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March 1, 2004

Mr. B.C. "Jay" Jackson, Jr., P.E.
Mobility Division
Wireless Telecommunications Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20054

**RE: WT Docket 02-86
Reply to February 19, 2004 Filing by
Opposing Carriers**

Dear Mr. Jackson:

AirCell, Inc. ("AirCell") has reviewed the *ex parte* filing by AT&T Wireless Services, Inc., Cingular Wireless, and Verizon Wireless (collectively, "Opposing Carriers"), including the Engineering Response V-Comm prepared, filed in the above-referenced docket on February 19, 2004. AirCell believes that, after a review of V-Comm's actual test data – rather than the erroneous conclusions and extraneous rhetoric in the filing – the Commission should gain even greater confidence in the data from multiple tests previously submitted by AirCell that have consistently shown that AirCell mobile units typically operate between 4 and 8 dBm, or approximately 5 milliwatts average.

While AirCell cannot fully assess the validity of the V-Comm tests without full information on flight routes and without fully calibrating the aircraft systems, we nevertheless believe that, with a couple of notable exceptions, V-Comm's recordings of DPC levels are generally representative of AirCell operations. What is not representative, however, are the *assumptions* (*i.e.*, not actual measurements) made by V-Comm relating to the transmit power of AirCell mobile units. As AirCell explained in its last filing, we know, based on the testing of every mobile unit prior to shipping, that the *actual* transmit power of mobile units manufactured for AirCell is significantly below the nominal power level indicated for each DPC step under the AMPS specification cited by V-Comm.^{1/}

^{1/} See V-Comm Engineering Response at notes 13-14. V-Comm is correct that the spec provides for a wide tolerance range for each power step. V-Comm notes that under the spec, the transmit power may be as low as 4 dB below the nominal power level. Thus, AirCell mobile units simply transmit at the low end of this permitted range, at levels approximately 2 dB lower than the nominal power levels identified in the spec.

In its Engineering Response, V-Comm dismisses this point, conjecturing that AirCell's use of the word "typical" masks some large variation in power levels from unit to unit. In fact, the 360 mW mean power test result for DPC Step 2, presented by AirCell in its last filing, had a standard deviation of only 28 mW, as measured across the entire production run. The highest single reading was 460 mW, out of 2000 total units tested. By contrast, V-Comm assumes a dramatically higher 631 mW. Thus, V-Comm's Table 2^{2/} and its conclusions regarding AirCell's transmit power at the mobile antenna are erroneous. Indeed, even V-Comm admits that the "spec" nominal power levels shown in its Table 2 are not representative of actual AirCell operations. In note 15, V-Comm cites its own 2001 test data which showed that the *maximum* operating power levels for the AirCell mobile terminals tested were "only" 1 dB below the nominal AMPS power specification. While AirCell stands by its statement that its "typical" operating power is 2 dB below the AMPS spec, we think it is significant that V-Comm agrees that even at maximum operating levels, AirCell units are still *below* the nominal power levels in the AMPS spec.

As noted above, AirCell believes that most of the DPC step data recorded by V-Comm is generally consistent with normal, day-to-day AirCell operations. However, there were two measurements – one recorded at Altoona and one at Owego – that represent extremely atypical readings. Without knowing flight paths and conditions we cannot speculate on causes, but can only state that the results are inconsistent with the other reported data.^{3/} Although these two anomalies did skew the overall average calculated by V-Comm, it is significant that the average reported DPC levels are *still* at near-typical values. The bottom line is that this new V-Comm data supports the Texas tests from the point of view that the typical AirCell mobile transmit power is centered between 4 and 8 dBm or approximately 5 mW, plus or minus 2 mW (with the variable being unit-to-unit variations), which is in agreement with the Texas results for standard (non-smart) antennas.

Finally, AirCell was surprised that the Opposing Carriers characterized AirCell's action in instructing Cingular to terminate AirCell operations at the Ellendale and Marlboro sites as an "attempt[] to prevent Petitioners from gathering and reporting" test data. Despite the Opposing Carriers' insinuations, AirCell was *not* aware that tests were in progress at these sites. Indeed, AirCell had sent Cingular a demand letter (attached) on August 13, 2003 which contemplated such action.^{4/} Cingular never responded to this letter. Therefore, AirCell's actions should have

^{2/} See V-Comm Engineering Response at 10.

^{3/} Because the DPC power distribution results at Owego appear particularly abnormal, AirCell intends to investigate this site and will take any corrective action necessary if we discover it is not operating properly.

^{4/} AirCell originally contracted with Comcast for service at these two sites in 1997, and they were later acquired by Cingular. After a period of good coordination between AirCell and Cingular, more recently AirCell has experienced numerous problems with the sites. For example, AirCell was not provided with ready access to the sites to maintain the systems, and requests to convert the sites to smart antennas and to retune the channels to those with less co-channel interference were ignored. Moreover, there is information on the record to suggest that the control parameters for these sites were changed in an unauthorized manner, including during tests referenced by V-Comm's April 2003 test reports to the FCC. After numerous friendly attempts to resolve these issues, AirCell finally sent the August 13, 2003 demand

come as no surprise to Cingular, given AirCell's demand letter and other attempts to resolve the existing concerns relating to these sites.

Please let us know if the Commission requires any additional information related to this matter.

Sincerely,

/s/ Jim Stinehelfer

Jim Stinehelfer
President
AirCell, Inc.

Attachment

cc: Michael D. Sullivan

letter noted above, and Cingular has never responded. Given that these sites were degrading the quality of AirCell service and the overall performance of AirCell's East Coast network, AirCell finally demanded that Cingular terminate AirCell network operations on the sites on January 30, 2004. Our service to AirCell customers was actually improved by eliminating these sites.

HOGAN & HARTSON

L.L.P.

August 13, 2003

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Mr. David G. Richards
Cingular Wireless LLC
5565 Glenridge Connector
Suite 1700
Atlanta, GA 30342

Dear Mr. Richards:

AirCell, Inc. greatly values its relationship with Cingular Wireless. Cingular provides facilities and services that play a key role in the operation of the AirCell system.

Recently matters have arisen that are of serious concern to AirCell. Cingular is not meeting its obligations under our Facilities and Services Agreement, and the company's lapses threaten to impact our ongoing service now and in the future. We are bringing these matters to your attention pursuant to Section 12 of the Agreement with the hope that we can resolve these matters promptly.

First, AirCell requests that Cingular take action to ensure that it will hold all necessary authorizations from the Federal Communications Commission to meet its obligations under the Agreement in the future. As you know, AirCell has a pending petition for extension of its waiver and associated operating conditions. Other cellular companies also are parties to the AirCell petition to the extent necessary to obtain ongoing authority to continue their operations in association with our company. To date, however, Cingular has neither joined in our application nor filed a separate application with the FCC of its own.

Cingular's continuing failure to seek an extension of its AirCell-related operating authority puts at risk AirCell's ability to maintain service quality and develop its business. AirCell is aware that Cingular has sometimes taken the position that it is not contractually obligated to seek waivers or extensions of existing waivers for this purpose. That is wrong. Cingular is legally obligated to provide the services set forth in the Agreement. As part of meeting those obligations, it is required to obtain any necessary FCC authorizations, just as it must take any other steps associated with meeting its contractual commitments. An FCC authorization is no different from any other permit required by Cingular to run its business and honor its contracts. Indeed, maintaining FCC authorizations is no different from any other basic action incidental to Cingular's business operations. Just as Cingular must ensure that its cell sites are powered, secure those sites, and pay its taxes, it similarly must ensure that its operations are properly authorized.

If Cingular does not promptly exercise its best efforts to maintain necessary FCC authorizations, it will be frustrating the purposes of the Agreement and threatening serious short-term and long-term damage to AirCell's business and its service to customers. We therefore request that Cingular take such actions beginning at once so as to avoid risk of interruption of its FCC authority, and the associated damage to AirCell that would result.

Second, Cingular is not meeting its obligations under the Agreement to provide services pursuant to the Agreement, or to operate the AirCell-provided equipment "with the same care and competence with which it operates its own equipment." *See* Section 1 and Exhibit A. These technical problems fall into a number of categories:

1. Cingular is using an incorrect channel (Channel 311) at the Marlboro site, despite AirCell's notification to Cingular of this problem on October 30, 2002. Channel 311 is not one of the channels published by AirCell for this site, yet AirCell discovered during a quality control flight test that the site was carrying traffic on Channel 311. AirCell had been using Channel 312 and has no record of coordination or notification with Cingular regarding use of Channel 311.
2. AirCell is no longer receiving data from its Cell Site Test Units (stand-alone cell site monitoring units that AirCell puts at each of its sites) at either the Marlboro or Ellendale sites. AirCell's records reflect that the unit at Marlboro was in service on December 2000 and later removed. The unit at Ellendale has either been deactivated or removed. AirCell has attempted to contact Cingular's operations managers and cellular technicians about this problem, but the calls have not been returned.
3. AirCell has not been receiving regular traffic and performance data from the switches for the Marlboro or Ellendale sites since August 2002, despite repeated requests to Cingular. AirCell monitors this cellular performance data (or "switch dump readouts") from its sites to manage its network.
4. Similarly, AirCell has not been receiving current translatable parameter information from the switches for the Ellendale or Marlboro sites. Specifically, AirCell needs the information for the Face Code Information (fci), cell2, ceqcom2, ceqsu2, and ctm forms on a monthly basis to verify site configuration and performance parameters (such as correct dynamic power control settings).
5. Recent photographs from May 2003 indicate that the lower boom arm (including the transmit and receive antennas) at the Marlboro site has been lowered beneath the tree line and needs to be raised. The foliage obstruction will reduce signal receive efficiency, resulting in the site requesting higher transmit powers from aircraft than normal.

6. AirCell has requested that Cingular install a smart antenna system at either the Marlboro or Ellendale sites. Indeed, when AirCell agreed in 2000 that Cingular could use the Marlboro site for testing the AirCell system, we did so conditioned upon installation of a smart antenna at that site, which was never done. AirCell has found that smart antennas assist with coverage area and quality of service, particularly in more urban environments (such as these two sites).

Again, AirCell values its working relationship with Cingular. The services and facilities provided by Cingular under the Agreement are vital to our business. We hope that Cingular will cure these breaches of the Agreement promptly to avoid damage to our operations and the services we provide. However, if these problems continue, AirCell reserves all of its legal rights and remedies pursuant to Section 12. Please contact me as soon as possible, and in any event no later than September 5, 2003 to discuss this matter.

Sincerely,



Peter A. Rohrbach
Counsel to AirCell, Inc.