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March 30, 2000

BY HAND DELIVERY

Federal Communications Commission
Office of Engineering & Technology
Experimental Licensing Branch
MS 1300E1
445 12th Street, S.W.
Washington, D.C. 20554

Re: **Final Analysis Inc., Progress Report for Experimental Little LEO Satellite Program – FAISAT-2v Satellite (Call Sign KS2XCY, File No. 0224-EX-RR-1999); Lanham, Maryland Ground Station (Call Sign WA2XHE, File No. 0142-EX-RR-1999); Logan, Utah Ground Station (Call Sign KS2XDA, File No. 0226-EX-RR-1999); and Remote Terminals (Call Sign KS2XCZ, File No. 0225-EX-RR-1999)**

Dear Madam or Sir:

In accordance with its above-referenced authorizations, Final Analysis Inc. ("Final Analysis"), by its attorneys, hereby submits this progress report on its experimental non-voice, non-geostationary mobile satellite service ("NVNG MSS" or "Little LEO") program.

On September 23, 1997, Final Analysis's experimental Little LEO satellite, FAISAT-2v, was successfully launched from Russia. Since the launch of FAISAT-2v, Final Analysis's technical staff has been actively engaged in monitoring and telemetry, tracking & control ("TT&C") of the satellite to ensure that it enters into proper orbital operation. Final Analysis made initial full contact with the satellite during early orbit from its main ground station and control center at the company headquarters in Lanham, Maryland, and remotely through its ground stations in Logan, Utah and Andoya, Norway.

The purpose of the experimental satellite is to permit Final Analysis to conduct multiple scans of a variety of VHF and UHF bands, including the 454-456 and 459-460 MHz bands allocated to Little LEOs internationally at WRC-95 and WRC-97, from FAISAT-2v. Final Analysis anticipates that these multiple scanning operations will help collect data on the comparative levels of noise from existing operations in the observed bands and accurately measure the feasibility of conducting Little LEO operations in these bands on a time-shared basis with existing operations. The scans performed early in the mission provided very useful data.

After launch of FAISAT-2v in September 1997 the initial early orbit operations of the satellite were within normal parameters. Data were regularly downloaded during satellite passes, although the Final Analysis staff was primarily engaged in early orbit operations, *i.e.*, fine tuning of the satellite's orbital stability, components, and other operational parameters. These stabilizing activities were not complete when, on October 24, 1997, the satellite entered into its first solar eclipse and began to expend more energy than could be generated by its solar panels given the satellite's orientation to the sun during eclipse. In anticipation of energy deficit situations which might occur during normal satellite operations, the satellite command software was originally programmed to shut the satellite down during defined energy deficit situations. The satellite performed as programmed and shut down, preventing further ground communication, and consequent energy drain, during the eclipse period. At the beginning of 1998 when the satellite re-entered full sun mode, the batteries recharged. Final Analysis made limited communication contact with the satellite. However, the satellite operations could not be improved during the full sun mode, and the satellite continues to shut down again during eclipse periods.

Since resuming limited satellite-ground communications, Final Analysis has repeatedly tried to complete early orbit operations, including stabilizing the satellite's orbit and fine tuning its other operational parameters. It was, and still is, Final Analysis's intention to upload new software to modify the spacecraft's energy use during routine operations and hopefully prevent future energy deficits during eclipse mode. However, Final Analysis has not been able to upload the software modification. Consequently, Final Analysis has continued to encounter operational difficulties and the satellite-ground communication is limited because FAISAT-2v shuts down and becomes inoperable during eclipse seasons.

Since July 6, 1999, Final Analysis has been performing operations primarily in the 455-456 and 459-460 MHz frequency bands from the Lanham station during normal working hours of favorable contact periods. Favorable contact periods are defined as approximately five-week periods, occurring about every three months, when the satellite is continuously lit. During these operations, Final Analysis sends a command at the start of a contact period to request a downlink beacon and set the satellite radio sensitivity to increase the chances of other commands being received. Commands are also sent to take batteries on- or off-line to charge and to try different onboard radios. The commands are repeatedly sent throughout the pass.

The original and two copies of this progress report are being filed herewith. In addition, in accordance with the conditions of Final Analysis's experimental authorizations, a copy of this progress report is being filed with the Wireless Telecommunications Bureau. Please do not hesitate to call the undersigned counsel at the above-referenced number if you should have any questions regarding this matter.

Sincerely,

Randall W. Sifers

Aileen A. Pisciotta
Randall W. Sifers
Counsel to Final Analysis Inc.

cc: Wireless Telecommunications Bureau (by hand delivery)