

FCC APPLICATION

EXHIBITS

- EXHIBIT A Describe how the necessary bandwidth was determined

The bandwidth was that assigned for the INMARSAT C Communications System as defined in the INMARSAT C System Definition Manual.

- EXHIBIT B Narrative Statement

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Harris has architected a proprietary world-wide communications system which has potential commercial and DoD applications. The system can be operated from fixed assets as well as dynamic land-and-sea based platforms. Harris is currently developing a proof-of-concept command and control system for a U. S. Government Customer. This effort will assess the viability of the communications system to operate on a variety of dynamic maritime platforms, which cumulatively represents the bounding operational conditions for any future applications.

In this activity, Harris will evaluate, through a series of on-the-air, end-to-end tests, the suitability of a standard INMARSAT C terminal, standard INMARSAT C services, and emerging data transfer protocols to meet a subset of requirements for the system described above. For this purpose Harris is seeking to commission one (1) INMARSAT C terminal for use in the U.S. Harris personnel will be the ultimate user and operator of this terminal.

The U. S. Government Agency participating in this activity is the U. S. Navy, and the contact number is (407) 727 - 5085.

IN
Page

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:** Harris Corporation
2. **Company's Business:** Communications Systems and Products

3. Who will operate the terminal? Harris Corporation

4. By what date do you need to operate the terminal in the U.S.? February 23, 1998
For how long? Two Years

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

See Attachment

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

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).

See Attachment

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

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 ☒ XX.

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: N/A

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

IF YES, please briefly describe below how the terminal will be used in fulfilling the government contract: Provide End-to-End communications link for possible future use from a marine platform to the user for proof-of-concept evaluations.

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

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 X No

IF YES, give the date you filed the license application: February 4, 1998; 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:

See Attachment

Thank you for your assistance in providing us the above information.

ATTACHMENT

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Harris has architected a proprietary world-wide communications system which has potential commercial and DoD applications. The system can be operated from fixed assets as well as dynamic land-and-sea based platforms. Harris is currently developing a proof-of-concept command and control system for a U. S. Government Customer. This effort will assess the viability of the communications system to operate on a variety of dynamic maritime platforms, which cumulatively represents the bounding operational conditions for any future applications.

In this activity, Harris will evaluate, through a series of on-the-air, end-to-end tests, the suitability of standard INMARSAT C terminals, standard INMARSAT C services, and emerging data transfer protocols to meet a subset of requirements for the system described above. For this purpose Harris is seeking to commission an INMARSAT C terminal for use in the U.S. Harris personnel will be the ultimate user and operator of this terminal. We wish to commission on February 23, 1998 in order to meet our scheduled tests and demonstration dates for our customers. We are forwarding our FCC Form 442 to the FCC for a license to operate this terminal in the domestic U.S.

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: Harris Corporation

Brief description of applicant's business: Develop and Manufacture Communications systems and products for world-wide applications.

Ultimate user of terminal: Harris Corporation

Who will operate the terminal?: Harris Corporation

Where will the terminal be operated? Palm Bay, Florida

Explain the services for which the terminal will be used and why no other means of communications are available: _____

A. Services Planned for use: Inmarsat C Terminal for Data Communications.

B. See Attachment

What is the required timeframe for use of the terminal for this service? Two (2) Years (February 23, 1998 thru February 22, 2000)

Have you obtained authorization from the FCC (commercial applicants) or NTIA (USC applicants) for ground segment use of the terminal? Please provide authorization date or date the authorization request was submitted. February 4, 1998

**** (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.**

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Registration for service activation of Maritime Mobile Earth Station

Sections 1-4 and 8 are to be completed by all customers.

Tick boxes as appropriate.

Please write in block capitals.

RO use only ROcode

Application number

Date Day Month Year

Customer's reference number

1 Your details (See note A)

Your name or the name of your organisation:

Harris Corporation

Address: 2400 Palm Bay Road N.E.

Town/city: Palm Bay

State/province: Florida

Post/ZIP code: 32905

Country: U.S.A.

Telephone: + Country code (1) - Area code (407) Telephone number (727-4000)

Facsimile: + Country code (1) - Area code (407) Facsimile number (729-7980)

Contact person:

James T. Kushner

Title:

Contracts Manager

Department:

Technology Development (M/25/5133)

What is their telephone number and/or extension? + Country code (1) - Area code (407) Telephone number (727-5085)

NOTE: Maritime MESS that MAY BE used for any distress and safety purposes MUST have an Accounting Authority.
Other maritime MESS may use Inmarsat Service Providers.

Will the MES be used for distress and safety communications? Yes ☐ No ☒

IF YES, enter the Accounting Authority Code (AAIC):

If the Code is unknown, enter the name of the AA:

IF NO, have you arranged payment of calls for this MES through (tick one)

(a) Accounting Authority (AA) ☒ (b) Inmarsat Service Provider (ISP) ☐

Enter ISP or AA Code:

U S O 1

If the Code is unknown enter the name of the ISP or AA:

Environment usage

Maritime ☐
Maritime fixed ☒

The system

Inmarsat-A ☐
Inmarsat-B ☐
Inmarsat-C ☒
Inmarsat-M ☐
Inmarsat-phone
mini-M ☐

What will be the primary use of the MES?

Trading ☐
Passenger/Cruise ☐
Offshore ☐
Government ☐
Fishing ☐
Yachts ☐
Other ☒

please specify Proof of concept of the
maritime portion for a world-wide
command, control and communication
system.

What will be the country of registry of this MES?

United States of America

Mobile Earth Station (MES) manufacturer

Trimble Navigation, Limited

Mobile Earth Station (MES) model / no.

Galaxy Ship Earth Station

Inmarsat A services (See note D)

Enter your Mobile Earth Station (MES) Serial number

Primary Inmarsat Mobile number (if known)

Privacy ☐ Voice ☐ Fax ☐ HSD ☐ DHSD ☐ Telex ☐ Telex answerback ☐

Secondary Inmarsat Mobile number (if known)

Privacy ☐ Voice ☐ Fax ☐ HSD ☐ DHSD ☐

Preferred service activation region Pacific ☐ Indian ☐ Atlantic East ☐ Atlantic West ☐

Preferred service activation LES:

Preferred service activation date: (day/month/year)

Agent to conduct test:

Country:

Telephone: + Country code () - Area code () Telephone number ()

Facsimile: + Country code () - Area code () Facsimile number ()

Go to Section 5

RO use only Type of test: Full ☐ Reduced ☐

Enter your Inmarsat Serial number (ISN)

3

Tick only 1 service per row and Privacy if required

Number	Privacy	Voice	Fax	Data	HSD	Telex	Telex answerback	Service code	RO use only Inmarsat Mobile number
1	☐	☐	☐	☐	☐	☐	☐		
2	☐	☐	☐	☐	☐	☐	☐		
3	☐	☐	☐	☐	☐	☐	☐		
4	☐	☐	☐	☐	☐	☐	☐		
5	☐	☐	☐	☐	☐	☐	☐		

To enter more services, copy and complete this page as required, then go to Section 5

Enter your Inmarsat Serial number (ISN)

6

Tick only 1 service per row and Privacy if required

Number	Privacy	Voice	Fax	Data	Service code	RO use only Inmarsat Mobile number
1	☐	☐	☐	☐		
2	☐	☐	☐	☐		
3	☐	☐	☐	☐		
4	☐	☐	☐	☐		

To enter more services, copy and complete this page as required, then go to Section 5

Enter your Inmarsat serial number (ISN)

7 6

Service	Privacy	Service code	RO use only Inmarsat Mobile number
Voice	☐		
Fax	☐		
Data	☐		

Enter your SIM card serial number (SSN)

Service	Privacy	Service code	RO use only Inmarsat Mobile number
Voice	☐		
Fax	☐		
Data	☐		

Enter your Mobile Earth Station (MES) Serial number

0200005050

Privacy Telex answerback

RD use only
Inmarsat Mobile number

Go to Section 6

5 Multi-channel details (see Note 1)

If you are NOT applying for a multi-channel or the Mobile Earth Station (MES) is not part of a multi-channel GO TO SECTION 6

If the Mobile Earth Station (MES) applied for is part of a multi-channel but is NOT the primary channel enter the required information below:

INMARSAT-A ONLY

Enter the Primary Inmarsat Mobile number of the primary channel

INMARSAT-B/M/Inmarsat-phone mini-M ONLY

Enter the Inmarsat Serial number (ISM) of the primary channel

If you are applying for more than one channel copy and complete Sections 4 and 5 for each MES that is part of this multi-channel application.

In completing SECTION 6 the customer confirms that the MES will be used for Distress and safety; the customer therefore MUST select the AA in section 2

COMPLETE IF THE MOBILE EARTH STATION (MES) IS TO BE USED FOR DISTRESS AND SAFETY ON SHIPS

Who should we contact?

Address:

Town/city:

State/province:

Post/ZIP code:

Country:

Telephone: + Country code () - Area code () Telephone number ()

Facsimile: + Country code () - Area code () Facsimile number ()

Alternative 24 hour emergency telephone: + Country code () - Area code () Telephone number ()

What is the name of the vessel?

In which country is the vessel registered?

Type of vessel

MMSI

Call sign

Gross tonnage

Capacity for persons on board (passengers and crew)

I Harris Corporation

the owner, have read and agree to comply with the Terms and Conditions for the use of the Inmarsat space segment on the next page.

Signed

Date

2 Feb. 98

James T. Kushner, Sr. Contracts Manager

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