Responses

RE: FCC ID: BCR-TFAM1719_ATCB004892
Attention: Tom Tidwell
I have a few comments on this Application. Please note that further comments may arise in response to answers provided to the questions below.

1. Please note that the internal photos appear to have shielding still on the board. Please remove any shielding and provide photos of the circuitry underneath. Alternately, please explain why the metal shown on the board is not shielding and why it should not be removed to show the circuitry underlying.
Please find additional photos with the shield removed. These are actually metal barriers that compartmentalize sections of the circuit but I found that removing them does give a clearer view of the PWB.

2. Please provide the MPE calculation results for the 2100MHz part 27 band.
Please find an additional MPE calculation for 2100 MHz band.

3. Please note that the manual states that 802.11 transmissions can also be amplified. Please note that if this is referring to part 15 802.11, no such testing for these signals has been provided. Please also note that such transmissions of this type via an amplifier of this nature may not be allowed under part 15.247. If this is referring to part 27 frequencies, please explain the context and statement concerning 802.11 signals in the manual.
The manual is intended to cover many devices. The unit does include what is referred to as "auxillary" ports. The function of these ports is simply to take an rf signal (at the BTS side), convert the rf to an optical signal and send the signal over fiber to the "remote" device. The remote is actually the device that we are certifying. The "auxillary" portion of the circuit is nothing more than a broadband rf to optical (and optical to rf) link. The signal is not amplified or altered in any way. The "auxillary" ports on the remote would be attached to a separately approved device manufactured by Andrew Corp. This separate device would really be similar to the remote device that we are now certifying but would cover a different frequency band. In some EU countries the auxillary remote extension would be used for a licensed WiFi service (thus the reference in the manual). This function is not usable without the auxillary remote device. Andrew is not attempting at this time to approve such a device.

4. Please note that the manual mentions narrowband PCS use however, there does not appear to be testing to that rule section. Please explain and please provide all necessary testing for all modulation types and rule parts.
This is again a reference to a different remote device that would be approved separately. This is a future product and will be certified at a later date. The remote device that we are certifying with this application covers only the PCS and AWS bands. The designation TFAM1719 indicates that this remote only works in the AWS band (generally referred to as 1700 MHz band) and Broadband PCS 1900 MHz band.

5. Please note that the manual mentions use of the device in the part 90 rule sections. If this device is intended to be used in this band please provide the necessary testing. If this device is not intended for use in the part 90 rule sections, please explain the reference in the manual.
This is again a reference to a different remote device that would be approved separately. This is a future product and will be certified at a later date. The remote device that we are certifying with this application covers only the PCS and AWS bands.

6. Please note that the manual indicates use in the 850MHz cell bands but no test data has been provided to support this band. Please explain and please provide test data for all rule parts used

by the device.
This is again a reference to a different remote device that would be approved separately. This is a future product and will be certified at a later date. The remote device that we are certifying with this application covers only the PCS and AWS bands.

7. Please note that the report states Edge technology emissions designator as GXW. Please note that the typical emissions designator used for EDGE technology is G7W. Please explain the use of GXW for EDGE in the report.
This was a typo. It should have been G7W. I am uploading a corrected report.

8. Please note that the test data table on page 12 of the report shows the first column as "Channel", however, the listings appear to be the frequency. Please clarify.
Another typo. I decided it might be better to put the actual frequency instead of channel designation but did not change the title in the table. See the corrected report.

9. Please note that as this is a part 27 AWS system also, it will have to go through the permit but ask route. This also means that the part 24 section will not be able to be granted until the part 27 has been approved for grant by the FCC.
It looked like from references made in the May TCB conference call with FCC that they are only interested in seeing AWS devices that fall into Portable RF Exposure category. I was not on the call so I defer to your judgment. We are not using any different modulations such as 802.16e, only the normal cellular modulations.

10. Please note that the upper signal on the graph on page 74 of the report appears to be over the red mask line. It is not possible to determine if this is an error in the line or if the device is actually failing the band edge. Please clearly identify the upper band limit so compliance can be easily be determined.
The graph on page 74 was done with 1 MHz RBW because the intent was not really to show band edge compliance. Graphs for band edge showing the emissions in the 1 MHz adjacent to the band edges are shown on pages 59 – 73.

11. Please note that in regards to item 10 there are a number of plots where the signal exceeds the red limit line. Some of these plots may be showing an improper limit line. Please consider remarking the limit lines (red lines) to show actual limit frequencies etc.
There are some cases in the report where the carrier itself is over the red line but this is only because the in-band limit was not adjusted for the power of the carrier. The out-of-band limits at -13 dBm are valid.