor is 20*log (50/100) = - 6 dB. The maximum correction factor to be applied is 20 dB per section 15.35 of the FCC rules.




Duration of one transmit burst in a 100msec time period




Pulse duration for a single pulse




Pause duration for a single pulse

Burst duration in a 100msec time period = 33.1msec

Total transmission time in a 100msec time period = 66 Single pulses * 0.25msec
= 16.5msec

Average correction factor = 20*log (16.5msec/100msec) = -15.65 dB