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October 27, 2004

Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 Twelfth Street, SW
Washington, DC 20554

**RE: Notice of *Ex Parte* Communication
 WT Docket No. 03-103**

Dear Ms. Dortch:

On October 26, 2004, Ahmed Lahjouji from the Commission's Office of Engineering & Technology, contacted Grant Saroka, technical consultant to AirCell, Inc. ("AirCell") by telephone to seek clarification regarding a footnote reference made in a prior filing in the above-referenced proceeding.

Page 3 of Exhibit B-7 of the referenced material 1/ states that "Through repeated measurement, the polarization isolation has been shown to range between 12 to 15 dB (see GE Research test results)." Attachment A contains pages reporting the GE Research test results. Mr. Lahjouji requested an explanation of the test methodology that produced the graph labeled 8.2.6.

Mr. Saroka explained his understanding of the methodology as follows: GE Research set up a test transmitter and a test dish antenna with both horizontal and vertical feeds. The aircraft was equipped with a test receiver and a horizontally polarized, belly mounted antenna. The aircraft flew on a radial path inbound

1/ See Exhibit B7 of the Reply Comments of AirCell, Inc., In the matter of AIRCELL, INC., Petition, Pursuant to Section 7 of the Act, For a Waiver of the Airborne Cellular Rule, Or in the Alternative, For a Declaratory Ruling (filed January 12, 1998).

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towards the transmitting location, staying within the main lobe of the antenna pattern. The transmitter was periodically switched between the two feeds. Signals labeled "Matched polarization" on the plot corresponded to measurements made when the transmitter was connected to the horizontally polarized feed, and those labeled "Cross polarization" were made when the transmitter was connected to the vertically polarized feed. The amount of signal change at the transitions indicate the discrimination at that point in space (*i.e.*, starting from mile 32, the isolation values are approximately 17, 22, 13, 17, 15, 14, 22 and 14 dB).

Mr. Saroka also indicated his belief that this is a sample plot, with GE Research's overall conclusion stated on the next page as: "Cellular Ground Station to Air Mobile Polarization Discrimination ≥ 15 dB."

Pursuant to Section 1.1206(b)(1) of the Commission's rules, I am filing this notice electronically in the above-referenced docket. In addition, I am sending one copy of this notice to the FCC representative listed below. Please contact me directly with any questions concerning this filing.

Sincerely,

/s/ David L. Martin

David L. Martin
Counsel to AirCell, Inc.

Enclosure

cc: Ahmed Lahjouji