Technical Review:

EMC Report

1. If the correction factor was used please include it in the calculations or at lease make reference to where it was taken into account.

   MFlom response: This is input into the spectrum analyzer as a correction factor and is automatically factored in by the equipment. The E4407B has the ability to input up to 4 correction factors.

   TCB response: For future filings please include a statement and/or calculation which account for all corrections.

   Noted. Future filings will have correction factors input into equipment listed in sample calculations.

2. Please indicate how 90.210 emission masks are equivalent to 2.1049 which states that the occupied bandwidth, is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission. As an alternative please submit occupied band width plots in order to justify the occupied bandwidths that was stated in the report.

   MFlom response: Part 90 radios are channelized with maximum allowable bandwidths and pre-defined limit lines. No other TCB has ever asked us for occupied bandwidth testing beyond 90.210 as the manufacturer stated emissions designators based upon necessary bandwidth calculations have always sufficed. .

   TCB response: Please see Licensed Devices General Technical Requirements (Detailed Update October 2005) Steven Dayhoff, Federal Communications Commission Office of Engineering & Technology for reference. In addition please see FCC IDs XPWSC-100T and Q95HD-1000 for measurements of Occupied bandwidth plots.

   I have evaluated the "**Licensed Devices General Technical Requirements Overview**" pdf dated October 2005 and noted that on page 7 the FCC states that TIA-603 testing meets the minimum requirements and there is no "Occupied Bandwidth" testing contained in TIA-603, only emission masks. In addition pages 13 – 16 of the pdf defines occupied bandwidth testing and the description on page 14 as well as the representative plot on page 16 is an emission mask.

   A test report from a previously granted product is not an official test procedure so these cannot be used. The FCC accepts TIA-603 (as indicated in the recommended pdf) and there is no occupied bandwidth test contained in that document.

   Please provide me with an "Official FCC Accepted Test Procedure" for measuring occupied bandwidth as relates to GMRS.

3. In Section 2.1033, application for certification, the data is required for sections 2.1046 through 2.1057inclusive. In Section 2.1053 Measurements required: Field strength of spurious radiation.

MFIom response: Page 14 of 40 in the test report is the beginning of this test section.

TCB response: The documents in the filing includes a test setup photo for CEV emissions (IMAG0267.pdf) yet no supporting data is included. Also, the radiated spurious data in the report does not cover standby mode with the transmitter off. Please correct as necessary.

This response is unrelated to the original question. Conducted emissions is run as part of FCC 15b rules on unintentional radiators and that os DOC only. Please disregard the photo.

SAR Report

1. I believe that for EUT testing a phantom thickness of 2mm is required, not 6mm.

MFIom Response: The reviewer is correct. My phantom is 6 mm thick on the sides and bottom with an area of 350 mm x 200 mm ellipse, which is 2 mm thick. Due to the volume of tissue needed to fill this size of phantom, the thicker side areas is required to not sag the phantom bottom too much. The device is tested under the 2 mm area in the center if the phantom. Is there another way in which they would like to see the certificate written to include this ellipse? If so, I will re-issue the report with a revised certificate.

TCB response: For future filings please include a full description of the EUT phantom as well as a certificate demonstrating that the requirements are met.

This information will be forwarded to the SAR lab for future filings.