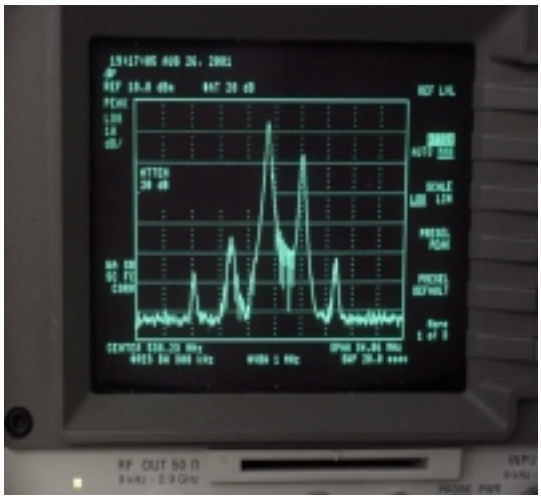
Conducted Harmonic and spurious signals

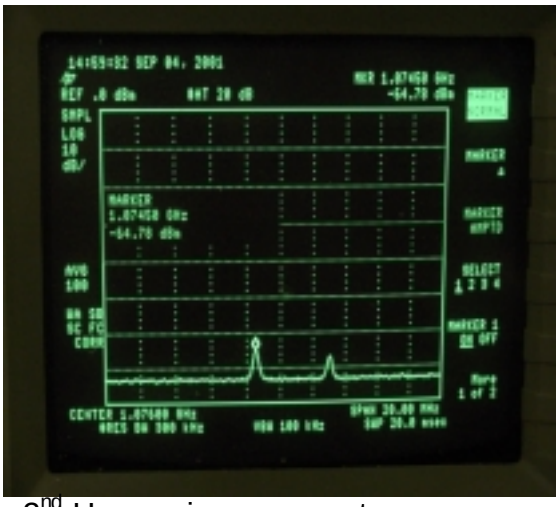
The equipment was configured as shown in the Figure 1 (Test Report #1.) The translator was operated at 110% visual power with a 10 dB visual/aural ratio. Measurements were recorded in the RF chain both before and after the retrofit amplifier. The top left photo below is the signal applied to the amplifier input indicating spurious signals just outside the channel. The top right photo below indicates the harmonics present at the input of the retrofit amplifier. The top of the spectrum analyzer screen is the level of the fundamental signal (i.e. harmonics are –40 dB on the input). The figures in the near the bottom on this page indicate that the spurious components outside the channel and harmonics meet the requirement at 30 watts output as outlined in FCC Rule 74.751(c). Harmonics and spurious levels at 110 watts peak power are shown in the following test report (See Test Report #5.)



Adjacent channel spurious (input)

2nd Harmonic area spectrum (input)

Adjacent channel spurious
Output @ 30 watts peak



2nd Harmonic area spectrum
Output @ 30 watts peak