

Exhibit 1

The INMARSAT B satellite radio to be licensed under this application to the FCC is to provide technical support, operator training and software testing in support of the SeaNet initiative. SeaNet is funded by the National Science Foundation through the Oceans Science program and by the Office of Naval Research (under the National Oceanographic Partnership Program Act.) The SeaNet NOPP partners are:

- Columbia University, Lamont-Doherty Earth Observatory, Palisades, NY
- Woods Hole Oceanographic Institution, Woods Hole, MA
- Omnet, Inc., Staunton, VA
- U.S. Naval Postgraduate School, Monterey, CA

The initial funding for SeaNet was provided the National Science Foundation through the Oceanographic Instrumentation and Technical Services Program of the Geosciences division in the spring of 1995. SeaNet funding has been continued by the National Science Foundation.

NOPP funding has been provided by ONR through a grant to the JOI, Inc. The grant is entitled: "SeaNet: Extending the Internet to the Oceanographic Research Fleet".
ABSTRACT: The Partnership will develop a common, underlying infrastructure necessary to integrate the oceanographic research fleet and to implement some production units optimized for intermittent Internet connections. The infrastructure includes building a shore-based operations center; providing updated satellite and cellular communications for a number of UNOLS vessels; developing shipboard communications servers designed specifically for the support of shipboard science and technical support applications; and, supporting the integration of emerging (less expensive) communications technologies in the future. Once this infrastructure is in place and operational, the incremental cost of adding more ships to the SeaNet network will be relatively small.

**REQUEST FOR SPACE SEGMENT CAPACITY
TO OPERATE INMARSAT TERMINALS
FROM LAND-BASED LOCATIONS IN THE UNITED STATES**

The Federal Communications Commission ("FCC") requires COMSAT Corporation ("COMSAT") to obtain authority prior to providing service to Inmarsat terminals operated from land-based (i.e., nonmaritime locations) within the United States. The FCC will only grant domestic service authority to COMSAT under certain circumstances. The FCC's determination is made on a case-by-case basis with regard to the specific facts of each request. For instance, the FCC has authorized COMSAT to provide space segment capacity in the United States where:

- (1) the capacity is required to test and demonstrate the communications capabilities of an Inmarsat terminal to prospective customers;
- (2) the performance of an Inmarsat terminal is to be tested prior to sending/taking it abroad;
- (3) personnel are to be trained in the use of Inmarsat terminal(s) prior to being deployed abroad;
- (4) an Inmarsat terminal is needed for emergency communications (either as backup communications or disaster relief); or
- (5) an Inmarsat terminal is required to provide services from a remote location where no alternative means of communications is available.

Therefore, the following information is necessary for COMSAT to prepare its request for authority from the FCC to provide domestic Inmarsat space segment capacity to your terminal(s) in a timely manner. The more specific and detailed the information you provide us about the intended use(s) of the terminal, the more likely it will be that COMSAT will be able to obtain timely FCC authorization to provide the services you need! Please feel free to attach additional pages if needed to answer questions fully.

1. Company's Name: LAMONT-DOHERTY EARTH OBSERVATORY
OF COLUMBIA UNIVERSITY
2. Company's Business: EARTH SCIENCE RESEARCH
AND EDUCATION.

3. Who will operate the terminal? DALE CHAYES, RICHARD PERRY
4. By what date do you need to operate the terminal in the U.S.? NOV 24, 1999
For how long? ABOUT 3 MONTHS.

Please indicate on page 3 your reasons for needing to use the terminal by the specified date.

5. Will the same terminal also be used in one or more foreign countries or globally?
Yes ☐ No ☒.

IF YES, please state on page 3 the country or countries involved, and how frequently you intend to use the terminal outside of the U.S.

6. Will the terminal be used for test and/or demonstration purposes?
Yes ☒ No ☐.

IF YES, please indicate on page 3 where the test(s) or demonstration(s) will take place, their duration and whether (a) this is a test prior to sale, (b) this is a test after sale prior to use, (c) this is a demonstration to potential customers, (d) the terminal will be a part of a test or demo pool, or (e) other (please describe).

7. Will the terminal be used to train your employees, customers, or other users?
Yes ☒ No ☐.

IF YES, please explain on page 3 the nature, purpose, and duration of the training (indicating in particular whether the terminal will be used outside the U.S. or if personnel being trained will be deployed outside the U.S.):

8. Will the terminal be used for emergency communications or in a remote location where no alternative means of communications exist? Yes ☐ No ☒.

IF YES, please describe on page 3 the nature of the emergency communication (if applicable), state the location, describe the communications service desired, and explain the reason(s) why existing means of communications, in particular those of the U.S. domestic mobile satellite service licensee (AMSC), are not available or are inadequate to meet your communications requirements:

9. If the terminal is to be used for high speed data applications, please indicate the speed at which transmissions will be conducted:

64 K BITS/SECOND

10. Does your use of the Inmarsat terminal relate to a U.S. Government contract?
Yes X No

IF YES, please briefly describe below how the terminal will be used in fulfilling the government contract: THIS UNIT WAS PURCHASED TO PROVIDE
STORE - STORE TECHNICAL SUPPORT OF OUR NORP - FUNDED
SECURITY EFFORT.

11. If not otherwise provided above, state the purpose for which the terminal will be used in the United States:

12. You are required to obtain a separate FCC license before operating the terminal in the United States. Have you applied to the FCC for a license to operate the terminal?
Yes ☒ No ☐

IF YES, give the date you filed the license application: Nov 23, 1999; or
the grant date: _____. Please attach a copy of the terminal license
application.

IF NO, please complete the enclosed FCC application form and return it with the other commissioning materials, or explain on page 3 why no additional FCC license is required.

Use the space below to provide any additional requested information:

We need to start using the terminal on or before Monday, November 24th, 1999 in order to be ready to install updated software and documentation on a similar unit on the R/V Melville in San Diego the following week.

The testing will be done with a Nera Saturn Bm that is already owned by the lab. The location of testing is at the Instrument Lab on the grounds of the Lamont-Doherty Earth Observatory of Columbia University. The lab is in Pallsades, (Rockland County) New York. This is not a demonstration to potential customers, however we do anticipate using this system for operator training.

Station License Letter Application
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Ms. Magalie R. Salas, Secretary
Federal Communications Commission
1919 M Street, NW, Room 222
Washington, D.C. 20554

ATTN: Frank Wright,
Office of Engineering and Technology
Re: Request for Special Temporary Authority
for Radio Station License

Dear Ms. Salas:

The Lamont-Doherty Earth Observatory of Columbia University in the city of New York (LDEO) herein requests a grant of special temporary authority for a new mobile radio station license beginning December 1, 1999 and extending until December 31, 2000 to operate one land-based INMARSAT ship earth station from temporary fixed locations in the United States. In support of this request, LDEO submits the following information:

1. Applicant's Name and Address:

Lamont-Doherty Earth Observatory of Columbia University
61 Route 9W
Palisades, NY 10964

2. Name and address of the person for inquiries regarding this request:

Dale Chayes
Instrument Lab
Lamont-Doherty Earth Observatory
61 Route 9W
Palisades, NY 10964
Telephone: +1-914-365-8434
Facsimile: +1-914-359-6940
Email: dale@ldeo.columbia.edu

3. Particulars of Operation:

Frequency:	Power	Modulating	Necessary bandwidth
1625.6 - 1646.5MHz	33dW	QPSK 16Kbps	20KHz

4. Geographical Location of the proposed operation:

Instrument Lab at LDEO, 41 00' 1 15.5" North, 073 54' 44.3" West
61 Route 9W
Palisades, Rockland County, New York, USA

5. Antenna Type: Directional X Non-Directional
Width of beam in degrees at the half-power point: 8
Orientation: Horizontal plane Vertical plane
Pointed at AOR-E (15.5 W, 0 N) and AOR-W (16.5 W, 0 N)

6. Transmitting equipment to be installed:

Manufacturer	Type	Number
Nera	Saturn Bm	SN:5082

LDEO, a U.S. not for profit corporation, organized under the laws of the state of New York affirmatively states that it does not in any manner act as a representative of a foreign government or a subdivision thereof nor would the authorization sought herein be used for the exclusive purpose of developing radio equipment for export that would come under the jurisdiction of the foreign government. The applicant has never had any FCC station license revoked or any application for permit, license, or renewal ever denied by the Commission.

LDEO further states that grant of this request would not have a significant environmental impact and this does not require an Environmental Statement under Section 1.1307 of the commission's Rules. Unless otherwise indicated in an attachment to this request, the authorization sought herein will not be sought for fulfilling the requirements of a government contract with an agency of the United States Government.

In addition, LDEO, further certifies that neither the applicant, nor any other party to this application is subject to a denial of Federal benefits pursuant to Section 5301 of the Anti-Drug Abuse Act of 1988, 21 U.S.C & 853a.

This temporary license is sought by LDEO, a not-for profit business, to operate one INMARSAT B terminal from temporary-fixed location in the United States to provide test and training services. Simultaneous to this request, COMSAT has submitted to the Common Carrier Bureau a request for special temporary authority to provide satellite communications services to the subject terminal via the INMARSAT system for the purposes stated herein.

Accordingly, LDEO respectfully submits that the public interest would be served by the operation of the subject terminal for the aforementioned purposes and thus, request that the Commission grant the instant request for temporary authority.

The requisite filing fee of \$45 is enclosed.

— Respectfully submitted,

Dale Chayes
Senior Staff Associate
+1-914-365-8434

cc: Sylvia Lam
Carl Hule