6-DSS-MISC-90 PN:11/21/89 RECEIVED

BEFORE THE

### Federal Communications Commission

WASHINGTON, D.C. 20554

Federal Communications Commission Office of the Secretary

INTERNATIONAL FACILITIES DIVISIUS COMMON ONE

NOV 1 4 1989

In the Matter of

White Contracts

Establishment of Policies and Procedures to Govern the Lease of Inmarsat Satellite Capacity for Domestic Mobile Satellite Service

To: The Commission

#### PETITION FOR IMMEDIATE DECLARATORY ORDER CONCERNING INMARSAT LEASE REQUESTS

Geostar Messaging Corporation ("GMC"), by its attorneys, hereby requests the Federal Communications Commission (the "Commission") to issue immediately a declaratory order concerning the lease of Inmarsat satellite capacity to provide domestic mobile satellite service ("MSS"). It is requested that the declaratory order state that the Communications Satellite Corporation ("Comsat"), as well as any other party involved, may lease Inmarsat capacity for such purpose, but that it does so at its own risk, and that any such lease will be subject to the outcome of Commission proceedings to establish policies for the provision of interim domestic MSS. In support of its petition, GMC presents the following.

I. GMC is Filing Simultaneously Herewith a Separate Petition to Establish Policies and Procedures to Govern the Use of Inmarsat Space Segment Capacity for Interim Domestic MSS

GMC is filing simultaneously herewith a separate petition requesting the FCC to establish policies and procedures to govern the use of Inmarsat satellite capacity for the provision of interim domestic MSS service (hereafter "Petition to Establish Interim MSS Policies"). In its Petition to Establish Interim MSS Policies, GMC explains that it is a company that is actively seeking to provide domestic MSS service as both a space segment licensee and an end-service provider. GMC needs access to interim Inmarsat capacity in order to compete with other space segment operators and end-service providers for a share of the domestic MSS market.

As is more fully discussed in the <u>Petition to Establish</u>

<u>Interim MSS Policies</u>, for at least the next two years, and
probably longer, the only space segment capacity available for
use by end-service providers of domestic MSS will be space
segment provided by Inmarsat. Such capacity as Inmarsat can
provide will be limited.

In its <u>Petition to Establish Interim MSS Policies</u>, GMC requests the Commission to decide how space segment and endservice providers of domestic MSS are to gain access to the limited amount of Inmarsat space segment that will be available. In GMC's view, end-service providers of interim MSS service should be permitted to acquire Inmarsat space segment directly through Comsat. To impose a middleman between Comsat and endservice providers would be anticompetitive, add unnecessarily to the costs of serving the public, and be inconsistent with the Commission's MSS Licensing Decision.1/

In its <u>Petition to Establish Interim MSS Policies</u>, GMC explains that there are numerous avenues available to the Commission for addressing these issues. These include GMC's application for a blanket radio station license to operate 10,000 mobile earth stations using interim space segment facilities; <u>2</u>/ pending applications relating to the Marisat AOR

Second Report and Order, Gen. Dkt. No. 84-1234, 2 FCC Rcd 485 (1987).

In re Application of Geostar Messaging Corporation For a Blanket Radio Station License to Operate Mobile Earth Stations in the 1530-1544 MHz and 1626.5-1644.5 MHz Bands, File No. \_\_\_\_\_ (filed May 30, 1989).

satellite $\underline{3}$ / in which GMC raised these issues, $\underline{4}$ / and future Section 214 application $\underline{5}$ / and tariff $\underline{6}$ / filings which GMC believes are required.

It is not clear when, and in which proceeding, the Commission will address the issues raised by GMC. In the meantime, it appears that Comsat and others may have proceeded with the development of lease arrangements before all the necessary applications have been filed to implement such lease arrange—

In re Communications Satellite Corporation's Application for authority to participate in an Inmarsat program to extend the lease of the L-band capacity of the Inmarsat system through 1992, File No. CSS-89-002-P/L (filed April 10, 1989) ("Lease Extension Application"); In re Application of Comsat General Corporation for authority to relocate the Marisat F-1 Atlantic Ocean Region Satellite (KS-33), File No. 1299-DSS-ML-89 (filed April 17, 1989).

<sup>&</sup>lt;u>Comments of Geostar Messaging Corporation</u>, filed May 19, 1989, in connection with Comsat-WSD's <u>Lease Extension</u> <u>Application</u>, File No. CSS-89-002-P/L.

<sup>5/</sup> Comsat is a "dominant" carrier under the Commission's Competitive Carrier decisions. Fifth Report and Order in CC Docket No. 79-252, 98 F.C.C.2d 1191, 1201 n.33 (1984). As such, it is subject to Section 214 of the Communications Act of 1934, as amended, which states, inter alia, that "[n]o carrier shall ...operate any line... or shall engage in transmission over or by means of such additional or extended line, unless and until there shall first have been obtained from the Commission a certificate that the present or future public convenience and necessity require or will require the ...operation... of such additional or extended line." 47 U.S.C.A. §214(a)(1984).

<sup>6/ &</sup>lt;u>See AT&T</u>, 42 F.C.C.2d 654, 659 (1973); <u>GTE Satellite Corp.</u>, 57 F.C.C.2d 153, 170 (1975); <u>American Satellite Corp.</u>, 73 F.C.C.2d 377, 322 (1979).

It is standard practice for the Commission to insulate itself from such arguments until it has had an opportunity to consider an issue before it, either by prohibiting the activity from occurring, or by advising the contracting parties that they may proceed at their own risk.

Thus, for example, Section 319(a) of the Communications Act (47 U.S.C. §319(a)) provides that "[n]o license shall be issued under the authority of this Act for the operation of any station unless a permit for its construction has been granted by the Commission." According to the legislative history of this section, "Congress adopted the construction permit requirement to discourage applicants from making considerable expenditures in . . . unmarketable equipment and using these investments to exert undue pressure on the licensing authority. . . "7/

Similarly, in considering whether domestic satellite carriers should be allowed to sell transponders in addition to offering them on a common carrier basis, the Common Carrier Bureau advised those carriers that they could sell transponders

<sup>7/ &</sup>lt;u>UA - Columbia Cablevision, Inc.</u>, 55 F.C.C.2d 656, 658, 34 R.R.2d 1133, 1135 (1975). While §319(a) may not be directly applicable to the facilities under consideration here, the same concerns have apparently been the basis for the Commission's requirement that Comsat file applications prior to Inmarsat Council action on new facilities and services. See e.g., 1974 Policy Statement, 46 F.C.C.2d 338, 339 (1974).

ments and before the Commission has addressed the issues raised by the use of Inmarsat space segment for interim domestic MSS.

GMC believes that the Commission should immediately issue a declaratory order to clarify the status of such activities pending final Commission action on these matters.

II. The Commission Should Issue the Requested Declaratory Order to Avoid Being Presented With a <u>Fait Accompli</u> With Respect to Past and Future Lease Activities.

GMC is concerned that Comsat has and/or will obtain a lease of Inmarsat space segment from the Inmarsat Council on behalf of one or more domestic MSS service providers before the Commission decides what policies regarding the interim use of Inmarsat space segment best comport with the public interest. Should that happen, Comsat (and the MSS service provider whose lease request has been satisfied) may argue that the Commission cannot or should not retroactively apply an equitable access policy to nullify, modify or otherwise condition a lease entered into before the Commission established its policy. To accept such an argument would severely prejudice GMC's pending applications and Petition to Establish Interim MSS Policies and unfairly obstruct GMC's efforts to establish competitive domestic MSS services.

before the Commission issued a decision, but that they did so at their own risk.8/

Because the same considerations apply in the instant situation, the Commission is requested to issue immediately a declaratory order that any lease of Inmarsat space segment for the provision of domestic MSS, as well as any Commission authorization to utilize such capacity, will be subject to the outcome of the Commission's proceedings to establish policies for the provision of interim domestic MSS which are described above.

Respectfully submitted,
GEOSTAR MESSAGING CORPORATION

By: // Finis

Barry Lambergman

Its attorneys

FLETCHER, HEALD & HILDRETH 1225 Connecticut Avenue, N.W. Suite 400 Washington, D.C. 20036 (202) 828-5700

November 7, 1989

<sup>8/</sup> Notice of Proposed Rulemaking in CC Docket No. 82-45, In re Domestic Fixed-Satellite Transponder Sales, 88 F.C.C.2d 1419, 1421 (1982).

#### CERTIFICATE OF SERVICE

I, Marissa Yatco, a secretary in the law firm of Fletcher, Heald & Hildreth, certify that on November 7, 1989, a copy of the foregoing "Petition For Declaratory Order Concerning Inmarsat Lease Requests" was mailed first-class, U.S. postage prepaid to:

- \* Chairman Alfred C. Sikes Federal Communications Commission 1919 M Street, N.W. Room 814 Washington, D.C. 20554
- \* Commissioner James H. Quello Federal Communications Commission 1919 M Street, N.W. Room 802 Washington, D.C. 20554
- \* Commissioner Sherrie P. Marshall Federal Communications Commission 1919 M Street, N.W. Room 826 Washington, D.C. 20554
- \* Commissioner Andrew C. Barrett Federal Communications Commission 1919 M Street, N.W. Room 844 Washington, D.C. 20554
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- \* Cecily Holiday, Esq.
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Marissa Yatco

\* Hand Delivered my/cosgmcru





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## GEOSTAR\* MESSAGING CORPORATION

SERVICE:

Satellite System

Type of Application: Initial Station License **Number of Stations:** 

10,000

May 30, 1989

Federal Communications Commission 1919 M Street, N.W. Washington, D.C. 20554

JUN 21989

OFFICE OF CHIEF DOMESTIC FACILITIES DIVISION COMMON CARRIER BUREAU

Attention:

Cecily C. Holiday, Chief

Satellite Radio Branch

Room 6324

Re:

Application for Blanket License for 10,000 Mobile

Earth Stations

Dear Ms. Holiday,

Attached is an original and nine copies of the application of Geostar Messaging Corporation for a blanket radio station license to operate up to 10,000 mobile earth stations in the bands 1530-1544 MHz (downlink) and 1626.5-1645.5 MHz (uplink).

The proposed mobile earth stations will operate on an interim basis with Inmarsat satellites, such as the Marisat-Atlantic satellite. The Commission has already accepted applications concerning the use of Inmarsat facilities for interim domestic mobile satellite services and placed them on public notice. These mobile earth stations will later be switched over to a domestic mobile Although rulemaking proceedings are still pending satellite system. concerning the use of these bands by domestic mobile satellites, GMC requests the Commission to accept and process this application for the reasons described in the accompanying Motion To Accept Application.

Pursuant to §1.1105 of the Commission's rules and regulations, a filing fee in the amount of \$5,000.00 is submitted with this application.

Please contact Ron Lepkowski at (202)-778-6008 if there are any questions concerning this filing.

Respectfully submitted,

Geostar Messaging Corporation T. Stephen Cheston, President

cc:

Gerald P. Vaughan William Torak

James R. Keegan Thomas Tycz

Fern Jarmulnek Geraldine Matise

Harry Ng

# FEDERAL COMMUNICATIONS COMMISSION Washington, D.C. 20554

In the Matter of the Application of	)
GEOSTAR MESSAGING CORPORATION	)
For a Blanket Radio Station License to Operate Mobile Earth Stations in the 1530-1544 MHz and 1626.5-1645.5 MHz Bands	)))

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#### MOTION TO ACCEPT APPLICATION

Geostar Messaging Corporation (GMC) requests the Commission to accept for filing at this time a concurrently filed application for a blanket radio station license to operate up to 10,000 mobile earth stations in the bands 1530-1544 MHz (downlink) and 1626.5-1645.5 MHz (uplink).<sup>1</sup>

GMC is proposing to use these mobile earth stations to provide digitized voice, data and facsimile services to users over existing Inmarsat space segment facilities, such as the Marisat-Atlantic satellite being relocated to 106.5° West Longitude, on an interim basis. Operations of these mobile earth stations will later be switched to a domestic mobile satellite system operating in these bands once such a system is placed into service.<sup>2</sup>

The Commission has already accepted for filing an application by Comsat

General Corporation (Comsat General) to relocate the Marisat-Atlantic satellite to 106.5°

West Longitude in order to provide interim land mobile satellite services within the

<sup>&</sup>lt;sup>1</sup> In its MSS Licensing Order, FCC 86-552 (released January 26, 1987) at paragraph 31, the Commission decided that mobile earth stations would be licensed on a blanket basis to vendors providing end-services to users. Other analogous examples of blanket licensing for mobile earth stations include Geostar Corporation, DA 87-145 (released February 20, 1987), and Qualcomm, Inc., FCC 82-24 (released February 14, 1989).

<sup>&</sup>lt;sup>2</sup> Some of these stations will be operated in the maritime mobile satellite service in coastal and inland waterway areas in accordance with the current table of frequency allocations, while most will be operated in accordance with the interim (co-directional) provisions of the digital land mobile satellite service proposed by GMC in RM-6459 and/or the land mobile satellite service allocations of the Final Acts of the 1987 Mobile WARC.

United States<sup>1</sup>. GMC's mobile earth station blanket application complements Comsat General's application by providing a concrete proposal for end-user terminals to be operated with the Inmarsat space segment should the Commission authorize its use in providing interim domestic mobile satellite services. Since the Commission has already accepted Comsat General's application and issued public notice of its filing, there would be no prejudice or delay to action on that application by accepting and processing GMC's blanket earth station application at this time. In fact, consideration of concrete mobile earth station applications in parallel with the proceedings concerned with the use of Inmarsat space segment capacity would assist the Commission in its examination of the issues involved in approving the use of Inmarsat facilities for interim domestic mobile satellite services.

GMC recognizes that the non-maritime uses of the bands proposed for its mobile earth stations are the subject of pending rulemaking proceedings with respect to a domestic space segment.<sup>2</sup> Acceptance of GMC's mobile earth station application at this time would not prejudice those proceedings<sup>3</sup>, and would be consistent with the Commission's parallel actions in its pending rulemaking and application proceedings concerned with the provision of aeronautical satellite services over the Inmarsat system.

In March of this year, the Commission decided to accept for filing and place on public notice the application of the Communications Satellite Corporation (Comsat), as well as other qualified entities, to provide aeronautical satellite service over the Inmarsat

<sup>&</sup>lt;sup>1</sup> Application File No. 1299-DSS-ML-89. See *Public Notice* DS-856 released May 17, 1989 at page 2.

<sup>&</sup>lt;sup>2</sup> One of these proceedings involves GMC's June 16, 1988 *Petition for Rulemaking* in RM-6459 to allocate these frequencies for a digital land mobile satellite service. Another involves the implementation of the Final Acts of the 1987 Mobile WARC. The Commission recently reviewed the status of its current allocations and the WARC results, and concluded that matters concerning the L-band portion of the spectrum would be addressed in a future proceeding. See *Notice of Proposed Rulemaking* in General Docket No. 89-103, FCC 89-125 (released May 5, 1989).

<sup>&</sup>lt;sup>3</sup> To the extent necessary, GMC will amend its application to bring its proposed mobile earth station facilities into conformance with any rules finally adopted by the Commission with respect to the operation of domestic mobile satellites in these bands.

system.<sup>1</sup> Although the Commission stated that such applications will not be granted "until it determined who is legally authorized to provide Inmarsat aeronautical services under the International Maritime Satellite Telecommunications Act, and under what circumstances such services may be provided," it concluded that:

[A]ccepting [Comsat's] applications for filing at this time is without prejudice to the outcome of pending policy issues in this proceeding. A waiver of the freeze will permit Comsat's applications to be accepted for filing and placed on public notice and give an opportunity for petitions to deny and competing applications to be filed by others who believe they may ultimately be authorized to provide INMARSAT aeronautical services.<sup>2</sup>

Similarly, the acceptance of GMC's application at this time will not harm any interested party. Interested parties will still be given the opportunity to file petitions to deny GMC's application and/or to file competing applications. Moreover, the Commission retains full flexibility to resolve any issues raised by GMC's application either in the context of a separate rulemaking proceeding or in the course of processing these applications.<sup>3</sup>

Acceptance of GMC's application now will encourage the prompt development of domestic mobile satellite services. GMC has been actively working with potential customers and suppliers to develop interim digital land mobile satellite services. GMC has found widespread interest in these services and believes that early introduction of its digital mobile satellite services will benefit the public. Acceptance of GMC's application, as well as applications of other potential end service providers, will also encourage the development of

<sup>&</sup>lt;sup>1</sup> Memorandum Opinion and Order, CC Docket No. 87-75, FCC 89-84 (released March 14, 1989)(Comsat Waiver Order). The Commission had earlier imposed a freeze on the filing of such applications in its Notice of Proposed Rulemaking in CC Docket No. 87-75, FCC 87-106 (released March 30, 1987).

<sup>&</sup>lt;sup>2</sup> Comsat Waiver Order at paragraph 7.

<sup>&</sup>lt;sup>3</sup> It is well established that the choice made between proceeding by general rule or by individual, ad hoc adjudication is one that lies primarily in the informed discretion of the administrative agency. *Securities and Exchange Commission v. Chenery Corporation*, 332 U.S. 194, 203 (1947), reh'g denied, 332 U.S. 783 (1947).

concrete interim service concepts that will assist the Commission in addressing the various policy issues that will be raised in this regard.

More importantly, accepting GMC's application at this time will reduce or eliminate unnecessary administrative delays in the future, and allow GMC and other mobile satellite service providers to bring service to the public more promptly if the Commission authorizes the provision of domestic mobile satellite services in the 1530-1544 and 1626.5-1645.5 MHz bands.

For these reasons, GMC requests the Comission to accept and process the application it is filing today for a blanket license for 10,000 mobile earth stations.

Respectfully submitted,

GEOSTAR MESSAGING CORPORATION

T. Stephen Cheston, President

1001 22nd Street, N.W. - Suite 550

Washington, D.C. 20037

(202)-887-0872

May 30, 1989

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## Before the FEDERAL COMMUNICATIONS COMMISSION

Washington, D.C. 20554

In the Matter of the Application of	)
GEOSTAR MESSAGING CORPORATION	) ) File No.
For a Blanket Radio Station License to Operate Mobile Earth Stations in the 1530-1544 MHz and 1626.5-1645.5 MHz Bands	) ) )

#### **APPLICATION**

Geostar Messaging Corporation (GMC)<sup>1</sup> requests a blanket radio station license<sup>2</sup> to operate up to 10,000 mobile earth stations in the bands 1530-1544 MHz (downlink) and 1626.5-1645.5 MHz (uplink).<sup>3</sup> These facilities will be used to provide digital mobile satellite services within the United States, including its coastal waters and inland waterways. Initially, these stations will operate with interim space segment capacity provided over the Inmarsat system.<sup>4</sup> The operation of these stations will later be switched over to a domestic mobile satellite system as soon as it becomes available in these bands.<sup>5</sup>

GMC is a wholly owned subsidiary of Geostar Corporation. Another Geostar subsidiary, Geostar Positioning Corporation, has been authorized by the Commission to construct and operate a satellite system in the radiodetermination satellite service (RDSS), and is currently providing an interim RDSS service.

<sup>&</sup>lt;sup>2</sup> A construction permit is not required for mobile stations pursuant to §319(d) of the Communications Act.

<sup>&</sup>lt;sup>3</sup> In its MSS Licensing Order, FCC 86-552 (released January 26, 1987) at paragraph 31, the Commission decided that mobile earth stations would be licensed on a blanket basis to vendors providing end-services to users. Other analogous examples of blanket licensing for mobile earth stations include Geostar Corporation, DA 87-145 (released February 20, 1987), and Qualcomm, Inc., FCC 89-24 (released February 14, 1989).

<sup>&</sup>lt;sup>4</sup> The Commission has already accepted such applications for filing. See, e.g., the applications of Communications Satellite Corporation-World Systems Division, File No. CSS-89-002-P/L, and Comsat General Corporation, File Nos. 1299-DSS-ML-89 *et al.* 

An application for such a domestic mobile satellite system has already been filed with the Commission. See GMC's Application for a Digital Land Mobile Satellite System filed on June 18, 1988, at Tab 19. GMC recognizes that the Commission has only recently issued a *Notice of Proposed Rulemaking* to implement the Final Acts of the 1987 Mobile WARC, but has deferred action to a future proceeding with respect to changes in the allocation of these bands to the mobile satellite services. Similarly, action is still pending with respect to GMC's *Petition for Rulemaking* in RM-6459. In any event, GMC has also filed today a *Motion to Accept Application* pending the completion of such rulemaking proceedings. Thus, to the extent necessary, GMC

GMC submits the following information in support of this application1:

(A) The name and address of the applicant is:

Geostar Messaging Corporation 1001 22nd Street, N.W., Suite 550 Washington, D.C. 20037 (202)-887-0872

(B) Correspondence concerning this application should be addressed to:

Geostar Messaging Corporation 1001 22nd Street, N.W. Suite 550 Washington, D.C. 20037

Attention: Ronald J. Lepkowski (202) 778-6008

with a copy to applicant's counsel:

ST.

James G. Ennis, Esq. Fletcher, Heald and Hildreth 1225 Connecticut Avenue, N.W. Suite 400 Washington, D.C. 20036-2679 (202) 828-5700

(C) GMC requests a blanket license for 10,000 mobile earth stations to be operated within the continental United States, Alaska, Hawaii, Puerto Rico/Virgin Islands and adjacent coastal waters. The mobile earth stations would be operated primarily on land-based vehicles. However, GMC will also operate some of these facilities in the maritime mobile satellite service, e.g. to serve small boats or other vessels operating on inland and coastal waters.

requests a temporary waiver of the Table of Frequency Allocations in order for the Commission to accept and process this application pending the outcome of such rulemaking proceedings. Moreover, since it is GMC's intention to provide commercial service over these facilities, it does not appear appropriate to file this application under the current Part 5 experimental license procedures.

<sup>&</sup>lt;sup>1</sup> GMC has used the Commission's June 18, 1987 *Public Notice*, DA 87-732, and April 19, 1989 *Public Notice*, DA 89-417, as guidelines for this filing.

(D) The technical parameters of the proposed mobile earth stations are presented in Exhibit 1 to the attached FCC Form 403. These stations are intended to operate within the 1530-1544 MHz (space-to-earth) and 1626.5-1645.5 MHz (earth-to-space) bands. These facilities will be capable of operating with both space segment capacity leased from other entities, such as the Marisat-Atlantic satellite to be relocated to 106.5° West Longitude, as well as with domestic mobile satellite facilities, such as the DLMSS-Prime satellite proposed by GMC in its June 18, 1988 satellite system application.

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These mobile earth stations will be designed with the flexibility to provide digitized voice, data and facsimile communications services. These facilities support digital transmissions at data rates between 1200 and 4800 bps. Offset QPSK has been selected as the type of modulation for spectrum use efficiency. The particular data rate and forward error correction characteristics will be chosen according to the type of service desired and to optimize system capacity for other users.<sup>2</sup>

Since initial operations will be with Inmarsat satellites employing global beam satellites, these terminals will utilize medium gain (nominal 12 dBi gain) mobile antennas<sup>3</sup>. Use of such high gain antennas with the Marisat satellite is necessary because of the low EIRP and G/T of this satellite. By using such higher gain antennas with this satellite, GMC believes it will be possible for the Marisat-Atlantic satellite to support several channels at the data rates needed to provide usable voice, data and facsimile services to mobile users within the United States. By careful choice of mobile earth station hardware and transmission characteristics

<sup>&</sup>lt;sup>1</sup> For operations with interim Inmarsat facilities, the operating frequency range will be more limited, e.g. the Marisat-Atlantic satellite operates only in the 1537-1541 and 1638.5-1642.5 MHz bands.

<sup>&</sup>lt;sup>2</sup> GMC currently expects that these mobile terminals will utilize a signalling and protocol scheme similar to the Standard-M system being developed by Inmarsat. GMC will cooperate fully with other users of interim Inmarsat space segment capacity to insure compatible operations.

<sup>&</sup>lt;sup>3</sup> The use of such high gain antennas in newly installed mobile terminals is planned only until domestic space segment capacity becomes available that can support the use of omnidirectional antennas. The initial mobile units using higher gain antennas will be equipped with power control switching capabilities to reduce EIRP once more sensitive domestic mobile satellites become available.

and Marisat transponder loading plans, the Commission should be able to allow competing end-service providers to utilize interim Inmarsat space segment capacity for mobile satellite services until higher capacity domestic mobile satellites can be brought into service in these bands.<sup>1</sup>

(E) The qualifications of the applicant are a matter of record before the Commission. Geostar Messaging Corporation filed its most recent *Common Carrier and Satellite Radio Licensee Qualifications Report* (FCC Form 430) with the Commission on October 26, 1988, and that filing is incorporated into this application by reference.

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- (F) The proposed facilities are categorically excluded from environmental processing under §1.1306 of the Commission's rules and regulations because these stations:
  - (1) do not involve a site location specified under §1.1307(a)(1)-(5);
  - (2) do not involve high intensity lighting under §1.1307(a)(6); and
  - (3) do not result in human exposure to radio frequency radiation in excess of the applicable safety standards specified in §1.1307(b).

With respect to certain other specific information required by the Commission's application guidelines, it should be noted that FAA notification is not required pursuant to Part 17 of the FCC rules because the antenna will not extend more than 20 feet above an existing structure. Site availability is not applicable to mobile units since they will be installed as requested by customers in their vehicles. No frequency coordination is required for these mobile earth station facilities.

<sup>&</sup>lt;sup>1</sup> GMC is currently investigating potential sites for its hub earth station facilities and will file an amendment to this blanket application once such a site has been selected and frequency coordination has been completed in accordance with the procedures specified in Parts 21 and 25 of the Commission's rules and regulations.

(G) The public interest will be served by a grant of this application because the proposed facilities will allow the early introduction of new mobile satellite services and will foster the Commission's objective of achieving a competitive supply of satellite services.

GMC has been actively working with potential customers and suppliers to develop interim digital land mobile satellite services. GMC has found widespread interest in such services and has developed an interim service concept to bring these services to the public.

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GMC has proposed to utilize specific bands that have been allocated internationally, but not yet domestically, for digital land mobile satellite services. This proposal will result in the provision of high quality, yet economic services that are particularly well-suited to mobile voice, data and facsimile applications that require full two-way satellite channels. Interim space segment capacity in these bands has been proposed through use of the Inmarsat space segment, and proposals are pending before the Commission in this regard. To the extent that the Commission authorizes the use of Inmarsat satellites for interim domestic mobile satellite services, GMC will utilize such space segment capacity to develop its proposed digital land mobile satellite services.

Thus, GMC's mobile stations have been designed to be compatible with a wide range of potential space segment facilities in these bands. Grant of this application will allow the Commission to implement its policies favoring a competitive supply of retail mobile satellite services without prejudicing later decisions on the licensing of domestic space segment facilities such as those proposed by GMC in these bands. Grant of this application will allow GMC to proceed promptly and efficiently with the development of innovative digital mobile satellite services in the 1530-1544 and 1626.5-1645.5 MHz bands to serve the American public.

The applicant waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United State because of the previous use of the same, whether by license or otherwise, and requests an authorization in accordance with this application. The undersigned, individually and for the applicant, certifies that the statements make in this application are true, complete and accurate to the best of his knowledge and belief, and are made in good faith.

Respectfully submitted,

GEOSTAR MESSAGING CORPORATION

T. Stephen Cheston

President

Attachments:

A. FCC Form 403

B. Technical Certificate

May 30, 1989

#### ATTACHMENT A

		APPLICANT SHOULD N	OT USE THI	S BLOCK
		File Number	Call Sign	
Federal Communications Commission Washington, D. C. 20554				
APPLICATION FOR RADIO STATION LICE OR	NSE			
MODIFICATION THEREOF UNDER PARTS 23 OR 25			:	
	INSTRUC	TIONS		
A. Submit TWO COPIES of this application direct to the fines on the following services (check appropriate box b	Federal Com elow).	munications Commission, Washingto	n, D. C. 20554,	for radio licen-
FCC Rules Part 23 - International Fixed Public Radiocommunication Services	⊠F	CC Rules Part 25 - Satellite	Communi catio	ons
B. It is recommended that, before submitting application, applied for. Copies of the rules may be purchased from D. C. 20402.	applicant re m the Superi	efer to the appropriate rule part which ntendent of Documents, Government	h govems the cl Printing Office,	ass of station Washington,
C. Use additional sheets only where necessary. Such she	eets must be	e marked as exhibits and referred to	in the application	on.
		ALS UNDER PRIVACY ACT	OF 1974	
The information requested by this form will be us eligibility for issuing authorizations in the use of f responsibilities rendered the Commission by the Coby this form will be available to the public. Responsed authorization.	requency s ommunica	spectrum and to effect the provi tions Act of 1934, as amended.	risions of regularity	latory requested
l(a) Name of Applicant:		(c) Purpose of application:		
Geostar Messaging Corporati	.on	Hicense to cover construction	icense	ඎ
		Modification of License		
(b) Mailing Address (number, street, city, sta	te,	Present File No.		
Zip Code):		(d) If for modification of li	cense indica	te proposed
1001 22nd St., N.W., Suit Washington, D.C. 20037	e 550	change:		
		Change in frequencies		
2(a) Class of Station and Call Sign:	- \	Change in authorized power		
Mobile Earth Station (New		Change(s) of control point(s		
(b) Nature of Service Mobile Satellite		Change in points of commun		
Service including land and mar mobile satellite service	citime	Change in other particulars		
3(a) List the outstanding construction permit(S	), if any,	which this application covers	::	
File Number Date Call Sign	<u>Ma</u>	nufacturer of Transmitter	Type No.	<u>Serial No.</u>
Construction Permit Not F	Require	ed.		

(b) If licensed transmitters are being deleted or replaced, show the following with respect to such

Manufactu <b>rer</b>		Type No.		Serial N	Vo.
	····				
	No	ot Applica	ble		
	•••••••••••				
(c) When was the constru	iction specified	in $3(a)$ com	oleted?		
(d) Is the station now read					
					YES NO
(e) Have all the terms of t	the constructio	n permit(s) lis	sted in $3(a)$ be	en met?	YES NO
(f) Are all the statements	made in the a	ipplications for	r the construct	tion permits or	
the modifications there cation?	eof mentioned	(a) still tr	ue as of the da · · · · ·	te of this appli-	YES N
(g) If the answer to eithe must be shown in app					
and submitted as a par	t of this form.		or nated separa	tiely in exhibits	
Indicate method of sub			_		
Numbers of paragrap Identification of exhib					
		***************			
Specify in the table all par	ticulars of ope	eration exactly	as they are de	sired in the lice	
tion thereof.					ense or modific
					ense or modific
(1)	(2)	(3)	(4) Modulating	(5) Transmission	(6)
FREQUENCIES	(2) POWER	(3) Emission	Modulating Frequency	(5) TRANSMISSION SPEED (Bauds)	
FREQUENCIES	POWER		Frequency —(Cycles)—	TRANSMISSION SPEED	(6) POINTS OF COMMUNICATION
FREQUENCIES AND ANTENNA POLARIZATION  (MHz)	POWER (Watts).	Emission (maximum.).	bps	TRANSMISSION SPEED TBauds) — DDS	Points OF COMMUNICATION All mobi
FREQUENCIES AND ANTENNA POLARIZATION	POWER	Emission	Frequency —(Cycles)—	TRANSMISSION SPEED (Bauds)—	Communication  All mobi
FREQUENCIES AND ANTENNA POLARIZATION (MHz)  1626.5-1645.5 RHc  1530-1544 RHc	POWER (Watts).	Emission (maximum.).	bps 4800	TRANSMISSION SPEED TBauds) — DDS	All mobi satellit service satellit
FREQUENCIES AND ANTENNA POLARIZATION  (MHz)  1626.5-1645.5 RHc	(watts)	Emission (maximum). 9K60 GID	bps 4800	Transmission Speed (Bauds) —  bps  9600	All mobi satellit service satellit within t
FREQUENCIES AND ANTENNA POLARIZATION (MHz)  1626.5-1645.5 RHc  1530-1544 RHc	(watts)	Emission (maximum). 9K60 GID	bps 4800	Transmission Speed (Bauds) —  bps  9600	All mobi satellit service satellit

#### COLUMN NOTES:

- (1) List all frequencies, indicating whether kilohertz or megahertz, and polarization of radiated signal.
- (2) Specify whether watts or kilowatts. In the Experimental Radio Services specify effective radiated power and in case of pulse emission peak power.
- (3) List all types of emission desired for each frequency. Describe special emission in space below. Give maximum modulating frequency for each type of emission involved.
- (4) Give maximum transmission speed employed in normal operation opposite each type of emission involved. To convert transmission
- (5) speed of Continental Morse to bauds, multiply the number of words per minute by 0.8.
- (6) Show below the operating agency at each point of communication.

5.	the i	is application is for authority to operate with an operator on duty at control point(s) other than transmitter location -
	(a)	What will be the location of the control point(s)?
		State District of Columbia County
		City or Town Washington, DC Street and No. 1001 22nd St., NW
. J	(b)	What will be the airline distance between transmitter location and the control point(s)? $\frac{n/a}{}$
	(c)	By what means will the station be monitored while in operation?
		Spectrum Anaylzers
	(d)	Can the transmitter be shut down by the licensed operator at the control point so as to prevent operation from other point(s)?
	(e)	How will unauthorized persons be prevented from having access to the transmitter?
		Transmitters will be secured within user vehicles.
о.		posed location of transmitter:  If portable: mobile: (check one, if applicable) give geographical area of proposed operation:
		Continental United States, Alaska, Hawaii, Puerto Rico/
		Virgin Islands and adjacent coastal waters.
	(b)	If permanently located at a fixed location, give:
		State County
		City or town Street and number
		N. Latitude: Degrees, minutes, seconds
		W. Longitude: Degrees, minutes, seconds, seconds
7.	No	te any alteration in transmitter(s) or antenna systems not previously reported to the Commission.
		Not applicable
8.	(a)	Have there been any changes in the data furnished in the application for construction permit covering ownership, citizenship, station control, business connections, and monopolistic practices? .not applicable YES NO
	(b)	Have such changes been reported to the Commission? If not, such data must be submitted herewith not applicable YES NO

The statement of rates required herein does not constitute a filing of schedules of charges required by Section 203 of the Communications Act of 1934, as amended, prior to commencing service.  (c) State basis of division of charges with other stations		
(b) Will any charge be made for handling public correspondence?	9. (a)	Is station to be open to public correspondence?
(b) Will any charge be made for handling public correspondence?		If so, state hours during which station will be open for such service
If so, state schedules of charges		Continuously, 24 hours a day
The statement of rates required herein does not constitute a filing of schedules of charges required by Section 203 of the Communications Act of 1934, as amended, prior to commencing service.  (c) State basis of division of charges with other stations	(b)	
10. If this application is for modification of license, state why the proposed change(s) is (are) deemed necessary and the purpose(s) it will serve.  Grant. of. this. application.will.permit the learly introduction of digital mobile satellite services in a cost-effective and efficien manner.  ** Gateway earth station and end-service providers are foreborne from Common Carrier regulation. See Second Report and Order, Daragraphs-1354_36FCC 86-552 (released January 26, 1987) at THE APPLICANT hereby waives any claim to the use of any particular frequency or of the electromagnetic spectrum as against the regulatory power of the United States because of the previous use of the same, whether by license or otherwise, and requests a station license in accordance with this application.  All the attached exhibits are a material part hereof and are incorporated herein as if set out in full in the application. All the answers on this application are a material part of the application.  CERTIFICATION  I certify that the statements in this application are true, complete, and correct to the best of my knowledge and belief, and are made in good faith.  Signed and dated this 30thay of May , 1989.  GEOSTAR MESSAGING CORPORATION  Name of Applicant (must correspond with item 1a)  T. Stephen Cheston, Presiden  Signonure (designate by checkmark below appropriate classification)  WILLFUL FALSE STATEMENTS MADE ON THIS FORM ARE PUNISHABLE BY FINE AND MARKER OF APPLICANT CORPORATION OR OFFICER AND MARKER OF APPLICANT CORPORATI		The statement of rates required herein does not constitute a filing of schedules of charges required by Section 203 of the Communications Act of 1934, as amended, prior to commencing
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Signature (designate by checkmark below appropriate classification)    INDIVIDUAL APPLICANT		
INDIVIDUAL APPLICANT   WILLFUL FALSE STATEMENTS MADE ON	-	T. Stephen Cheston, President
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SECTION 1001.	I,M	APRISONMENT. U. S. CODE, TITLE 18  APRISONMENT U. S. CODE, TITLE 18  MEMBER OF APPLICANT ASSOCIATION

#### **Technical Information**

(1) Applicant:

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Geostar Messaging Corporation

1001 22nd Street, N.W., Suite 550

Washington, D.C. 20037

(202) 887-0872

(2) Point of Contact

Ronald J. Lepkowski

Geostar Messaging Corporation 1001 22nd Street, N.W., Suite 550

Washington, D.C. 20037

(202) 778-6008

(3) Number of Stations:

10,000

(4) Type of Service:

(a) Class of Station:

Mobile Earth Station

(b) Regulatory Class:

Common Carrier (foreborne)

(c) Type of Facility:

Transmit/Receive

(5) Frequency Bands: 1.5 GHz (receive)/1.6 GHz (transmit)

- (6) Points of Communication: All satellites operating in the 1.5/1.6 GHz mobile satellite service bands between 15° West Longitude and 183.5° West Longitude (176.5° East Longitude), including:
  - (a) Marisat AOR satellite at 106.5 ° West Longitude
  - (b) other INMARSAT Atlantic and Pacific Ocean Region satellites that might be available on an interim basis for domestic mobile satellite services
  - (c) GMC's DLMSS-Prime satellite (see DLMSS System Application filed June 16, 1988, Tab 19).
- (7) Operating Orbital Arc: 15° 183.5° West Longitude
- (8) Transmitting Equipment
  - (a) Number of HPA's: One
  - (b) Manufacturer and Model Number: Geostar Messaging Corproation, Model GMC 2000
  - (c) Maximum power output: 20 watts

#### (9) Antenna Facilities

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(a) Mobile earth station antennas are not required to conform to Section 25.209

(b) Antenna size: (not applicable)

(c) Maximum antenna height: 1 foot above supportive structure

(d) Type of feed not applicable - reflector antenna not used.

(e) Manufacturer and Model Number: GMC 2000 (transmitter and antenna are incorporated into a single user terminal)

(f) Antenna Gain:

- (1) 12 dBi at 1635 MHz (Transmit)
- (2) 12 dBi at 1537 MHz (Receive)

#### (10) Remote Control Operations

(a) Location:

Geostar Messaging Corporation

1001 22nd Street, N.W. Washington, D.C. 20037

(202) 887-0872

- (b) Transmissions are made only upon specific assignment by the central control station, except for random access service request channels.
- (11) Receiving System Noise Temperature: 220 K
- (12) Specifics of Operation

(a) Frequencies:

1530-1544 MHz (Receive)

1626.5-1645.5 MHz (Transmit)

(b) Polarization:

circular

(c) Emission Designators:

2K40G1D

4K80G1D

9K60G1D

(d) Maximum EIRP:

25 dBW

(e) Maximum EIRP density:

25 dBW/4 KHz

- (f) Description: PSK digital carrier
  - (i) Data Transmission Rate: 1200, 2400 and 4800 bps

(ii) Forward Error Encoding: up to rate -1/2

(iii) R.F. Carrier Transmission Rate: up to 9600 bps

(iv) Modulation Type: OQPSK

(v) Maximum Downlink EIRP Density: 17.3 dBW/4 kHz

#### TECHNICAL CERTIFICATE

I hereby certify that I am the technically qualified person responsible for the preparation of this application; that I am familiar with Part 25 of the Commission's Rules and Regulations; that I have either prepared or reviewed the technical information contained in this application; and that it is complete and accurate to the best of my knowledge and belief.

Ronald J. Lepkowski

Vice President, System Implementation

Date:

: May 30, 1989