

KELLEY DRYE & WARREN LLP

A LIMITED LIABILITY PARTNERSHIP

1200 19TH STREET, N.W.

SUITE 500

WASHINGTON, D.C. 20036

(202) 955-9600

NEW YORK, NY
LOS ANGELES, CA
CHICAGO, IL
STAMFORD, CT
PARSIPPANY, NJ

BRUSSELS, BELGIUM

HONG KONG

AFFILIATE OFFICES
BANGKOK, THAILAND
JAKARTA, INDONESIA
MANILA, THE PHILIPPINES
MUMBAI, INDIA
TOKYO, JAPAN

FACSIMILE

(202) 955-9792

DIRECT LINE (202) 955-9771

E-MAIL: apisciotta@kelleydrye.com

November 17, 1999

RECEIVED
NOV 17 1999
FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Mr. Donald Abelson
Chief, International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

**Re: Final Analysis Communication Services, Inc. -
Application for Clarification and Review of Non-Voice Non-Geostationary
Mobile Satellite Service ("NVNG MSS") License, 13 FCC Rcd 6618 (1998)
(File No. 7-SAT-AMEND-98)**

Dear Mr. Abelson:

On behalf of Final Analysis Communication Services, Inc., enclosed please find a copy of a memorandum dated March 11, 1998 from Nelson V. Pollack, Air Force Frequency Management Agency, to William Hatch, Deputy Associate Administrator of NTIA ("Air Force Memorandum"), which is Attachment C to my letter to you dated November 16, 1999 in the above-referenced matter. The wrong document was inadvertently provided as Attachment C in the version that was filed. Please substitute the Air Force Memorandum for that document.

I apologize any inconvenience.

Sincerely,



Aileen A. Pisciotto
Counsel to
Final Analysis Communication Services, Inc.

cc: All parties



DEPARTMENT OF THE AIR FORCE
 AF FREQUENCY MANAGEMENT AGENCY
 4040 NORTH FAIRFAX DRIVE, SUITE 204
 ARLINGTON, VIRGINIA 22203-1413

DATE 11 March 1997²

MEMORANDUM FOR Mr. William Hatch,
 Deputy Associate Administrator, NTIA

FROM: AFFMA/SCA

SUBJECT: FCC Draft Order for Final Analysis (FAI)

REFERENCES: (a) FCC Draft Order for Final Analysis (FAI)
 (b) STARSYS Amendment to Application (4/94)
 (c) VITA Amendment to Application (4/94)
 (d) FAI Amendment to Application (10/97),
 revised on 4 and 12 November 1997.

Final Analysis (FAI) is proposing to operate within the 400.505-400.645 MHz portion of the 400.15-401 MHz band that is situated between the two DMSP channels. The spectrum proposed includes that allocated for use by the first round applicants VITA and STARSYS. Specifically, FAI proposes to time share frequencies previously allocated to VITA and to additionally operate within that portion recently vacated by STARSYS.

Air Force agreed during the FCC Negotiated Rulemaking in 1992 to the principle of sharing the spectrum between the two DMSP channels with two U.S. mobile satellite systems based on the proposed technical parameters of the first round applicants. In 1994, AF agreed to the licensing of VITA and STARSYS systems based on the technical parameters proposed for these systems (REF b and c). The VITA system was specified in Ref c to have an effective radiated power (EIRP) of 8 dBW at the Earth's horizon. The STARSYS system was specified in Ref c to have an EIRP of 8.2 dBW in the vicinity of the Earth's horizon. FAI's recent application proposes an EIRP of 17.8 dBW at the Earth's horizon. This value is 9.6 dB greater than that planned by STARSYS. This value of EIRP substantially increases the interference

power received by the DMSP over that which would have resulted from the STARSYS system.

The FAI application states the power flux-density (PFD) near the Earth's horizon (at a 5 degree arrival angle) will be -127.8 dBW/m²/4 kHz. This value of PFD is adequate to avoid harmful interference to the DMSP. The FAI application indicates their system design will use a shaped beam antenna to produce uniform power flux-density (PFD) at the Earth's surface. The AF is concerned that the amount of antenna beam shaping needed to accomplish this uniform PFD cannot be practically achieved, especially once the antenna has been mounted on the spacecraft. This situation could cause the PFD at higher arrival angles to be greater than the -127.8 dBW/m²/4 kHz value calculated in the application. PFD values greater than -126.0 dBW/m²/4 kHz are unacceptable to AF since such values will cause unacceptable interference to the DMSP. It is essential that FAI's license be conditioned on not producing PFD levels at any point on the earth's surface that exceed -126.0 dBW/m²/4 kHz. It is also essential that the FCC require FAI to demonstrate through tests on the first completed spacecraft that this PFD value will be met at all arrival angles. These tests should be performed within 120 days of the launch of the first satellite and monitored by the AF. Because greater PFD levels could prevent the DMSP from satisfying its mission, it is important that the FCC emphasize their intent to revoke this license unless tests are performed to conclusively show this PFD limit is met. Also, AF requests that FCC encourage FAI to implement a variable power capability to be able to compensate for any unexpected problems which may be encountered in meeting this PFD level.

In summary, we request the FCC to condition the FAI license to meet a level of -126 dBW/m²/4 kHz to protect the DMSP system. This requested limit is consistent with the calculated PFD levels stated in the FAI application. We further request the FCC require tests to demonstrate compliance with this limit as a condition on the license. This precaution is warranted since failure to meet this limit will have an adverse effect on DMSP. We believe these actions promote a reasonable balance between U.S. economic interests and national security.

NELSON V. POLLACK

Technical Director, AFFMA

Cc: Richard Barth (DoC)
Jim Vorhies (NTIA/OSM)

CERTIFICATE OF SERVICE

I, Beatriz Viera, hereby certify that a true and correct copy of the foregoing **Letter to Donald Abelson**, on behalf of Final Analysis Communication Services, Inc., was delivered by hand or regular mail this 17th day of November 1999, to the individuals on the following list:

Chairman William E. Kennard*
Federal Communications Commission
Portals – Room A302
445 12th Street, S.W.
Washington, D.C. 20554

Mr. Daniel Harrold*
Office of General Counsel
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Gloria Tristani*
Federal Communications Commission
Portals – Room C302
445 12th Street, S.W.
Washington, D.C. 20554

Ms. Anna M. Gomez*
Deputy Chief, International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, DC 20554

Commissioner Harold W. Furchtgott-Roth*
Federal Communications Commission
Portals – Room B201
445 12th Street, S.W.
Washington, D.C. 20554

Mr. Thomas Tycz*
Chief Satellite and RadioCommunications
Division
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Susan Ness*
Federal Communications Commission
Portals – Room B115
445 12th Street, S.W.
Washington, D.C. 20554

Ms. Cassandra Thomas*
Deputy Chief, International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Commissioner Michael K. Powell*
Federal Communications Commission
Portals – Room A204
445 12th Street, S.W.
Washington, D.C. 20554

Mr. Harold Ng*
Chief, Satellite Engineering Branch
Satellite and RadioCommunication Div.
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Mr. Christopher J. Wright*
General Counsel
Federal Communications Commission
Portals
445 12th Street, N.W.
Washington, D.C. 20554

Mr. Alex Roytblat*
Satellite and RadioCommunication Div.
International Bureau
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Mr. William T. Hatch
Associate Administrator
Spectrum Management
U.S. Department of Commerce
NTIA – Room 4099
14th & Constitution Avenue, N.W.
Washington, D.C. 20230

Kathy D. Smith
U.S. Department of Commerce
NTIA – Room 4713
14th & Constitution Avenue, N.W.
Washington, D.C. 20230

James Vorhies
U.S. Department of Commerce
NTIA – Room 4076
14th & Constitution Avenue, N.W.
Washington, D.C. 20230

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

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

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

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

Mr. Nelson Pollack
AFFMA
4040 North Fairfax Drive, Suite 204
Arlington, VA 22203-1613

Mr. Richard Barth
U.S. Department of Commerce
National Oceanic and Atmospheric
Administration
Office of Radio Frequency Management
Room 2246, SSMC-2
1325 East West Highway
Silver Spring, MD 20910

SMC/CIIS
Attn: Lt. Dave Meyer
2420 Vela Way, Suite 1467-A8
Los Angeles AFB
El Segundo, CA 90245-4659



Beatriz Viera

* Via Hand Delivery