

The antenna systems being tested are short, rapidly deployable systems for AM broadcasting under military and emergency conditions. It is characteristic of these systems that they develop quite high peak voltages compared to conventional AM antennas. During a portion of the test procedure, the robustness of the antenna systems under this power stress is observed. In order to ensure that the antennas are capable of handling peak voltages typical of a 125 - 140% modulated carrier (typical of modern AM broadcast transmitters), it is necessary to test the antennas using modulation similar to typical program modulation. Carrier only transmissions, or sine wave modulated transmissions can not duplicate the peak/average voltage and power ratios encountered in complex program modulation. There will be no "program" transmission in the sense of the broadcast of voice or musical entertainment performances. We would only use a technical transmission in the nature of a repeating voice test identification containing a brief musical passage typical of the client's content requirements, sufficient to reasonably impose the requisite high peak voltages on the system. During other periods, such as when only field intensity was being measured, an unmodulated carrier would be used.