



QUALCOMM Incorporated

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September 2, 2011

Ms. Marlene Dortch  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, SW  
Washington, DC 20554

**Re: Written *Ex Parte* Presentation Regarding RM-11640 -  
Petition for Rulemaking To Establish A Next Generation Air-Ground  
Service On A Secondary Licensed Basis In The 14.0 to 14.5 GHz Band**

Dear Ms. Dortch:

QUALCOMM Incorporated (“Qualcomm”) filed the above-referenced Petition for Rulemaking to establish a Next Generation Air-Ground service. In the text of Appendix A to the Petition for Rulemaking, Qualcomm described the antenna profile for purposes of conducting interference calculations. To further assist the Commission and other parties in evaluating Qualcomm’s Petition for Rulemaking, attached herewith are graphical depictions of the antenna profile.

The aircraft elevation gain and aircraft azimuth gain profiles, which were described in Section 1.1 of Appendix A to the Petition, are graphically depicted in the attached Figures 1 and 2. Please note that positive angles represent above horizon angles and negative angles represent below horizon angles, and that the Next Generation Air-Ground system has been specified such that the above horizon gains are below that specified in Figure 1.

In addition, as explained on page A-5 of the Petition, the peak antenna gain for the Next Gen Air-Ground Ground Station antenna looking directly north is 37 dBi. Finally, the Ground Station antenna gain toward the Geostationary arc, that is, for angles greater than  $\pm 95$  from true north, is 0 dBi.

Respectfully submitted,

A handwritten signature in black ink, appearing to read 'D. R. Brenner', written in a cursive style.

Dean R. Brenner  
Vice President, Government Affairs

Att.

## Attachment

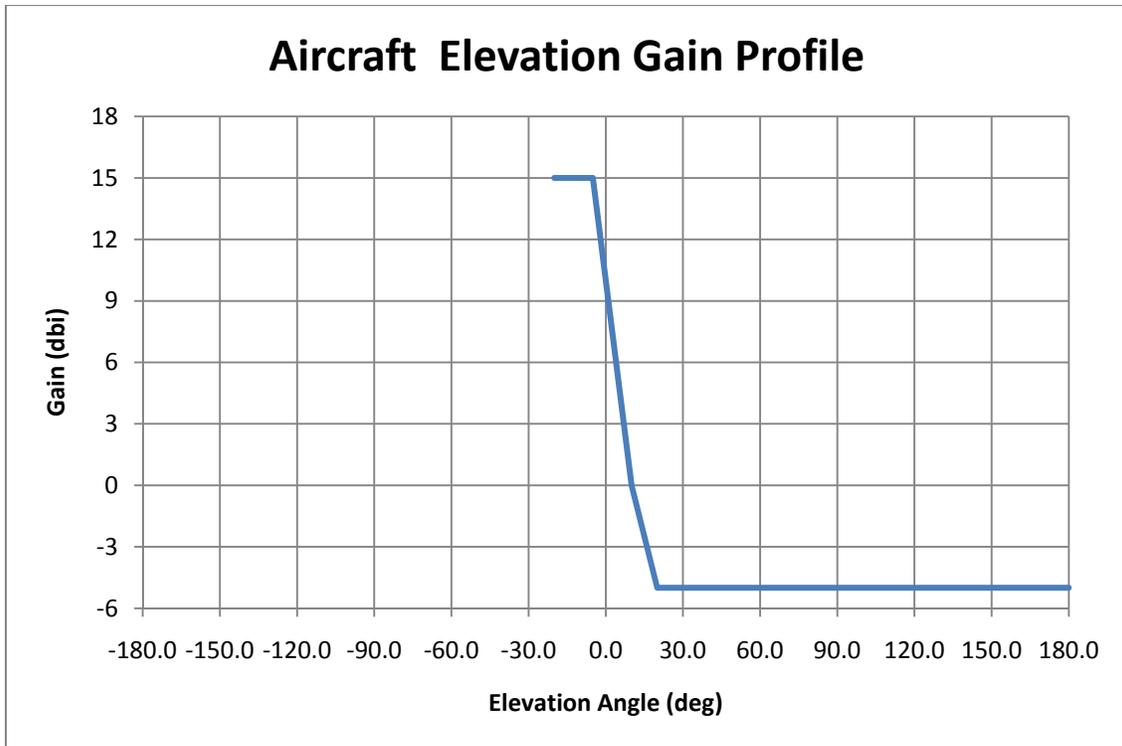


Figure 1. Aircraft elevation gain profile

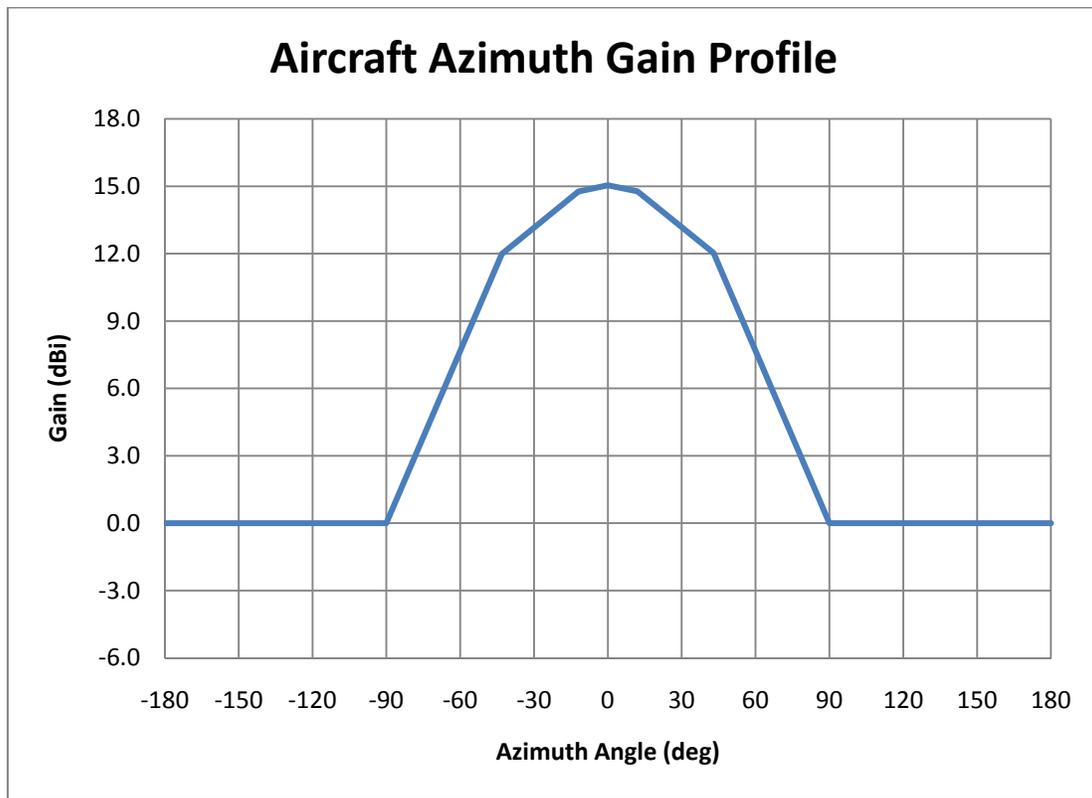


Figure 2. Aircraft azimuth gain profile