

From: William Kolb

To: Jose Trevino

Date: December 14, 2007

Subject: FCC file number 0188-EX-RR-2007

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Message:

Responding to the request for an Exhibit to the application to renew Experimental License File Number 0020-EX-TC-2007, Call Sign WC2XPE, Reply to Correspondence Reference Number 5789:

This License has been used and will continue to be used to develop and refine transmission and reception equipment in the standard Ku-Band from 14.0 to 14.5 GHz that is in use under existing FCC authorization. ARINC, Inc. develops communications solutions for commercial, military and government companies and agencies in coordination with domestic satellite service providers. Apparatus requiring developmental testing includes mechanically and electrically steerable antennas, antenna-mounted HPA's, rejection filters, block upconverters and LNA's. Antennas that do not fully comply with Section 25.209 require rigorous evaluation under the Experimental License. Modulation schemes that minimize potential interference and maximize data transfer have been developed using the Experimental License.

One example of this is the development of the SKYLinkSM Broadband communications system authorized under Call Sign E030205, issued by the International Bureau. Variations of the airborne mobile antenna for different sizes and types of aircraft will use the requested Experimental License for low EIRP testing and evaluation on Ku-band transponders provided by SES Americom for that purpose. Other steerable Ku-band antennas for terrestrial mobile applications will be developed as required for commercial and military applications that are conducted within the Frequency, Station Class, Authorized Power and within the designated bandwidth limitations specified in the Experimental License.

Further, ARINC, Inc. maintains current agreements to protect NASA TDRSS Earth Station Sites currently operating and for the proposed site in Blossom Point, Maryland. Significant development work will be required if NASA does establish the Blossom Point site because its proximity to major East Coast population centers now being serviced by SKYLinkSM lie within the nominal protection zone expected for that site.

ARINC, Inc. also maintains a Coordination Agreement with the National Science Foundation to protect their Radio Astronomy Sites, including the National Radio Quiet Zone. The NASA and NSF Agreements would apply to the use of the requested Experimental License.

This Experimental License renewal request is in the interest of the public, the government and the military for leading edge development of communications systems operating within the domestic Ku-band.

William M. Kolb