

The Boeing Company
Experimental Modification Application
FCC Form 442, Exhibit 1

NARRATIVE STATEMENT

The Boeing Company (“Boeing”) requests that the Commission modify and consolidate Boeing’s existing experimental licenses to operate Aeronautical Mobile-Satellite Service (“AMSS”) terminals in the 14.0-14.5 GHz band (Call Sign WC2XVE, File Nos. 0038-EX-ML-2003 and 0200-EX-PL-2003). Specifically, Boeing seeks to remove the Eutelsat Atlantic Bird 2 and Eutelsat II-F4 satellites and add the AsiaSat 3S, Superbird-C and SESAT satellites as authorized points of communication for its experimental operations. In addition, Boeing seeks to consolidate its two experimental licenses for Call Sign WC2XVE by adding the authority granted in license File No. 0038-EX-ML-2003 to license File No. 0200-EX-PL-2003. As demonstrated herein, modifying Boeing’s experimental license as requested in this application would serve the public interest, convenience and necessity.

I. MODIFYING BOEING’S AUTHORIZED POINTS OF COMMUNICATION WOULD FURTHER THE PUBLIC INTEREST

Boeing is authorized by the Commission to operate in the 14-14.5 GHz band, on an experimental basis, up to ten (10) technically identical phased array antenna and ten (10) technically identical reflector antenna mobile terminals aboard U.S. aircraft communicating with ALSAT Ku-band satellites (*i.e.*, U.S. licensed satellites and those foreign-licensed satellites on the Permitted Space Station list) and the Eutelsat Atlantic Bird 2 and Eutelsat II-F4 satellites over CONUS, Alaska and

Hawaii, and in international airspace.¹ Boeing is also licensed to operate two (2) technically identical phased array antenna and two (2) technically identical reflector antenna terminals at its System Integration and Testing Facility (“SIF”) in Kent, Washington with the same authorized points of communication.² The operational conditions sets forth in the two experimental licenses associated with Call Sign WC2XVE are substantially identical.³

As discussed in its prior experimental applications, continued development of Boeing’s innovative two-way AMSS service -- Connexion by BoeingSM -- provides substantial public interest benefits to U.S. Government, military and commercial users in the United States and around the world.⁴ The important public interest factors that supported Commission grant of Boeing’s prior experimental licenses are even more compelling today. From providing commercial airline passengers with two-way broadband connectivity to satisfying critical U.S. government aeronautical mobile communications requirements, there is a compelling need for the innovative

¹ See *The Boeing Company, Experimental Radio Station Construction Permit and License, Call Sign WC2XVE, File No. 0038-EX-ML-2003* (effective August 18, 2003).

² See *The Boeing Company, Experimental Radio Station Construction Permit and License, Call Sign WC2XVE, File No. 0200-EX-ML-2003* (effective November 10, 2003).

³ License File No. 0200-EX-ML-2003 contains additional emissions designators that Boeing seeks to utilize for all AMSS operations, and the order in which the special conditions are listed differs from license File No. 0038-EX-ML-2003.

⁴ See, e.g., *The Boeing Company, Experimental Radio Station Application, File No. 0145-EX-PL- 2001*; *The Boeing Company, Experimental Radio Station Application, File No. 0038-EX-ML-2003*. The background and public interest benefits of Boeing’s AMSS services set forth in Boeing’s prior experimental applications are hereby incorporated by reference.

communications services being developed by Boeing. As a result, Boeing must continue to test and demonstrate its experimental stations, and to adjust its authorized points of communication as its experimentation needs change over time.

In this connection, Boeing no longer seeks to communicate with the Eutelsat Atlantic Bird 2 and Eutelsat II-F4 satellites for its Atlantic/European experimental operations. Instead, Boeing seeks to utilize the Eutelsat SESAT satellite at 36° E.L., which affords coverage of the Atlantic, Europe, Middle East and Central Asia regions. In addition, Boeing seeks to add the Space Communications Corporation Superbird-C satellite at 144° E.L. and the Asia Satellite Telecommunications Company Ltd. AsiaSat 3S satellite at 105.5° E.L., which will extend the reach of Boeing's experimental operations throughout the Asia/Pacific region. Use of these new authorized points of communication will significantly enhance the efficiency and geographic scope of Boeing's experimental operations.

Boeing does not seek to alter any operational conditions set forth in its experimental licenses. Boeing recognizes and accepts these conditions, and confirms that it will operate its experimental stations in accordance with the interference levels that have been accepted by other satellites in coordinating with the new authorized points of communication. In particular, Boeing will comply with Special Condition (3) in license File No. 0200-EX-ML-2003, which requires Boeing to obtain a certification from the operator of each listed satellite point of communication that operators of co-frequency satellites within +/- 6 degrees have been notified of Boeing's experimental operations prior to the commencement such operations. Because the technical and operational conditions contained in Boeing's existing experimental

authorizations will continue to apply, Boeing's operations will continue to be conducted in a manner that protects other users of the 14.0-14.5 GHz band from potential harmful interference.

II. CONSOLIDATING BOEING'S EXPERIMENTAL LICENSES WILL FURTHER THE INTERESTS OF ADMINISTRATIVE CONVENIENCE AND REGULATORY CONSISTENCY

As noted previously, the Commission's authorization of Boeing's experimental AMSS terminal operations is contained in two separate license documents in File Nos. 0038-EX-ML-2003 and 0200-EX-PL-2003. The first license authorizes the mobile operations of Boeing's two types of aircraft terminals, and the second authorizes fixed testing of the same terminals at Boeing's Kent, Washington facility. Although the operational conditions of the two licenses are substantially identical, the licenses have different expiration dates.

Boeing seeks to consolidate its two experimental licenses for Call Sign WC2XVE by adding the authority granted in license File No. 0038-EX-ML-2003 to license File No. 0200-EX-PL-2003. Because the operational conditions associated with both licenses are the same, the proposed consolidation would not materially affect the requirements imposed on Boeing's experimental operations. Such consolidation would, however, to further the interests of administrative convenience and promote regulatory consistency by ensuring that all of Boeing's AMSS experimental operations are subject to the same conditions and authorization period. Accordingly, this proposed modification would serve the public interest.

III. CONCLUSION

For all of the foregoing reasons, Boeing respectfully requests that the Commission modify Boeing's experimental authorization to change its authorized points of communication and consolidate its experimental licenses as set forth herein.