Dear Barry,

Following are my responses to the issues raised.

Regards,

Tom

Dear Tom,

We have conducted our review of the application. The following issues need to be resolved before we can proceed:

1. The spurious radiated data is taken utilizing a procedure similar to ANSI C63.4. This will not be acceptable in the future and may not be acceptable now. The FCC has stated that it is branch policy to require the measurements be made in accordance with ANSI/TIA/EIA-603-1992 Section 2.2.12 substitution method. We believe that the FCC has expressed some clemency and will accept a few more applications with test data taken in this mode, but they could decide not to accept non-substitution data at any time. In light of these developments, you may wish to submit substitution based measurements for this device.

Response: This is an issue that we dealt with back in 1990 in correspondence with the Commission. Since there was no test procedure specified at the time, we proposed that field strength measurements be made and the erp derived mathematically using Maxwell's equations. At that time they agreed to the proposal. We have no objection, however, to using the EIA method on future filings.

2. We do not see data for a three signal test in this application. We note that there is mention of a mode in which the device puts up four channels. We do see two signal tests for the various operating modes, but the FCC tells us that they want to see these performed at the band edge (both high and low). If you can't do three signal tests due to equipment limitations it is acceptable to perform the two signal intermod test at the upper and lower band edges. Please submit plots responsive to this request.

Response: The two-signal intermodulation tests were performed at lower, middle, and upper band and appear in the report on pages 30 - 35. Attached here is a plot of the intermodulation spurious with three analogue(voice) modulated signals.
<<analog intermod.xls>>

3. Please submit a plot of the input vs. the output modulated waveform for each modulation type.

Response: The input plots precede the output plots in the report.

4. Please report the DC voltages and currents in the final amplifier stage.

Response: Power amplifier is a Stanford Microdevices SXA-289. It uses +5Vdc@ 115 mA.

5. Please submit the amplifier tune-up procedure. This may be a factory procedure used to set the unit's output power.

Response: There is no tune-up procedure. The power output is limited by the rf cascade.

6. Please submit a document responsive to the 22.933 requirement for compatibility with OET 53. A statement will be acceptable.

Response: The Commission has generally not required this attestation statement for amplifier products since the attestation is intended to address the operability of mobiles and base stations in the AMPS system and an amplifier product really has no impact on this.

7. Please supply a complete users manual so we can check for the necessary statements regarding modifications, compliance and RF exposure.

Response: The manual is still in draft form but does include the necessary statements.
<<InCell new manual.zip>>