As shown in Exhibit 4a, the typical characteristic variation due to temperature is less than ±.02%. This is true for all heterodyne processor channels.

PART 74.750(c)(2):
With the translator set up as in Exhibit 3 with a normal Channel 13 TV input signal, the following products, more that 2MHz from the channel edges, were measured at the output terminal relative to 1 watt peak sync.

FREQUENCY(MHz)	SOURCE	LEVEL MEASURED(dB)
1374.50	2ND HARMONIC	-68
700.75	Aural +9.0MHz	>-70
696.25	Aural +4.5MHz	>-70
682.75	Visual –4.5MHz	-68
678.25	Visual –9.0MHz	>-70

Observations were made on a properly operating translator Channel 13 to Channel 60 using a Hewlett-Packard 8591E Spectrum Analyzer with a cut to frequency dipole antenna at 10 meters from the translator and rotated to detect maximum radiation. The following signals were present:

		SPECIFICATION	
FREQUENCY(MHz)	SOURCE	LIMIT uV	MEASURED uV
1374.50	2nd Harmonic	700	50
733.00	LO	238133	10

Radiation from the heterodyne processor was nil. No spurious products could be detected at 10 meters that were less than 90dB down.

Antenna terminal measurements with the 8591E Spectrum Analyzer showed no change due to the heterodyne processor since the power amplifier stages are not affected by this modulation.

The above tests were performed using the same equipment hook up and methods described in Exhibit 3a. The translator test data compiled for this application was Channel 15 to Channel 60. Translator operating with a standard video test signal input (modulated stair step and color burst) and a modulated audio carrier at –10dB of peak visual. Results are typical of performance on all channels.

PART 74.750(c)(3)(I):
Variations of input voltage ±15% (reference +24VDC or 120VAC) during the temperature tests resulted in no discernible frequency variation traceable to the power supply. This is reasonable due to the heterodyne processor's internal regulation.

PART 74.750(c)(4):
With the equipment set as described in Exhibit 3, a CW signal at the visual carrier frequency was substituted for the normal input signal. After setting the translator output to 1 watt, the input signal was varied. Refer to Exhibits 6a, 6b, 6c. The output power may be set at 100% for any