## 7.0 MEASUREMENT PROCEDURES AND TEST EQUIPMENT USED – Pursuant to 47CFR 2.947

### 7.10 Transient Frequency Behavior - Pursuant to 47 CFR 90.214

Measured per TIA/EIA-603 2.2.19. Transient frequency behavior is a measure of the difference, as a function of time, between the actual transmitter frequency and the assigned transmitter frequency. This test is performed while the transmitter is switched on and off. The output of the transmitter is connected through a directional coupler, a 30 dB pad and a second directional coupler to the input of the HP 8901B modulation analyzer. The demodulated output is connected to channel 1 of a Tektronix TDS 3052 digital storage oscilloscope. The coupled port of the first coupler is connected to a RF power detector and the output of the detector is connected to the external trigger input of the oscilloscope. The second coupler is used to inject a signal from a HP E4332B signal generator that is at the same frequency as the transmit frequency but is at least 30 dB lower in power. This injected signal is used to lock the modulation analyzer on frequency when the transmitter is off. The signal from the generator is modulated with a 1kHz tone and either 25 or 12.5 kHz deviation depending on the channel spacing being tested.

### 7.11 Additional Test Equipment List

HP E4332B signal generator