

EXHIBIT 1

Final Analysis, Inc.¹ (Final Analysis) hereby submits its application for modification of its experimental authorization for its ground station at Logan, Utah (Call Sign KS2XDA) to add the 148.7 MHz frequency to be used as uplink from the Logan ground station to its satellite, FAISAT-2V (Call Sign KS2XCY). A central purpose of Final Analysis's experimental satellite program is to determine the ability of non-voice non-geostationary mobile satellite service ("NVNG MSS" or "Little LEO") operations to coexist in certain frequency bands with existing users in those bands.² To that end, Final Analysis is planning to employ two ground stations in the United States, one in Logan and another at its corporate headquarters in Lanham, Maryland.³ A third ground station is being planned in Norway. In addition, Final Analysis has an experimental authorization for up to 350

¹ Final Analysis, Inc. is the parent corporation of Final Analysis Communication Services, Inc., which is an applicant for a commercial license in the non-voice, non-geostationary mobile satellite service ("NVNG MSS").

² A detailed description of the experimental program also has been presented in Final Analysis' earlier filings, which are incorporated herein by reference. See Final Analysis, Inc. Application for Experimental Satellite, Call Sign KS2XCY, File No. 4682-EX-PL-95, at Exhibit 1 (received March 7, 1995).

³ Final Analysis filed its application for a fixed ground station to be located in Lanham, Maryland on November 13, 1996 (File No. 5582-EX-PL-96). Final Analysis subsequently filed a request for special temporary authority on January 8, 1997 to test communications between the proposed Lanham ground station and FAISAT-2v prior to shipment of the satellite to Russia, which is expected to occur by the end of January, 1997, for launch as a secondary payload aboard a Cosmos rocket in the first quarter of 1997.

Remote Mobile Terminals (Call Sign KS2XCX). As the ground stations must maintain communications with the satellite for command, control and telemetry, use of the 148.7 MHz frequency for uplink to FAISAT-2v is critical specifically to control the satellite and in order generally to advance the overall objectives of the experiment.

Current analyses indicate that proposed Little LEO systems require considerably more spectrum than is available to meet the substantial anticipated demand for such services and that an additional 20 MHz of spectrum will be needed to meet this anticipated demand in the year 2002.⁴ A primary objective of the experimental use of FAISAT-2v, as originally conceived by Final Analysis, is to demonstrate that NVNG MSS systems will not cause harmful interference to existing primary users in the proposed bands. To this end, a variety of experiments are planned, using remote mobile terminals (RTs) in a variety of circumstances, including urban, suburban, and mountainous conditions and over bodies of water. Final Analysis also has actively participated domestically in proceedings before the Commission and internationally at world radioconferences and ITU working groups in order to identify potential frequency bands for Little LEO services and to study potential spectrum sharing techniques to optimize use of spectrum available for NVNG MSS.

One of the bands to be studied for potential service uplinks includes the frequencies around 455 MHz. During the first phase of the experimental program, a state-of-the-art receiver on-board the satellite will scan this band and record the global activity as a

⁴ See ITU-R Document 8D/136 "Spectrum Demand for Non-GSO MSS Below 1GHz Services."

function of location and time of day.⁵ This data will be stored in the memory of the on-board computer and downloaded when the satellite is over one of the ground stations. This information will be used to determine on a statistical basis the number and location of unused channels. Apart from this data collection, which should demonstrate the theoretical possibility of sharing with existing users, an essential component of the experiment is the deployment and use of the RTs, so that actual data transmission can be attempted on the frequencies identified during the scanning process. Thus, actual attempts at communications under the experimental conditions envisioned by Final Analysis will facilitate the collection of real-world data on the feasibility of Little LEO systems on the frequencies identified and under the actual conditions in which Little LEO users would likely be situated.

⁵ Final Analysis has an ongoing partnership with the NASA Center for Space Power to develop and promote space-based science and technology.