

EXHIBIT 1

NARRATIVE STATEMENT

1. OVERVIEW

Aeronautical Radio Inc. (ARINC) previously applied for and received an Experimental Radio Station Construction Permit and License (Call Sign WC2XPE). See File Number 0054-EX-PL-2001, as modified 0029-EX-ML-2003 and 0029-EX-ML-2004. Under this license, ARINC has been developing a Ku-band (11.7 to 12.2 GHz and 14.0 to 14.5 GHz) two-way wideband system to communicate between commercial aircraft and a Ground Earth Station. ARINC also has been developing a smaller, lighter, but equally wideband system for executive jet aircraft called “SKYLinkSM.”

ARINC received authorization to conduct a Limited Market Study of its SKYLink System, effective June 3, 2003. The Limited Market Study is being conducted within the continental United States (CONUS) on several different types of domestic business jets that seat up to sixteen passengers. Through this Limited Market Study, ARINC seeks to determine how the SKYLink service will be used by, among others, business customers. This Limited Market Study has demonstrated that the SKYLink service is technologically viable.

Less than three months ago, ARINC received authorization to charge users for service provided pursuant to the authorized Limited Market Study, effective June 16, 2004. Since that date, the Limited Market Study has been conducted to determine whether the SKYLink service is economically sustainable. Through this Limited Market Study, ARINC seeks to determine whether there is a viable market for the service.

By this application, ARINC seeks to renew until November 1, 2006 the exact terms of its existing authorization to conduct a Limited Market Study. ARINC’s current license will expire on November 1, 2004. At this stage, more time is necessary for ARINC to continue to determine whether the SKYLink service is economically sustainable. The purpose of a Limited Market Study is to determine whether there is a viable market for the service. Therefore, this renewal will provide ARINC with the additional time necessary to perform the “last step” in its Limited Market Study.

2. DESCRIPTION OF THE LIMITED MARKET STUDY

Apart from renewing the current license, the details of the Limited Market Study will remain as previously described.¹ ARINC’s Limited Market Study is designed to evaluate the technological and economic viability of the SKYLink service as well as the usage characteristics of the service on business jet aircraft. In particular, ARINC seeks to obtain information

¹ The technical aspects of the SKYLink service also have not changed since ARINC received authorization to conduct the Limited Market Study. A complete technical description of the experimental system was provided in Exhibit 1 to the previous application. See Aeronautical Radio Inc., Exhibit 1, File No. 0029-EX-ML-2003 (submitted May 6, 2003) (entitled “Technical Description of the SKYLinkSM Broadband System Proposed for Limited Market Study”).

regarding the frequency and duration of use during a flight, data rates achieved to and from each aircraft, and aggregate data rates achieved through the transponder. ARINC also seeks to validate the system's performance by collecting data relating to quality of service, including bit error rates, latency, and possible degradation of service at the edge of service contours. Finally, ARINC seeks to obtain information on the economic viability of the service.

The Limited Market Study is apportioned among several different models of aircraft manufactured by at least two different manufacturers. The aircraft include FAA designated "experimental" aircraft and also privately owned aircraft whose owners agreed to take part in the Limited Market Study. Because executive jet aircraft typically fly only two or three days a week, and some may be out of CONUS for extended periods, ARINC tests its SKYLink service on up to fifteen aircraft. This permits ARINC to collect data from one to seven simultaneous flights. ARINC closely monitors each flight to ensure that the aggregate satellite power densities remain within acceptable, non-interference limits for the selected data rates of the service. Further, satellite transmit and receive footprints are verified within CONUS by monitoring the quality of service, including bit error rates, data rates, throughput and latency.

3. CONCLUSION

ARINC respectfully requests that the Commission renew its experimental authority to continue to perform a Limited Market Study to enable it to confirm the economic viability of its SKYLink system, a system designed and tested under ARINC's existing Experimental License.