

(505) 292-7509
FAX (505) 299-4253



VAL - COMM, Inc.
Sales - Service - Design Concepts
RF Communications RF Links - Business
Two Way Radios Telemetry Systems
Specialized Cellular

249 Muriel N.E.
Albuquerque, NM
87123

August 16, 1994

EXHIBIT NO. 1

The proposed experiment is to test the Standard "C" Terminal capabilities along with Digital mapping software. The experiments are aimed to accomplish the following goals:

- a) Real-time test of signaling and access control protocol for land mobile to terrestrial station and vice versa via land earth stations, (e.g. COMSAT, Southbury LES);
- b) Real-time measurement of a digital communication within the performance and functional specifications of INMARSAT SDM;
- c) Real-time test of digital communication reliability over satellite.

The proposed experiment will provide end-users with hands-on experience of digital satcom terminals.

Inmarsat-C Land Mobile Earth Station Commissioning Application Form



Inmarsat

Maritime users should use a maritime application form

Please type or use BLOCK CAPITALS. Forward to your national routing organization.
Explanatory notes are provided to assist you.

Office use only

RO:

Appl. No:

Country:

SECTION A. APPLICATION DATA

Routing organization COMSAT

Country (of registration) U.S.A.

SECTION B. INSTALLATION DETAILS

Complete only one of the following 3 parts. Please tick the appropriate boxes.

• Part 1. Fixed installations.

If the installation is at a fixed location please complete:

Location name: _____

Country: _____

Usage (please tick)

☐ Attended

☐ Unattended

Will it be part of a fixed group? ☐ Yes

☐ No

• Part 2. Use on a vehicle.

If the installation is on a vehicle please complete:

Vehicle registration: _____

Country of vehicle registration _____

• Part 3. Use as a portable or transportable.

If the installation is portable or transportable, please tick:

☒ Portable

☐ Transportable

Will it be used internationally? ☒ Yes

☐ No

SECTION C. USER INFORMATION

Please tick only one appropriate box in each column.

Type of use or vehicle:

- ☐ Remote data collection/control
- ☐ Business/office communications
- ☐ Truck > 10t
- ☐ Truck < 10t
- ☐ Coach/bus
- ☐ Car
- ☐ Rail operations
- ☐ Rail passenger use
- ☐ Inland waterways
- ☐ Other

Industry:

- ☐ Transport/distribution
- ☐ Media
- ☒ Telecommunications
- ☐ Financial sector
- ☐ Government
- ☐ Lease/hire
- ☐ Natural resource management
- ☐ Construction/Mining
- ☐ Police/fire/ambulance
- ☐ Fuel/power industries
- ☐ Disaster relief
- ☐ Other

Env:

Ind:

SECTION G. BILLING DATA

After satisfactory attempts have been made to resolve issues delaying payment for telecommunication services, LES operators have the right to suspend service to land mobile earth station users due to non-payment of invoices. Services will be reinstated only after a payment is received in full or an agreement is reached between the two parties.

AAIC:

• Part 1. Mandatory ITU Accounting Authority

AAIC code (if known): _____

Name: _____

Address: _____

Post/zip: _____

Tel: _____

Fax: _____

Tlx: _____

BE:

• Part 2. Other billing options (if permitted by the routing organization and LES operator)

2.1 Billing entity code (if known): _____

Name: VAL-COMM., INC.Address: 249 MURIEL NEALBUQUERQUE, NMPost/zip: 87123Tel: (505) 292-7509Fax: (505) 299-4253

Tlx: _____

• Part 2.2 Credit/charge card:

Card type: (e.g. Amex, Visa e.t.c.) _____

Expiry date: _____

Card number: _____

Name (on card): _____

CERTIFICATION AND AGREEMENT

The applicant agrees to comply with the attached terms and conditions for the utilization of the Inmarsat space segment by the land mobile earth station (LMES) described in this application, and the Routing Organization agrees, pursuant to Article XIV(3) of the Inmarsat Operating Agreement, to be responsible to Inmarsat for such compliance by the LMES.

Applicant Name: PAUL N. RAEISignature: Paul N. RaelDate: 8/17/94

R.O. Rep. Name: _____

Signature: _____

Date: _____

For applications covering groups of mobile earth stations

This section may only be used if the billing arrangements and ownership details in the case of each mobile earth station are identical.

It is important that this information is given exactly as indicated on the equipment. Any differences will delay processing of this application.

1.1	Manufacturer	<u>TRIMBLE</u>	2.1	Manufacturer	<u>TRIMBLE</u>
1.2	Model Name	<u>TNL 7002</u>	2.2	Model Name	<u>TNL 7002</u>
1.3	Unit serial No.	<u>0190000562</u>	2.3	Unit serial No.	<u>0190000565</u>
1.4	Four letters desired in telex answerback	<u>VCIH</u>	2.4	Four letters desired in telex answerback	<u>VCII</u>
1.5	Inmarsat Mobile Identity Number	_____	2.5	Inmarsat Mobile Identity Number	_____

3.1	Manufacturer	<u>TRIMBLE</u>	4.1	Manufacturer	<u>TRIMBLE</u>
3.2	Model Name	<u>TNL 7002</u>	4.2	Model Name	<u>TNL 7002</u>
3.3	Unit serial No.	<u>0190000894</u>	4.3	Unit serial No.	<u>0190000895</u>
3.4	Four letters desired in telex answerback	<u>VCIJ</u>	4.4	Four letters desired in telex answerback	<u>VCIK</u>
3.5	Inmarsat Mobile Identity Number	_____	4.5	Inmarsat Mobile Identity Number	_____

5.1	Manufacturer	_____	6.1	Manufacturer	_____
5.2	Model Name	_____	6.2	Model Name	_____
5.3	Unit serial No.	_____	6.3	Unit serial No.	_____
5.4	Four letters desired in telex answerback	_____	6.4	Four letters desired in telex answerback	_____
5.5	Inmarsat Mobile Identity Number	_____	6.5	Inmarsat Mobile Identity Number	_____

7.1	Manufacturer	_____	8.1	Manufacturer	_____
7.2	Model Name	_____	8.2	Model Name	_____
7.3	Unit serial No.	_____	8.3	Unit serial No.	_____
7.4	Four letters desired in telex answerback	_____	8.4	Four letters desired in telex answerback	_____
7.5	Inmarsat Mobile Identity Number	_____	8.5	Inmarsat Mobile Identity Number	_____

9.1	Manufacturer	_____	10.1	Manufacturer	_____
9.2	Model Name	_____	10.2	Model Name	_____
9.3	Unit serial No.	_____	10.3	Unit serial No.	_____
9.4	Four letters desired in telex answerback	_____	10.4	Four letters desired in telex answerback	_____
9.5	Inmarsat Mobile Identity Number	_____	10.5	Inmarsat Mobile Identity Number	_____

11.1	Manufacturer	_____	12.1	Manufacturer	_____
11.2	Model Name	_____	12.2	Model Name	_____
11.3	Unit serial No.	_____	12.3	Unit serial No.	_____
11.4	Four letters desired in telex answerback	_____	12.4	Four letters desired in telex answerback	_____
11.5	Inmarsat Mobile Identity Number	_____	12.5	Inmarsat Mobile Identity Number	_____

3. FEE TYPE CODE(S):

Type of Application:

- a. New station authorization
- b. Modification of authorization
- c. Confidentiality request

Fee Type Code:

EAE

EAE

EAE

*Confidentiality Request: Applications filed with a request for the Commission to withhold any information from public inspection, pursuant to FCC rule provisions in 47 CFR 0.457(d), shall use the additional Fee Type Code EAE. These applications must also contain a letter justifying the withholding of information in accordance with 47 CFR 0.459 of the Rules.

- 4. If a corporation, state corporate name; if a partnership, state names of all partners and the name under which the partnership does business; if an unincorporated association, state the name of an executive officer, the office held by him, and the name of the association. If this application involves a station that is now authorized, the name herein shown must correspond exactly with that shown on the current authorization.
- 5. Applicants should make every effort to file complete applications. Failure to do so may result in a rejection and return of the application or a delay in the processing of the application.
- 6. Each document required to be filed as an exhibit should be current as of the date of filing. If a current and complete answer to any question other than questions 1, 2 and 3, is already on file within the Commission, then the question may be answered by reference to such information on file.
- 7. To refer to the material on file it is necessary that the applicant provide sufficient information to locate the previously filed material. If filed with a station application, furnish name of applicant or licensee, call sign, file number, and date of filing. In other cases furnish date of filing and describe the matters in connection with which filed.
- 8. Each document or statement required to be filed as an exhibit should be numbered separately. Exhibit numbers should be shown in the blank space provided for this purpose in the individual items of the application form. Where the space left in the application for narrative answers is insufficient a separate statement, bearing an exhibit number in sequence with other exhibits numbered in the application, should be attached to the application and reference to the statement's exhibit number should be made in the answer space.
- 9. When the antenna structures proposed to be erected will extend more than 6 meters above ground or above an existing building, the applicant must analyze the structures pursuant to Part 17, Subpart B, to determine if notification to FAA is required. If notification is required, applicant should submit FAA Form 7480-1, Notice of Proposed Construction or Alteration to one of the FAA Regional Offices listed on FCC Form 854, Request for Antenna Height Clearance and Obstruction Marking and Lighting Specifications.
- 10. An applicant may request that the Commission withhold from public inspection any information or material filed with this application. Requests shall be filed in accordance with 47 CFR 0.459 of the Federal Communications Commission Rules and Regulations.

U. S. Land-Based Operating in Domestic U.S.A.

Comsat Commissioning Department requires the following:

- 1. Commissioning Application**
- 2. Letter-of-Intent**
- 3. Space Segment Request**
- 4. Copy of 442 submitted to FCC**

Operating in Foreign Country only

Requirements are:

- 1. Commissioning Application**
- 2. Letter-of-Intent**

We remind customers of the necessity of contacting the PTT of that country and obtaining permission to bring the unit into their country and radiate carrier.

FCC Requirement U.S. Land-Based

The FCC requires the owner/operator of a U.S. Land-Based unit to obtain a license to radiate carrier within the domestic U.S.A. The requirements are:

- FCC Form 442
- FCC Form 155 (Fee Form)
- \$100 Per Terminal

The FCC application check should be submitted to the following address:

Federal Communications Commission
Experimental Radio Service
Box 358320
Washington, PA 15251-5320

May 6, 1994

COMMISSIONING BULLETIN COM 01-94

This bulletin contains questions and answers pertaining to commissioning procedures and completing a commissioning application. These are requirements which must be completed prior to your being able to perform commissioning tests and gain entry into use of the Inmarsat system.

One of the first requirements is that the SES/MES/AES you wish to commission must be type approved/access approved by Inmarsat for use within the Inmarsat system.

Q. What is a Routing Organization?

A. A Routing Organization is the organization/entity through which Commissioning applications are processed and forwarded to Inmarsat. For all U.S. registered SES/MES/AESs, the Routing Organization is COMSAT.

Q. I am a U.S. Government entity wishing to commission my SES/MES/AES - what should I do?

A. All Commissioning applications for units owned/operated by the U.S. Government must be processed through the National Telecommunications and Information Administration (NTIA). COMSAT Commissioning will process all government applications and forward to Inmarsat only if they are received from NTIA.

The Contact at NTIA is:

Mr. Richard Balta
Telephone No: 202-482-0599
Facsimile No: 202-482-3790

Q. What is required for commercially owned/operated units aboard U.S. registered vessels?

A. COMSAT Commissioning Department requires:

1. Commissioning Application (completed & signed)
2. Credit Application (new customers)
3. Copy of FCC Form 506 (C & M customers only)

Q. Why does Commissioning require copies of the FCC Form 506 for "C" and "M" customers?

A. This is required because of the assignment of the MMSI (Maritime Mobile Service Identification) number. You see, once we receive the FCC 506 Form from the customer, we assign the MMSI number under the guidance of the FCC, place the number in Item No. 21 of the form, and

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1. Commissioning Application (completed & signed)
2. Credit Application (new customers)
3. Copy of FCC Form 506 (C & M customers only)

Q. Why does Commissioning require copies of the FCC Form 506 for "C" and "M" customers?

- A. This is required because of the assignment of the MMSI (Maritime Mobile Service Identification) number. You see, once we receive the FCC 506 Form from the customer, we assign the MMSI number under the guidance of the FCC, place the number in Item No. 21 of the form, and

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fax it to the FCC. This is an FCC requirement. It alerts them of a new user and they will be expecting to receive the original form from the customer shortly thereafter. We then notify the customer of the MMSI number in order for him/her to place the number in Item No. 21 of the original form and immediately forward to the FCC at the following address:

Federal Communications commission
Marine Ship Service
P. O. Box 358275
Pittsburgh, PA 14251-5275

Q. Can you explain the billing data section of the Commissioning Application?

A. Sure, the following applies for units registered in the U.S.

Billing Data:

Accounting Authority - MANDATORY. If:

- a. you do not have a contract with an authorized Accounting Authority (someone engaged to pay your bills for services rendered),
- b. your SES/MES/AES is U.S. registered,
- c. and you wish COMSAT to direct bill you when you use COMSAT's LES/GES for services,

you should place US01 as the AAIC code. This stipulates the FCC. If you have a contract with an authorized Accounting Authority and you do not wish direct billing, place your authorized Accounting Authority's code as the AAIC code.

Billing Entity/Optional Billing:

Your billing address, etc. should be placed in this section if you have indicated US01 as your authorized Accounting Authority and you wish COMSAT to direct bill you when you use COMSAT's LES for services.

Note: If you have given us a billing entity address for direct billing the following will happen. Anytime you use one of COMSAT's LES's/GES's for services, COMSAT will forward your invoice to the billing entity address. If you should happen to use another (foreign) LES for services, that LES will forward the invoice to the FCC (US01); the FCC will charge you a surcharge of \$2.00 per line-item for processing and forward the invoice to the billing entity address. You will avoid a surcharge by using COMSAT's LES for services.

Note: Any time a foreign address is given as the Billing Entity/Optional Billing, Finance has to approve it before Commissioning will process.

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Q. What should I do if I'm a foreign customer and wish COMSAT to direct bill me?

A. The foreign customer should, as usual, forward his/her Commissioning Application to the appropriate Routing Organization for that particular country. COMSAT should not be named as the Accounting Authority nor Billing Entity. Once the customer receives his assigned ID numbers(s), a CMC Credit Application should be completed with ID numbers listed and forwarded to the CMC Billing Department. When you use COMSAT for services, your invoice will be forwarded to the address listed on the Credit Application.

For foreign aeronautical customers, a service agreement is provided, signed and forwarded to CMC Contracts for direct billing.

Q. What are the requirements for Commissioning a U.S. Registered Commercial land-based unit for operation within the domestic U.S.?

A. The FCC requires the owner/operator of a U.S. registered land-based unit to obtain a license to radiate carrier within the domestic U.S. The requirements are:

FCC Form 442 (completed and signed)
\$35 fee per application

The FCC Form plus check should be submitted to the following address:

Federal Communications Commission
Experimental Radio Service
P. O. Box 358320
Pittsburgh, PA 15251-5320

COMSAT's Commissioning Department requires the following:

Commissioning Application (completed and signed)
Letter of Intent
Space Segment Request
Copy of 442 submitted to FCC
Credit Application (new customers only)

Q. Suppose I'm a U.S. resident wishing to commission a land-based unit for operation outside the Domestic U.S.? What is required?

A. U.S. customers operating in a foreign country only should submit the following to CMC Commissioning:

Commissioning Application (completed and signed)
Letter of Intent

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COMSAT COMMISSION G

020/022

Credit Application (new customers only)

We remind customers of the necessity of contacting the PTT of that country to obtain permission to bring the Unit into their country and radiate carrier.

There are no FCC requirements for operation of a U.S. registered unit in a foreign country. However, if the customer is intending to operate in a restricted/embargoed country, there are legal aspects and our Legal Department has to obtain permission from government entities before Commissioning can process their application.

Sample Letter of Intent for use within the Domestic US:

To Whom It May Concern:
CMC is a communications firm seeking to commission three (3) Standard-A units for use in the domestic U.S. for (state purpose of use and why normal means of communications cannot be utilized). CMC personnel will be the ultimate user and operator of these units. We wish to commission on ((give approximate date)). We have forwarded our FCC Form 442 to the FCC for a license to operate these units in the domestic U.S.
(signature)

Sample Letter of Intent for use in a Foreign Country:

To Whom It May Concern:
GWC is a broadcasting/news gathering organization seeking to commission two Standard-M units for use in (state Country). These units will be operated by GWC personnel for (explain the services for which the terminals will be used).

These units will not be used in the domestic U.S. at this time. I understand that if, in the future, these units are returned to the U.S. for use, we must apply to the FCC for a license to radiate carrier (operate) within the domestic U.S.
(signature)

Please submit any questions you may have regarding Commissioning to:

COMSAT Mobile Communications
Attn.: Mrs. Geri Robinson, Manager, Commissioning
22300 COMSAT Drive
Clarksburg, MD 20871
Telephone No.: 1-301-428-2368
Facsimile No.: 1-301-601-5958