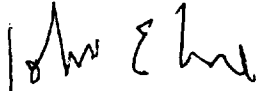


Dec 01 14:30 1995 towhom Page 1

To Whom It May Concern:

Trimble Navigation is a manufacturing firm seeking to commission one (1) Standard-C unit for use in the domestic U.S. for testing and verification of Inmarsat-C protocols.

Trimble Navigation personal will be the ultimate user and operator of unit. We wish to commission on Dec 11, 1995. We have forwarded our FCC Form 442 to the FCC for a license to operate this unit in the domestic U.S.



John E Crane  
(for Trimble Navigation, Limited)

# Inmarsat-C Land Mobile Earth Station Commissioning Application Form

Maritime Users should use a maritime application form



Please type of 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.  
Total No. of Inmarsat-C LMES currently commissioned: \_\_\_\_\_

## 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:

Will it be used internationally?  Portable  Transportable

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 MARKETING AND ENGINEERING UNITS

### Industry:

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

Env:

Incl:

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**SECTION D. APPLICATION DETAILS**

App:

Name: TRIMBLE NAVIGATION LTD.  
 Address: 645 NORTH MARY AVE  
SUNNYVALE, CALIFORNIA 94088-3642 U.S.A.  
ATTN: John E. CRANE

Post/ZIP: 94088-3642  
 Tel: (408) 481-6001 Fax: (408) 481-2020 Tlx: \_\_\_\_\_

**SECTION E. EQUIPMENT DETAILS**

Mfr:

The following information is essential. Ensure it is correct as errors could delay the processing of your application. If this application is for more than one terminal, please complete the last page.

Manufacturer: THRANE & THRANE A/S Model: TT 3022A  
 Serial number: 9510374  
 Four letter desired in tlex answer back: TNMM

IMN:

Do you have a high-gain antenna?  No  Yes  
 Date terminal purchased: NOV 28, 1995  
 If privacy is required please tick  2.20  
 Software revision number: \_\_\_\_\_

**SECTION F. OWNER/LICENSEE DETAILS**

Owner:

Owner (if different from applicant):

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Post/ZIP: \_\_\_\_\_  
 Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ Tlx: \_\_\_\_\_

Licensee:

Land mobile earth station licensee

(or indicate if same as applicant or owner):

Name: \_\_\_\_\_  
 Address: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 Post/ZIP: \_\_\_\_\_  
 Tel: \_\_\_\_\_ Fax: \_\_\_\_\_ Tlx: \_\_\_\_\_

**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) US01  
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: TRIMBLE NAVIGATION, LTD.  
Address: P.O. Box 3642  
SUNNYVALE, CALIFORNIA  
\_\_\_\_\_  
Post/ZIP: 94088-3642  
Tel: (408) 481-8000 Fax: (408)-481-8909 Tlx: \_\_\_\_\_

• **Part 2.2 Credit/Charge card:**

Card type (e.g. Amex, Visa etc): \_\_\_\_\_ Expiry date: \_\_\_\_\_  
Card number: \_\_\_\_\_  
Name (on card): \_\_\_\_\_

**CERTIFICATION AND AGREEMENT**

The Owner 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.

Owner's Name: TRIMBLE NAVIGATION, LTD Signature: [Signature] Date: Nov 29, 1995

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 _____                             | 2.1 | Maufacturer _____                              |
| 1.2 | Model Name _____                               | 2.2 | Model Name _____                               |
| 1.3 | Unit serial No. _____                          | 2.3 | Unit serial No. _____                          |
| 1.4 | Four letters desired in telex answerback _____ | 2.4 | Four letters desired in telex answerback _____ |
| 1.5 | Inmarsat Mobile Identity Number _____          | 2.5 | Inmarsat Mobile Identity Number _____          |

- |     |  |     |  |
|-----|--|-----|--|
| 3.1 | Manufacturer _____                             | 4.1 | Maufacturer _____                              |
| 3.2 | Model Name _____                               | 4.2 | Model Name _____                               |
| 3.3 | Unit serial No. _____                          | 4.3 | Unit serial No. _____                          |
| 3.4 | Four letters desired in telex answerback _____ | 4.4 | Four letters desired in telex answerback _____ |
| 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 | Maufacturer _____                              |
| 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 | Maufacturer _____                              |
| 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 | Maufacturer _____                              |
| 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 _____          |

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TERMS AND CONDITIONS FOR THE UTILIZATION OF THE INMARSAT SPACE SEGMENT  
BY LAND MOBILE EARTH STATIONS

Article 1: Scope of Terms and Conditions

Subject to, and complementary to, the relevant provisions of the INMARSAT Convention and Operating Agreement, and any further terms and conditions that INMARSAT may attach, the terms and conditions set forth herein shall apply to the authorization made by INMARSAT to the Licensee of the Land Mobile Earth Station (LMES) described in the attached Access Authorization Certificate, with respect to the utilization of the INMARSAT Space Segment by the LMES

Article 2: Land Mobile Earth Station Performance, Criteria and Operations

(A) Authorization Subject to Compliance with Technical and Operating Requirements

- (1) Throughout its utilization of the INMARSAT space segment, the LMES shall comply with the criteria and performance standards to which it was type-approved by INMARSAT, and the LMES Operator shall comply with the operating procedures notified by INMARSAT to the LMES Licensee and LMES Operator at any time or times.
- (2) The authorization to utilize the INMARSAT space segment shall be conditional upon such compliance. The LMES Operator shall not utilize the INMARSAT space segment for any purpose or in any manner other than as specified in the application for authorization and in these Terms and Conditions, without the prior written consent of INMARSAT.

(B) Sanctions in the Case of Non-compliance

- (1) INMARSAT shall be entitled, at any time or times, and with immediate effect, unilaterally to modify, restrict, suspend or terminate, temporarily or permanently, the authorization by notification to the LMES Licensee and LMES Operator, if INMARSAT deems the LMES or the LMES Operator to not so comply, or to practice a utilization not so authorized, no matter what the cause or causes of such non-compliance or practice.
- (2) Unless the authorization has been terminated, INMARSAT shall lift such modification, restriction or suspension, if it is demonstrated to INMARSAT's satisfaction that compliance has been resumed and will be maintained, or that such unauthorized practice has been and will be discontinued by the LMES Operator.

(C) Suspension and Termination in Special Circumstances

- (1) The authorization shall be deemed to be suspended during any period in which persistent malfunction or any operation of the LMES that degrades the performance of the INMARSAT space segment occurs.
- (2) The authorization shall be deemed to be terminated if any one of the following circumstances occurs:
- (a) any change in the information contained in the commissioning application which would require a change in LMES identity;
  - (b) significant modification or change to the LMES.
- (3) The LMES Licensee or LMES Operator, as the case may be, shall notify INMARSAT promptly of any of the events specified in paragraphs (1) and (2) above.

(D) Compliance with National Regulations

In utilizing the INMARSAT space segment, the LMES Licensee and LMES Operator shall comply with the regulations governing the use of radiocommunications of any State in which the LMES is located at any time.

(E) Suspension for Non-Payment of Accounts and Other Causes

- (1) Without prejudice to any of the other remedies and provisions of these Terms and Conditions or at law, Inmarsat and any or all of the land earth station (LES) Operators in the Inmarsat system may, individually or jointly, suspend the authorization due to non-payment of accounts for the telecommunications services provided by the LESs, unauthorized use of the LMES, loss or theft of the LMES, fraudulent abuse of or by the LMES, any other non-compliance with these Terms and Conditions, insolvency of the LMES Licensee, the LMES Operator or their designated entity responsible for payment of accounts, or any other reason established under the Inmarsat Barring Procedures.
- (2) Upon being satisfied that the causes of the suspension have been remedied, Inmarsat and the LES Operators may lift the suspension.
- (3) The disclaimer of Inmarsat and other persons and entities under Article 4 (Telecommunications Disclaimer) of these Terms and Conditions shall apply to any claims arising from suspension of this authorization by Inmarsat and the LESs for reasons specified in this Article.

Article 3: Financial Obligations

The establishment of charges for the telecommunications services provided by the land earth stations (LESs) is the prerogative of the owner and/or operator of the LES. All accounts for telecommunications services via the LESs must be paid without delay. In the event of delayed payment, the LESs concerned may discontinue telecommunications services for the LMES in default.

Article 4: Telecommunications Disclaimer

INMARSAT, its Parties, Signatories, their officers, employees, agents, the lessors, manufacturers and other providers of the INMARSAT space segment, or their assignees, or any of them, shall not be liable to the LMES Licensee or any other person or entity for any direct, indirect or consequential loss, damage, liability or expense sustained by reason of any unavailability, delay, interruption, disruption or degradation in or of the INMARSAT space segment capacity or any modification, restriction, suspension or termination of the authorization, regardless of the cause or causes thereof.

Article 5: Language and Communications

- (A) These terms and conditions and all documentation and communications required thereunder shall be in the English language.
- (B) All communications pertinent to the authorization or to these terms and conditions shall be made or confirmed, by telex, facsimile, data transmission or other written form. Communications by INMARSAT to the LMES Licensee shall be sent to its last known address and communications to the LMES Operator shall be sent to the LMES.

Article 6: Amendments

The terms and conditions as herein stated are subject to amendment by the Council of INMARSAT, such amendment to become effective upon the date specified by the INMARSAT Council, but not less than thirty (30) days after the date of notification of the amendment to the LMES Licensee, the LMES Operator and the Routing Organization through which the LMES Licensee's application for authorization was forwarded to INMARSAT.

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**GUIDELINES ON COMPLETING THIS APPLICATION FORM**

To use your land mobile earth station (LMES), it must be commissioned. This means the equipment must be tested to see if functions correctly and does not jeopardise the integrity of the Inmarsat system.

Before these tests, information is required concerning the LMES, the owner/licensee, the billing authority and your national Routing Organization (RO), who processes the application and who allocates you an Inmarsat Mobile Number (IMN), which will be used by public service subscribers to communicate with you.

The agent selling your LMES can advise you on who is your national RO. An up-to-date listing of ROs may be obtained from Inmarsat. All completed applications must be forwarded to a Routing Organization.

The RO will notify you of your IMN and when commissioning may take place. Your LMES may be commissioned at any time or place after this date, simply by activating a terminal log-on or test request procedure - refer to the Operator's Instructions supplied with your LMES. It is possible for commissioning to take place anywhere in the world providing your mobile earth station is within coverage region of an Inmarsat satellite.

If you have any difficulties completing the application, you should contact your national Routing Organization. Failing this, the Inmarsat Land Mobile Commissioning Unit is open between 08:00 and 17:00 UTC, Monday to Friday, at the following numbers and address:

Telephone: +44 71 728 1518  
 Telefax: +44 71 728 1142  
 Telex: 297201 INMSAT G

Inmarsat Land Mobile Commissioning Unit  
 99 City Road  
 London EC1Y 1AX  
 United Kingdom

**How to fill in the form:****Section A Application Data**

Fill in the country where your LMES will be registered and the name of the national RO of that country.

**Section B Installation Details**

Complete only one part of this section. Specify whether your LMES will be used at a fixed location, or on a vehicle or as a Portable or Transportable. A Portable terminal can be hand-carried and used while on the move. A Transportable can also be hand-carried, but needs to be set up in a stationary position before use.

**Section C User Information**

Please tick only one box in each column, one indicating the type of use or type of vehicle and another indicating the industry in which the LMES will operate. If you are unsure you should tick the box marked "Other".

**Section D Applicant Details**

Complete this section with your own name and address details.

**Section E Equipment Details**

It is very important that these details are correct. You must fill in the name of the manufacturer of your LMES as well as the model name. The serial number must correspond exactly to the serial number of the LMES transceiver (not the antenna). It is this number which is used to link the IMN with the codes that are answerback for telex subscribers calling your terminal, you must indicate it here. If you desire a particular antenna you should note this in the appropriate box. Please also indicate if your terminal should be "Private" - not listed in any terminal directories. You should note the terminal software revision number in this section too.

**Section F Owner and Licensee Details**

If you are not the owner of the LMES or are not licensed to use it, you must indicate the name and address of both the owner and the licensee here. The licensee is the person or entity holding the national radio license for the mobile earth station installation.

**Section G Billing Data**

Part 1 must be completed for all applications. This is the authority to which accounts for the LMES will be forwarded, unless terms under Section G, Part 2 are applicable. All recognised accounting authorities have been assigned codes. If this code is known and entered in the appropriate space, the other items in this section may be left blank.

Part 2 is an optional section. Certain Routing Organizations permit the use of credit cards or billing entities as well as ITU Accounting Authorities. All authorised billing entities have been assigned codes. If this code is known and entered in the appropriate space, the other items in this section may be left blank.

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

**Certification and Agreement**

You must clearly write or type your name here and sign and date the application at this point. The terms and conditions applicable to operation of your terminal are available on the reverse of this page.

**REQUEST FOR SPACE SEGMENT TO BE USED WITH LAND-BASED SES TERMINALS**

The Federal Communications Commission (FCC) requires COMSAT Mobile Communications to obtain authorization for providing space segment to be used in providing services via land-based ship earth station terminals. The FCC will authorize COMSAT to provide space segment for such services only under certain conditions. The FCC will approve temporary limited use of such stations only where no other means of communications are available such as in the case of emergency situations resulting from disasters or where these terminals are the only adequate means of meeting urgent communications requirements in remote locations. In order to enable us to obtain FCC authorization, the following information is required.

Applicant: John E. CRANE FOR TRIMBLE NAVIGATION

Brief description of applicant's business: DESIGN AND DEVELOPMENT ENGINEERING FOR TRIMBLE'S COMMUNICATION PRODUCTS

Ultimate user of terminal: TRIMBLE'S COMMUNICATION PRODUCTS MARKETING/ENGINEERING

Who will operate the terminal?: QUALIFIED TRIMBLE EMPLOYEES

Where will the terminal be operated? SUNNYVALE, CALIFORNIA

Explain the services for which the terminal will be used and why no other means of communications are available: COMMUNICATIONS PRODUCT TEST AND ANALYSIS



What is the required timeframe for use of the terminal for this service? INDEFINITE

Have you obtained authorization from the FCC (commercial applicants) or NTIA (USG applicants) for ground segment use of the terminal? Please provide authorization date or date the authorization request was submitted. YES

**\*\* (NOTE) - Customers are to be informed that they are responsible for filing with the FCC' Office of Engineering Technology an experimental license form (Form 442) which is the procedure the FCC follows for these TAs. This applies to all Land-Based terminals for domestic (U.S.) only.**