

KELLEY DRYE & WARREN LLP

A LIMITED LIABILITY PARTNERSHIP INCLUDING PROFESSIONAL ASSOCIATIONS

1200 19TH STREET, N.W.

SUITE 500

WASHINGTON, D. C. 20036

(202) 955-9600

FACSIMILE

(202) 955-9792

Received

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WRITER'S DIRECT LINE

(202) 955-9774

Satellite Policy Branch
International Bureau

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Ms. Magalie Roman Salas
Secretary
Office of the Secretary
Federal Communications Commission
1919 M Street, N.W., Room 222, Mail Stop 1170
Washington, D.C. 20554

Re: *Further Erratum to Amendment to Application of Final Analysis
Communication Services, Inc. for Authority to Construct, Launch and
Operate a Low Earth Orbit Satellite System (File No. 25-SAT-P/LA-95),
filed on October 30, 1997*

7-SAT-AMEND-98

Dear Ms. Salas:

Pursuant to Sections 25.110 and 25.111 of the Commission's rules, 47 C.F.R. §§ 25.110-25.111, Final Analysis Communication Services, Inc. ("Final Analysis"), by its attorneys, hereby submits certain further corrections, as described below, to its above-referenced amendment to its application ("Amendment"). Final Analysis submits these corrections in response to an informal request from Commission staff for additional information. In particular, the staff's informal request for additional information requires correction and additional information on the following three specific points in Final Analysis's Amendment: (i) corrected emission designators for frequency bands identified in the Amendment at p.32; (ii) correction of a typographical error in the description in the Amendment at pp.52-53 of Final Analysis's Scanning Telemetry Activity Receiver System ("STARS") which is to be utilized to avoid interference with existing fixed and mobile users in the 148.149.9 MHz uplink band; and (iii) the description of the method utilized by Final Analysis to meet the "72-hour reset signal" requirement discussed in the Amendment at p.57. These corrections are discussed in detail below.

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1. **Amendment at p.32 -- corrected emission designators for 137-138 MHz, 400.15-401 MHz and 148-150.05 MHz bands (Amendment at 32):** The staff has requested that the emission designators for the feeder link frequency sub-bands in the 137-138 MHz band proposed in Final Analysis's Amendment be corrected by excluding Doppler shift and transmission tolerance bands. Amendment at 32. In correcting the emission designators for the 137-138 MHz band, Final Analysis also submits herewith conforming corrections to the emission designators for the 400.15-401 MHz and 148-150.05 MHz bands specified in the Amendment at p.32, consistent with the staff's request. In addition, the baud rates identified in the Amendment have been conformed to optimize bandwidth utilization in accordance with the corrected emission designators. The frequency sub-bands and associated center points specified in the Amendment have not been changed. Accordingly, the corrected emission designators and conformed baud rates for the frequency sub-bands specified in the Amendment at p.32 are as follows:

137-138 MHz sub-bands:

- 137.025-137.175 MHz centered on 137.100 MHz: the corrected emission designator is 144KF1D; the conformed Baud rate is 96 kBaud.
- 137.333-137.4125 MHz centered on 137.37275 MHz: the corrected emission designator is 72K0F1D; the conformed Baud rate is 48 kBaud.
- 137.475-137.525 MHz centered on 137.550 MHz: the corrected emission designator is 43K5F1D; the conformed Baud rate is 29 kBaud.
- 137.595-137.645 MHz centered on 137.620 MHz: the corrected emission designator is 43K5F1D; the conformed Baud rate is 29 kBaud.
- 137.753-137.787 MHz centered on 137.770 MHz: the corrected emission designator is 27K5F1D; the conformed Baud rate is 18 kBaud.
- 137.825-138.00 MHz centered on 137.9125 MHz: the corrected emission designator is 168KF1D; the conformed Baud rate is 112 kBaud.

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400.15-401 MHz sub-bands:

- 400.505-400.5517 MHz centered on 400.528 MHz: the corrected emission designator is 28K0F1D; the conformed Baud rate is 18.6 kBaud.
- 400.5983-400.645 MHz centered on 400.622 MHz: the corrected emission designator is 28K0F1D; the conformed Baud rate is 18.6 kBaud.
- 400.5517-400.5983 MHz centered on 400.575 MHz: the corrected emission designator is 28K0F1D; the conformed Baud rate is 18.6 kBaud.

148-150.05 MHz sub-bands:

- 148.000-149.810 MHz with bands centered on 25 kHz centers: the corrected emission designator is 18K0F1D; the conformed Baud rate is 12 kBaud.
- 150.000-150.050 MHz centered on 150.025 MHz; the corrected emission designator is 43K0F1D; the conformed Baud rate is 28.6 kBaud.

2. Amendment at 52-53 -- correction in typographical error in discussion of protection of existing users. The staff has brought to Final Analysis's attention a typographical error in the description of its STARS system for avoiding interference with existing fixed and mobile users in the 148.149.9 MHz uplink band. Namely, the Amendment states *inter alia* that: "the modified Time Division Multiple Access ("TDMA") polling scheme will limit transmissions to no more than 17% of the time during any 15 minute period and will limit the uplink message size such that a single transmission will not exceed 450 milliseconds" Amendment at 52-53. The typographical error in the foregoing sentence is hereby corrected to provide that the modified TDMA polling scheme "will limit transmissions to no more than 1% of the time during any 15 minute period"

3. Amendment at 57 -- clarification of Final Analysis's method for meeting 72-Hour reset signal requirement. The staff has requested that Final Analysis describe more specifically the method it will utilize to satisfy the "72-hour reset signal" requirement in the *Report and Order* which is designed to protect NOAA operations in the

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137-138 MHz band from harmful interference in the event of a malfunction in a commercial Little LEO satellite operating in that band.¹ In its Amendment, Final Analysis states that it has implemented several layers of protection to detect a failed-on condition well in advance of "malfunction" as defined in the *Report and Order*, i.e. a consecutive 72-hour period in which there has been no radio communication between the ground station and the satellite.² As requested by the staff, Final Analysis hereby makes a correction to the Amendment's discussion regarding the 72-hour reset signal requirement to clarify that Final Analysis will utilize a "Watch Dog Timer" function in all of the satellites in the FAISAT constellation to implement the 72-hour reset signal protection. The Watch Dog Timer function is designed to turn off all affected radios if and when a 72-hour period has elapsed in which no communication has been transmitted between a satellite and the ground station. This function will protect the NOAA constellation satellites from a potential uncontrolled satellite operation in the FAISAT constellation.

Final Analysis respectfully requests that a copy of the foregoing corrections be associated with the Commission's files for Final Analysis's Amendment. In accordance with Section 25.110 of the Rules, an original and nine (9) copies of this filing are included herewith. Please acknowledge receipt of this filing on the "stamp-and-return" copy provided for that purpose. Please do not hesitate to call the undersigned counsel at the above-referenced number if you should have any questions regarding this matter.

Respectfully submitted,



Peter A. Batacan
Counsel to Final Analysis Communication Services, Inc.

Enclosures

cc: Attached certificate of service list

¹ See Amendment of Part 25 of the Commission's Rules to Establish Rules and Policies Pertaining to the Second Processing Round of the Non-Voice, Non-Geostationary Mobile Satellite Service, IB Docket No. 96-220, Report and Order at ¶¶ 112-113 (rel. Oct. 15, 1997) ("*Report and Order*").

² See Amendment at 57 (citing Comments of Final Analysis, filed in IB Docket No. 96-220 on December 20, 1996 at Exhibit 2 "Systems Analysis" pp.8-9).

CERTIFICATE OF SERVICE

I hereby certify that a true and correct copy of the foregoing Further Erratum to Amendment to Application of Final Analysis Communication Services, Inc., was sent by hand delivery or mailed, via first-class mail, postage prepaid, this 12th day of November, 1997, to each of the following:

Chairman William E. Kennard*
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, D.C. 20554

Commissioner Gloria Tristani*
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, D.C. 20554

Commissioner Harold W. Furchtgott-Roth*
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, D.C. 20554

Commissioner Susan Ness*
Federal Communications Commission
1919 M Street, N.W., Room 832
Washington, D.C. 20554

Commissioner Michael K. Powell*
Federal Communications Commission
1919 M Street, N.W. Room 826
Washington, D.C. 20554

Albert Halprin, Esquire
Halprin, Temple & Goodman
Suite 650 East
1100 New York Avenue, N.W.
Washington, D.C. 20005
Counsel for ORBCOMM

Mr. Harold Ng*
Chief, Satellite Engineering Branch
Satellite and Radio Communication Division
International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 500
Washington, D.C. 20554

Mr. Alex Roytblat*
Satellite and Radio Communication Division
International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 500
Washington, D.C. 20554

Ms. Regina Keeney*
Chief, International Bureau
Federal Communications Commission
2000 M Street, N.W., Room 830
Washington, D.C. 20554

Henry Goldberg, Esquire
Joseph Godles, Esquire
Mary Dent, Esquire
Goldberg, Godles, Wiener & Wright
1229 19th Street, N.W.
Washington, D.C. 20036
Counsel for Volunteers in Technical
Assistance

* Hand Delivery

Robert A. Mazer, Esquire
Vinson & Elkins
1455 Pennsylvania Avenue, N.W.
Washington, D.C. 20004-1008
Counsel for Leo One USA

Leslie Taylor, Esquire
Leslie Taylor Associates, Inc.
6800 Carlynn Court
Bethesda, Maryland 20817-4302
Counsel for E-Sat

Mr. Charles Ergen, President
E-SAT, Inc.
90 Inverness Circle, East
Englewood, Colorado 80112



Peter A. Batacan

*** Hand Delivery**