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Domestic Facilities Division
Satellite Radio Branch
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

OFFICE OF CHIEF
DOMESTIC FACILITIES DIVISION
COMMON CARRIER BUREAU

In the Matter of

**GEOSTAR POSITIONING
CORPORATION**

For Modification of the
Geostar RDSS Space Station
Authorizations

-) File Nos. 43-DSS-MP/ML-90,
-) 44-DSS-MP/ML-90, 45-DSS-
-) MP/ML-90, 46-DSS-P/LA-90,
-) 48-DSS-P/LA-90, 51-DSS-
-) EXT-90, 52-DSS-EXT-90, 53-
-) DSS-EXT-90, CSS-90-012 (ML),
-) CSS-90-013 (ML), CSS-90-014
-) (ML), CSS-90-015 (ML)
-)
-)
-)
-)

PETITION TO DENY
OF
QUALCOMM, INC.

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October 10, 1990

Its Attorneys

SUMMARY

In this Petition, QUALCOMM, Inc., requests that the Commission deny applications filed by the Geostar Positioning Corporation to modify existing authorizations to construct and launch a Radiodetermination Satellite System. First, relying on Geostar's reports to the Securities and Exchange Commission, as well as Geostar's Auditor's Opinion, QUALCOMM shows that Geostar is not financially qualified to construct, launch and operate a dedicated RDSS system. In those SEC reports, Geostar admits that additional financing is required to continue any operations during the fourth quarter of 1990, much less to construct the RDSS system. No evidence of such financing has been provided. Second, QUALCOMM points out that Geostar has not shown good cause for extension of construction and launch milestones established by the Commission.

QUALCOMM also argues that the Commission should reconsider its allocation of spectrum for RDSS, since the position location service has not proven to be commercially viable and the 33 MHz could be used more efficiently elsewhere. Finally, the Commission must reconsider its authorizations for the Geostar interim system since that system is predicated on a dedicated RDSS system which may never be constructed, launched or operated.

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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of)	File Nos. 43-DSS-MP/ML-90,
	)	44-DSS-MP/ML-90, 45-DSS-
	)	MP/ML-90, 46-DSS-P/LA-90,
	)	48-DSS-P/LA-90, 51-DSS-
GEOSTAR POSITIONING	)	EXT-90, 52-DSS-EXT-90, 53-
CORPORATION	)	DSS-EXT-90, CSS-90-012 (ML),
	)	CSS-90-013 (ML), CSS-90-014
	)	(ML), CSS-90-015 (ML)
)	
For Modification of the)	
Geostar RDSS Space Station)	
Authorizations)	

PETITION TO DENY

QUALCOMM, Inc., by its attorneys, hereby petitions the Federal Communications Commission ("FCC" or "Commission") to deny the above-captioned applications. These applications request modification of the authorizations granted by the Commission to the Geostar Corporation ("Geostar") to construct and launch a dedicated Radiodetermination Satellite Service ("RDSS") system. Specifically, they request that the Commission further extend construction and launch milestones for the dedicated system to accommodate "technical innovations". In addition, these applications request Commission authorization to construct, launch and operate two additional RDSS single beam satellites.

I. INTRODUCTION

QUALCOMM, Inc. ("QUALCOMM") is a manufacturer of telecommunications equipment and Commission licensee for operation of the OmniTRACS® system. OmniTRACS was the nation's first operational two-way mobile satellite system.

QUALCOMM is a competitor of Geostar in the provision of satellite services to mobile users. In addition, QUALCOMM has significant interests in the development of other radio communication services, including cellular radio, personal communications services ("PCS") and other advanced wireless technologies. For example, QUALCOMM has recently announced agreements with other manufacturers and service providers to develop and implement code division multiple access ("CDMA") technology for use in the mobile environment.

QUALCOMM's interest in this proceeding stems both from its competitive concerns and from its recognition that frequencies available for the burgeoning mobile radio field are limited and should not be wasted on services that are not commercially viable.

II. BACKGROUND

A. The Establishment of a Radiodetermination Satellite Service

In 1985 the FCC amended its Rules to allocate 33 MHz in the 1610-1626.5 MHz and 2483.5-2500 MHz bands for use by a

new Radiodetermination Satellite Service.^{1/} It was intended that RDSS would provide certain capabilities not then available by means of any other radio service, most importantly, position location information. Subsequently, the Commission adopted rules to govern the provision of RDSS service to the public.^{2/} That RDSS Licensing Order established financial qualification requirements and construction and launch milestones.

Specifically, the Order required all RDSS applicants to demonstrate their financial preparedness to assume the costs and liabilities of constructing and launching the system and operating it for one year.^{3/} The Commission cautioned, however, that it would not "permit licensees an open-ended opportunity" to finance RDSS systems.^{4/} To ensure "that RDSS systems are being implemented in a timely manner",^{5/} the

^{1/} Amendment of the Commission's Rules to Allocate Spectrum for, and to Establish Other Rules and Policies Pertaining to, a Radiodetermination Satellite Service, Gen. Docket 84-689, 58 Rad. Reg. 2d (P&F) 1416 (1985) (RDSS Allocation Order).

^{2/} Policies and Procedures for the Licensing of Space and Earth Stations in the Radiodetermination Satellite Service, Gen. Docket No. 84-690, 60 Rad. Reg. 2d (P&F) 298 (1986) (RDSS Licensing Order).

^{3/} Id. at 308.

^{4/} Id.

^{5/} Id. at 309.

Commission established milestones which require licensees to begin construction of their first satellites within one year of grant of the construction permit and to complete construction within four years. "Full systems must be launched and operational within six years of the date of grant."^{6/} Failure to fulfill these conditions will render the authorization null and void.^{7/}

B. The Geostar Dedicated RDSS System

1. Financial Qualifications and Milestones

In 1986 the FCC licensed Geostar to "construct, launch and operate three geostationary satellites to provide radio-determination satellite service (RDSS) and ancillary message services, and to construct and launch a fourth satellite as an in-orbit spare".^{8/} In the Geostar Authorization the Commission found Geostar to be financially qualified pursuant to the standards of the RDSS Licensing Order. The Commission

^{6/} Id.

^{7/} Id.

^{8/} Geostar Corporation, 60 Rad. Reg. 2d (P&F) 1725, 1726 (1986) (Geostar Authorization). Geostar voluntarily relinquished the authorization for its fourth satellite "when it decided not to begin construction of the satellite by the required date." See Letter of James R. Keegan, Chief, Domestic Facilities Division, to Veronica M. Ahern, June 13, 1989.

based its finding on Geostar's business plan which projected revenues of \$1.99 billion over the initial seven-year operating period. "Thus, Geostar has demonstrated its financial preparedness to meet the \$276.99 million of construction, launch and first year operating costs of its system."^{9/}

The Geostar Authorization also specifically applied construction and launch milestones to Geostar's RDSS system. According to those milestone requirements, Geostar was required to begin construction of the first satellite by August 1987, and the remaining satellites by August 1988. Construction of the first satellite was required to be completed by August 1991. The full system was required to be launched and operational by August 1992.^{10/}

2. The First Milestone Extension

On at least one prior occasion, Geostar specifically has sought extension of its milestone requirements for the dedicated RDSS system.^{11/} On that occasion, the Commission found that modifications of the shuttle launch manifest

^{9/} 60 Rad. Reg. 2d (P&F) at 1729.

^{10/} Id. at 1730.

^{11/} See Application File Nos. 1304/1305/1306-DSS-MP/ML-89, May 2, 1989, granted by letter of May 12, 1989. This application did not appear on Public Notice.

required extension of the construction completion dates and permitted Geostar until August 1993 to make operational the full RDSS system. Upon learning of the Commission's action, QUALCOMM sought clarification from the Commission as to whether the action was based solely on launch delays or whether the Commission was aware of revised business plans which indicated a faltering commitment to construction of a dedicated system.^{12/} QUALCOMM's concerns were based upon Geostar's Securities and Exchange Commission filings which did not reflect adequate expenses incurred for construction of the RDSS system. The Commission responded to QUALCOMM's concerns by reviewing its policies for the routine grant of launch extensions. The Commission also stated that "Geostar has fully conformed with all conditions of its licenses . . . to date" and that the Commission had no reason to believe that Geostar is not "vigorously proceeding with implementation of its dedicated system."^{13/}

3. The Caribbean Service Request

Shortly thereafter, in July of 1989, QUALCOMM filed Comments with the Commission in connection with requests for

¹² See Letter of Veronica M. Ahern to James R. Keegan, June 5, 1989.

¹³ See Letter of James R. Keegan to Veronica M. Ahern, June 13, 1989.

modification of Geostar's authorizations to add spotbeams to the RDSS satellites to extend service to Alaska, Canada, Mexico, the Caribbean, and Central and South America.^{14/}

While not opposing the Geostar request, QUALCOMM again brought to the Commission's attention Geostar's financial reports which continued to suggest a wavering commitment to a dedicated system. Indeed, at that time it was clear that Geostar was simply not spending enough money on satellite construction to meet even its extended milestones. However, in its response to QUALCOMM, Geostar stated that it "has met and will meet every milestone which the Commission sets for its dedicated RDSS satellites".^{15/}

C. The Geostar Interim System

In 1986, seeking to allow Geostar opportunity to begin offering service to the public while constructing its dedicated RDSS system, the Commission began a series of actions which allowed Geostar to operate an interim RDSS system.^{16/} Using

^{14/} Application File Nos. 1145/1146/1147-DSS-MP-89, QUALCOMM Comments, July 5, 1989.

^{15/} Application File Nos. 1145/1146/1147-DSS-MP-89, Geostar Reply Comments, July 25, 1989 at 3.

^{16/} See, e.g., In the Matter of GTE SPACENET CORPORATION; Application for Modification of Construction Permit for the Fourth GSTAR Domestic Fixed-Satellite and In the Matter of GEOSTAR CORPORATION; Application for Modification of Construction Permit in the Radiodetermination Satellite Service, 2 FCC Rcd 5312 (1987); In the Matter of the Application of GTE SPACENET CORPORATION; For Modification of Authority to Construct the Fourth Spacenet Domestic Fixed-Satellite, 1 FCC Rcd 1163 (1986).

"payloads" on host satellites provided by GTE Spacenet, the interim system has been capable of offering two-way messaging service and LORAN-C positioning since September 1989.^{17/} The interim system relies on non-conforming use of C-band frequencies and is predicated on implementation of a dedicated system. The then Chief of the Common Carrier Bureau made this clear to Geostar in a July 11, 1989 letter:

The Commission permitted this non-conforming use of the C-band frequencies without conducting a rulemaking to make RDSS an authorized use of the spectrum, in large part, on the basis of Geostar's representation that it is continuing to implement its dedicated system in conformance with the required milestones, and that it intends to use the C-band link only until its dedicated system is operational in 1993.^{18/}

D. Geostar's Financial Reports

1. The 1989 Form 10-K

On April 16, 1990, Geostar filed an SEC Annual Report for the calendar year 1989 (1989 Form 10-K). In that Report

^{17/} The interim system uses terrestrial LORAN-C to generate position location information to be transmitted over satellite links.

^{18/} Letter from Gerald Brock, Chief, Common Carrier Bureau, to Robert D. Briskman, July 11, 1989.

Geostar revealed that, in December 1989, it amended its satellite construction contract to include the construction and delivery of "two single beam satellites to precede the construction and delivery of the three multiple beam satellites originally contracted for."^{19/} Further, Geostar stated that

Subsequent to the signing of this agreement, the Company decided to defer construction of the satellites for at least one year.^{20/}

The Report also stated:

Because of the Company's plans for construction of its satellites and the estimated launch dates for the Company's satellites, the Company is currently negotiating with the FCC to obtain the necessary extensions for the other deadlines.^{21/}

QUALCOMM's review of the Geostar Form 10-K prompted it to bring these matters to the Commission's attention by letter of May 9, 1990. It was evident to QUALCOMM that Geostar had unilaterally decided to, at the very least, "defer"

^{19/} Geostar 1989 Form 10-K at 3. These are presumably the Geostar satellites 1B and 2B for which authority is sought in this proceeding.

^{20/} Id. (Emphasis added).

^{21/} Id. at 15 (Emphasis added). Apparently, these "negotiations" consisted of a February 22, 1990 ex parte meeting with the Commission staff. We draw to the Commission's attention Section 1.1208(a) of its Rules, 47 C.F.R. § 1.1208(a), which prohibits ex parte presentations in restricted proceedings. Pursuant to Section 1.1208(c)(1)(i)(B), upon the filing of this Petition to Deny, the instant proceeding becomes restricted and further ex parte "negotiations" are prohibited.

construction, without seeking extension of its milestones. Underlying this decision, however, was a more fundamental problem. There was substantial doubt about Geostar's ability to continue as a "going concern".^{22/} The 1989 Form 10-K had revealed that Geostar had had recurring losses from operations, a net working capital deficiency of \$7,677,905 and material financial contractual commitments.^{23/} Geostar had stated in the 1989 Form 10-K that it

can meet its financing arrangements through the second quarter of 1990 through current assets, revenues from commercial service and sales of technology, assuming no repayment of existing debt. The Company will require additional financing for its operations subsequent to that date.^{24/}

Geostar responded to QUALCOMM's May 9 letter in two ways. First, it filed a series of applications, including those captioned above, which sought Commission authority to do what it had already decided to do.^{25/} Second, it filed a letter on May 25, 1990 which described the applications and attempted to satisfy the Commission that it had met "all of the

^{22/} Opinion of KPMG Peat Marwick, April 6, 1990, Geostar 1989 Form 10-K at F-1.

^{23/} Geostar 1989 Form 10-K at F-11.

^{24/} Id. (emphasis added).

^{25/} See note 20 supra and accompanying text.

milestones towards implementation of its RDSS system that the Commission has required to date"^{26/} and that it will have "little difficulty in raising the necessary funding to complete its RDSS systems."^{27/} Geostar pointed to "assets of \$78.2 million (compared to \$65.2 million in liabilities)" and its "shareholder's equity of almost \$13 million."^{28/}

2. The June 1990 Form 10-Q

On August 14, 1990 Geostar filed its SEC Quarterly Report for the period ending June 30, 1990. (Geostar Form 10-Q). In that Report, Geostar stated that its "working capital deficit increased to \$23,611,354 at June 30, 1990 from \$7,677,905 at December 31, 1989".^{29/} It reported assets of \$76,894,710 (compared to \$71,751,960 in liabilities) and shareholder's equity of \$5,142,750. Geostar also stated that it had secured \$2,000,000 in debt financing due October 31, 1990 and that it had not made interest payments totalling

^{26/} Letter from Robert D. Briskman to Donna R. Searcy, May 25, 1990 at 1.

^{27/} Id. at 3.

^{28/} Id. The assets Geostar identifies consist primarily of \$61.1 million in the Geostar System. Liquid assets amounted to less than \$6 million. See 1989 Form 10-K, Consolidated Balance Sheets.

^{29/} Geostar Form 10-Q at 9, attached as Exhibit A.

\$720,000 which were due on August 1, 1990, on the principal amount of its convertible subordinated debentures.

Finally, Geostar stated that:

The Company believes that it can meet its minimum operating cash requirements into the fourth quarter of 1990 from existing funds, revenues from commercial operation of the system, and contracts with United States government agencies, assuming no repayment of existing indebtedness payable upon demand or the acceleration of payment of convertible debentures resulting from the occurrence of any event of default pursuant to those debentures, and assuming that the Company can continue to defer amounts due to certain vendors and other creditors. The Company will require additional financing for its operations during the fourth quarter of 1990. The Company is in the process of exploring and evaluating financing and other alternatives which may be available to it. There can be no assurance that the Company will be successful in obtaining financing.^{30/}

E. The Payload Application

The above-captioned applications were filed on May 18, 1990. Also filed on that date, but not a subject of the Commission's September 4 Public Notice, was an application to construct, launch and operate an RDSS transmit/receive payload on an unnamed host satellite. In that application, Geostar stated that with this two-way package and the existing RDSS relays, it:

^{30/} Id. at 10. (Emphasis added).

would be able to provide full RDSS service, including satellite ranging and support of handheld user terminals, by the August 1993 date currently specified by the Commission for full RDSS system implementation.^{31/}

Geostar has not yet identified its host satellite and the application has not yet been accepted for filing.

III. ARGUMENT

A. The Commission Should Deny the Applications Because Geostar is Not Financially Qualified.

In the subject applications, Geostar states that its qualifications are a matter of record before the Commission. QUALCOMM believes that this Petition to Deny presents a substantial and material question of fact as to whether Geostar is financially qualified pursuant to the RDSS Licensing Order.

In that Order, the Commission determined that all applicants must demonstrate that "sufficient funds are or will be available to meet the costs of constructing, launching and operating the system for one year".^{32/} Not only has Geostar failed to meet that test, but also its most recent SEC filings show that there is substantial doubt as to whether it can continue any operations in this, the fourth quarter of

^{31/} Application File No. 47-DSS-D/CA-90, May 18, 1990 at 7.

^{32/} RDSS Licensing Order at 308.

1990.^{33/} By Geostar's own admission, additional financing is required. Yet the instant applications fail to demonstrate that any funds will be forthcoming, much less sufficient funds to meet even the first year costs of only one of its proposed dedicated satellite pairs, \$34,500,000.

In demonstrating its financial qualifications, Geostar cannot simply rely upon the Commission's past findings. It is well settled that

the Commission's assessment of how the public interest will be pursued can change with time and changed circumstances may, in fact, necessitate an altered regulatory response^{34/}

In this case the changed circumstances relate to Geostar's projected revenues and financial condition. There can be no question of changes since the Commission's initial public interest finding in 1986. That finding relied upon Geostar projections of \$1.99 billion in revenues over an initial seven year operating period. In fact, total revenues for the first three years of operation, including software and hardware sales, have amounted to only \$24.8 million, or 1.2% of the amount projected. Of the \$24.8 million in revenues since 1987,

^{33/} See note 30 supra and accompanying text.

^{34/} Ownership and Operation of Domestic Satellite Earth Stations in the Bush Communities in Alaska, 81 FCC 2d 304, 311 (1980). See also Geller v. FCC, 610 F.2d 973 (D.C. Cir. 1979).

over \$15.4 million, or over 62%, is attributable to non-commercial, government contract revenue.^{35/} Furthermore, the circumstances of Geostar's financial condition have changed, have worsened, not only since the Commission's initial finding, but also in the months between the filing of its 1989 Form 10-K and the June 1990 Form 10-Q. In its May 25, 1990 letter Geostar pointed to shareholder equity of almost \$13 million as of December 31, 1989. By the close of the second quarter of 1990, that amount had been reduced to \$5,142,750. In six months, shareholders have lost more than half their equity in the company, at a rate of over \$1 million a month.

The Commission must recognize that Geostar's financial circumstances have changed and require that Geostar demonstrate its present financial qualifications to construct, launch and operate the dedicated RDSS system. If Geostar is unable to make the requisite showings, the Commission must deny the applications.

B. The Commission Should Declare Geostar's Existing Licenses Null and Void

^{35/} See 1989 Form 10-K at F-4. Although the original projections were for operation of the dedicated system, QUALCOMM believes that a comparison to the revenues derived from the interim system is valid.

The RDSS Licensing Order established specific milestones to "ensure that RDSS systems are being implemented in a timely manner".^{36/} Geostar has consistently failed to meet those milestones, but has instead, as in the instant case, sought extensions. Even if we accept that the first extension was prompted by launch delay and not by wavering commitment to a dedicated RDSS system, Geostar has not demonstrated good cause to justify the present extension requests. It is not sufficient to rely upon "technical innovations" provided by the prospect of a dual launch. The satellite industry is very dynamic. There will always be a "technical innovation" around the corner. If the Commission granted milestone extensions based on promised "technical innovations", no satellite would ever be launched.

A more reasonable explanation for Geostar's failure to implement an RDSS system is its inability to secure financing. However, the Commission has specifically determined that "failure to obtain the financing necessary to proceed according to schedule will not be considered to be circumstances beyond the control of the licensee".^{37/} Thus, Geostar asserts that its revised -- and delayed -- implementation plan represents

^{36/} RDSS Licensing Order at 309.

^{37/} RDSS Licensing Order at note 48.

a financially prudent approach to system implementation that better matches in-orbit capacity with actual market development.^{38/}

In other words, demand for RDSS has not met Geostar's expectations, and Geostar cannot afford to build a dedicated system.

Moreover, Geostar has presented the Commission with a fait accompli. According to its 10-K, Geostar has already decided to defer construction of the dedicated system. No amount of hurrying can make dedicated satellites ready in time to meet current milestones. This was true when QUALCOMM first brought this matter to the Commission's attention over 15 months ago. It was obvious at that time that the current milestones would not be met. Geostar's statement then that it would "meet every milestone which the Commission sets for its dedicated RDSS satellites"^{39/} was a piece of linguistic legerdemain. A more meaningful commitment would have been to meet every milestone which the Commission has set. Geostar should not assume the Commission will grant every request Geostar makes.

Nowhere is this disdain for the Commission's processes more apparent than in Geostar's attempt to substitute the

^{38/} See, e.g., Application File No. 46-DSS-P/LA-90 at 8.

^{39/} See note 15 supra and accompanying text.

interim system for the dedicated system for purposes of milestone requirements. By incorporating a third payload on a host satellite, Geostar claims, it can provide "full RDSS service by the August 1993 date currently specified by the Commission for full RDSS system implementation".^{40/}

The Commission must not be misled by this shell game. Construction and launch milestones apply to the dedicated RDSS satellites and cannot be satisfied by enhancing a jerry-built, stop-gap system, licensed on a non-conforming, temporary basis and predicated on its replacement by the dedicated system.

The facts that remain are these: Geostar "decided to defer" construction of its dedicated RDSS system without obtaining extensions of its milestone requirements. It will not meet those milestone requirements. It has not provided good cause for extension of those milestone requirements. Therefore, the Commission should declare Geostar's authorizations null and void, pursuant to the requirements of the RDSS Licensing Order.

C. **The Commission Should Reconsider the RDSS Allocation**

It is apparent that Geostar is not financially capable

^{40/} See note 31 supra and accompanying text.

of constructing, launching and operating its dedicated RDSS system. This may be due, in part, to the fact that the market for position location has not developed as Geostar had predicted. Indeed, a senior official at Geostar has conceded that the company:

maybe got a little too hung up on the technology and didn't focus on the business.^{41/}

The "business" that Geostar has, according to The Washington Post, shifted its focus toward is messaging.

Indeed, The Post's view is confirmed by the Geostar 1989 Form 10-K in which the company describes its targeted markets.^{42/}

It identifies the "management of mobile assets" as its primary market and suggests additional RDSS markets as including:

control of field operations; transaction services; fixed site and mobile remote monitoring and control of equipment; business communication; and government communications, command and control services.^{43/}

The problem for Geostar in shifting its focus toward

⁴¹ Michael J. Breslin, as quoted in The Washington Post, May 21, 1990, attached as Exhibit B.

^{42/} Geostar 1989 Form 10-K at 9-11.

^{43/} Id at 9. This is in contrast to the services contemplated in the Commission's RDSS Allocation Order where "safety of life" was the Commission's first example of planned use of RDSS. See RDSS Allocation Order at Appendix B.

messaging is simple: such a shift is prohibited by the Commission's rules. Radiodetermination is defined as

The determination of the position, velocity and/or other characteristics of an object, or the obtaining of information relating to these parameters, by means of the propagation properties of radiowaves.^{44/}

Stations licensed in the radiodetermination service "may not render other services except as ancillary to the radiodetermination service".^{45/} Simply stated, a shift toward messaging violates the Commission's Rules.

This issue is important not only for Geostar, but also because the Commission has allocated valuable spectrum for a service that is not proving to be commercially viable. Geostar's difficulties in obtaining financing for a dedicated RDSS system are indicative of the marketplace's lack of interest in radiodetermination. Geostar should be commended for its entrepreneurial spirit and commitment. It won a long battle for allocation of spectrum in the U.S. and internationally for a technology and a service that it believed would be commercially viable. But radiodetermination has simply not proven to be as attractive as Geostar, and others, had anticipated. The Commission must now consider whether the

^{44/} 47 C.F.R. § 2.1.

^{45/} 47 C.F.R. § 25.392(d).

33 MHz of spectrum allocated to RDSS might not be better utilized in some other way, for example by allocation to Personal Communications Services or for Low Earth Orbit satellites. A reallocation to more viable services, serving a larger universe of potential users, would enhance the public interest and would recognize the realities of spectrum use, particularly the shift from position location to messaging. Therefore, the Commission should consider whether the RDSS allocation continues to serve the public interest. If the Commission determines that the instant proceeding is not a proper vehicle for a reallocation of spectrum, it should institute a rulemaking for this purpose.

D. **The Commission Should Reconsider its Authorizations for the Interim System.**

If, as QUALCOMM anticipates, the Commission ultimately determines that a dedicated RDSS system is not likely to be implemented, for financial and marketplace reasons, then it must reconsider its decisions regarding the interim system. The Commission has made clear that its authorizations of payloads for non-conforming use were based on the expectation that use of those payloads would be phased out when the

dedicated system was implemented.^{46/} Parties who commented on Geostar's interim system applications did so relying on the temporary nature of that system.^{47/} Commentors, who based their views upon the short-term impact of an interim system, may find a "permanent" interim system highly objectionable. The rights of those parties would be undermined if the Commission permits the continuation of licenses predicated on implementation of the dedicated RDSS system, if that system is not implemented. The D.C. Circuit Court of Appeals has emphasized the Commission's responsibilities in this respect:

Even a statute depending for its validity upon a premise extant at the time of enactment may become invalid if subsequently that predicate disappears. It can hardly be supposed that the vitality of conditions forging the vital link between Commission regulations and the public interest is any less essential to their continuing operation. We hold that the Commission is statutorily bound to determine whether that linkage now exists.^{48/}

If the predicate for the interim system disappears, if the dedicated system is not implemented, then the Commission is "statutorily bound" to reconsider its authorizations for the interim system.

^{46/} See note 18 supra and accompanying text.

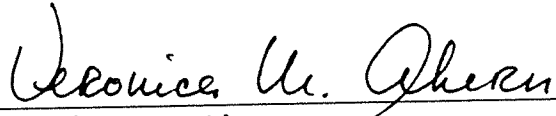
^{47/} See, e.g., Geostar Positioning Corporation, 4 FCC Rcd 4538 (1989).

^{48/} Geller v. FCC, 610 F.2d 973, 980 (D.C. Cir. 1979).

IV. CONCLUSION

In this Petition to Deny, QUALCOMM has relied upon Geostar's own reports to the SEC to demonstrate that it is not financially qualified to construct, launch and operate a dedicated RDSS system. We have also shown that Geostar has not shown good cause for extension of its milestones. For these reasons the instant applications must be denied. QUALCOMM also urges the Commission to reconsider its allocation of spectrum to the Radiodetermination Satellite Service and its authorizations of Geostar's interim system.

Respectfully submitted,
QUALCOMM, Inc.



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October 10, 1990

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EXHIBIT A

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SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the quarterly period ended June 30, 1990

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES
EXCHANGE ACT OF 1934

For the transition period from _____ to _____

Commission File No: 0-16868

GEOSTAR CORPORATION *INC*

(Exact name of registrant as specified in its charter)

Delaware
(State or other jurisdiction of
incorporation or organization)

22-2478651
(I.R.S. Employer Identification No.)

1001 22nd Street, N.W., Washington, D.C. 20037
(Address of principal executive offices) (Zip Code)

Registrant's telephone number, including area code: (202) 887-0870

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.

Yes (X) No ()

Indicate the number of shares outstanding of each of the issuer's classes of Common Stock as of the latest practicable date:

The number of shares outstanding of the issuer's common stock, par value \$.01 per share, on July 31, 1990 was 11,491,168.

*Page 1 of 12 pages
There is no Exhibit Index to this Report*

GEOSTAR CORPORATION AND SUBSIDIARIES
June 30, 1990 QUARTERLY REPORT ON FORM 10-Q

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PART I--FINANCIAL INFORMATION

GEOSTAR CORPORATION AND SUBSIDIARIES
Consolidated Condensed Balance Sheets

	June 30, 1990 (unaudited)	December 31, 1989
ASSETS		
Current assets:		
Cash and cash equivalents	\$ 938,585	4,965,620
Accounts receivable, net	3,704,987	5,102,969
Other current assets	<u>1,232,742</u>	<u>1,041,055</u>
Total current assets	5,876,314	11,109,644
Geostar System, construction in progress and equipment, net of accumulated depreciation and amortization	61,988,628	61,188,789
Investments	4,256,231	1,176,271
Patents and licenses, net of accumulated amortization	3,730,859	3,478,046
Deposits and other assets	533,592	701,260
Debt issuance costs, net of accumulated amortization	509,086	572,698
	<u>\$ 76,894,710</u>	<u>78,226,708</u>
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current liabilities:		
Accounts payable and accrued expenses	\$ 6,974,172	4,688,878
Current portion of notes payable - other	14,064,329	10,667,323
Current installments of obligations under capital leases	696,006	668,817
Current portion of convertible subordinated debentures	2,820,000	-
Current portion of space segment obligation	2,283,556	1,472,557
Accrued interest payable	1,257,476	790,187
Deferred revenue	<u>1,392,129</u>	<u>499,787</u>
Total current liabilities	29,487,668	18,787,549
Notes payable-other	2,342,689	3,912,546
Convertible subordinated debentures	11,600,000	14,420,000
Space segment obligation	24,210,704	25,572,863
Obligations under capital leases	1,561,917	1,902,499
Deferred revenue	2,548,982	676,164
Total liabilities	<u>71,751,960</u>	<u>65,271,621</u>
Shareholders' equity:		
Preferred stock, \$.25 par value; 10,000,000 shares authorized	-	-
Common stock, \$.01 par value, one vote per share; 25,000,000 shares authorized; 11,491,168 shares outstanding in 1990 and 11,490,068 in 1989	114,912	114,901
Additional paid-in capital	67,639,593	67,683,455
Accumulated deficit	<u>(62,611,755)</u>	<u>(54,843,269)</u>
Total shareholders' equity	5,142,750	12,955,087
	<u>\$ 76,894,710</u>	<u>78,226,708</u>

See accompanying notes to consolidated condensed financial statements.

GEOSTAR CORPORATION AND SUBSIDIARIES

Consolidated Condensed Statements of Operations (unaudited)

	Three Months Ended June 30,		Six Months Ended June 30,	
	1990	1989	1990	1989
Revenues	\$ 2,512,217	3,453,597	6,615,638	6,448,136
Expenses:				
Direct contract, hardware and software costs	1,607,524	1,406,810	3,617,606	2,501,615
Space and ground segment operating expenses	1,300,724	550,463	2,629,980	987,351
Selling, general and administrative expenses	1,464,246	1,772,075	3,499,486	3,199,830
Depreciation and amortization	337,640	481,902	749,127	792,910
Research and development costs	158,675	187,973	390,980	370,845
Total operating expenses	<u>4,868,809</u>	<u>4,399,223</u>	<u>10,887,179</u>	<u>7,852,551</u>
Loss from operations	2,356,592	945,626	4,271,541	1,404,415
Other expense (income):				
Interest expense and related borrowing costs, net of capitalized interest	1,574,808	876,908	3,137,012	1,855,753
Other nonoperating expense	143,368	106,500	619,813	106,500
Interest and other income	(155,782)	(329,428)	(259,880)	(664,534)
Net Loss	\$ <u>3,918,986</u>	<u>1,599,606</u>	<u>7,768,486</u>	<u>2,702,134</u>
Loss per common share	0.34	0.14	0.68	0.24
Weighted average number of shares outstanding	<u>11,490,902</u>	<u>11,321,278</u>	<u>11,490,485</u>	<u>11,311,520</u>

See accompanying notes to consolidated condensed financial statements.

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GEOSTAR CORPORATION AND SUBSIDIARIES
Consolidated Condensed Statements of Cash Flow (unaudited)

	Six Months Ended June 30,	
	1990	1989
Cash flows from operating activities:		
Net loss	\$ (7,768,486)	(2,702,134)
Adjustments to reconcile net income to net cash provided (used) by operating activities:		
Depreciation and amortization	749,127	792,910
Amortization of debt issuance costs and other assets	331,280	442,774
Provision for losses on accounts receivable	350,000	26,081
Noncash nonoperating losses	580,069	-
Accrued space segment expenses	2,078,616	-
Accrued interest on the space segment obligation	1,398,840	1,106,396
Changes in operating assets and liabilities :		
Decrease (increase) in accounts receivable	1,036,098	(352,495)
(Increase) decrease in other current assets	(304,160)	131,343
(Decrease) increase in accounts payable and accrued expenses	(200,529)	154,703
Increase (decrease) in accrued interest payable	467,289	(22,919)
Increase in deferred revenue	2,765,160	386,434
Net cash provided (used) by operating activities	<u>1,483,304</u>	<u>(36,907)</u>
Cash flows from investing activities:		
Purchases of Geostar System, construction in progress and equipment	(1,997,157)	(4,645,183)
Receipt of insurance proceeds	-	5,000,000
Payment for equity investment in foreign company	(3,079,960)	-
Additions to patents and licenses	(269,836)	(394,056)
Net cash provided by investing activities	<u>(5,346,953)</u>	<u>(39,239)</u>
Cash flows from financing activities:		
Proceeds received from the sale of stock	-	1,733,269
Payment of expenses related to the sale of stock	-	(10,719)
Notes payable proceeds	-	208,713
Principal payments under notes payable	-	(141,007)
Principal payments under notes payable - other	-	(433,894)
Principal payments under space segment obligations	-	(724,500)
Principal payments under capital lease agreements	(163,386)	(416,710)
Net cash (used) provided by financing activities	<u>(163,386)</u>	<u>215,152</u>
(Decrease) increase in cash and cash equivalents	(4,027,035)	139,006
Cash and cash equivalents at beginning of period	4,965,620	13,053,204
Cash and cash equivalents at end of quarter	<u>\$ 938,585</u>	<u>13,192,210</u>
Noncash transactions:		
Capital leases entered in period	\$ -	697,666

See accompanying notes to consolidated condensed financial statements.

GEOSTAR CORPORATION AND SUBSIDIARIES
Notes to Consolidated Condensed Financial Statements
(unaudited)

1. In the opinion of the Company, the interim financial statements include all adjustments, consisting of only normal recurring adjustments, necessary for a fair presentation of the results for the interim periods. Certain information and footnote disclosures normally included in financial statements prepared in accordance with generally accepted accounting principles have been condensed or omitted. The interim financial statements should be read in conjunction with the Company's December 31, 1989 and 1988 audited financial statements. The interim operating results are not necessarily indicative of the operating results for the full fiscal year.
2. Certain prior period financial statement balances have been reclassified in order to conform with the current period financial statement presentation.
3. Included in the Current portion of notes payable-other balance as of June 30, 1990 is a note in the amount of \$1,000,000 which was previously due on June 30, 1990. Prior to June 30, 1990, the maturity date of this note was amended to September 30, 1990.
4. In August 1990, the Company secured a \$2,000,000 promissory note. The note accrues interest at 11% and principal and interest are due on October 31, 1990. The note is collateralized by a security interest in certain of the Company's foreign patent rights. The Company has not made convertible debenture interest payments totalling \$720,000 which were due on August 1, 1990 on \$14,420,000 principal amount of its convertible subordinated debentures.

ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

Results of Operations

Three Months Ended June 30, 1990 Compared to the Three Months Ended June 30, 1989

Total revenues decreased to \$ 2,512,217 in the second quarter of 1990 from \$3,453,597 in the second quarter of 1989. This decrease resulted primarily from a decrease of \$1,318,000 in Technology license revenue, and an offsetting increase in Government contract revenues of approximately \$393,000. In addition, hardware and software revenues increased in the second quarter of 1990 as compared to the second quarter of 1989.

Direct contract, hardware and software costs ("direct costs") increased to \$1,607,524 in the second quarter of 1990 from \$1,406,810 in the second quarter of 1989. Direct contract costs consist principally of subcontract costs incurred for the Company's contracts with the government. Direct hardware and software costs represent the cost of the hardware and software sales. The increase in direct costs is directly related to the increase in government contract revenues and hardware and software revenues.

Direct costs as a percent of revenues increased to 64% in the second quarter of 1990 from 41% in the second quarter of 1989. This increase in direct costs as a percent of revenues is due primarily to the decrease in Technology license revenue for which there are no associated material direct costs, and the increase in the government contract revenues and hardware and software revenues which carry a high percent of direct costs due to the subcontract costs and equipment costs, respectively.

Space and ground segment operating expenses increased to \$1,300,724 in the second quarter of 1990 from \$550,463 in the second quarter of 1989. Space and ground segment operating costs consist primarily of satellite transponder services, in-orbit insurance costs and technical equipment leases and software and hardware maintenance and support contracts. The increase in space and ground segment operating costs is due primarily to increased space segment redundancy which increases transponder costs and in-orbit insurance costs. Such redundancy was put in place in the fourth quarter of 1989.

General and administrative (G&A) expenses decreased to \$1,464,246 in the second quarter of 1990 from \$1,772,075 in the second quarter of 1989 or a decrease of \$307,829. The decrease in G&A expenses is due primarily to the successful implementation of a cost reduction program.

Depreciation and amortization decreased to \$337,640 in the second quarter of 1990 from \$481,902 in the second quarter of 1989. The decrease results from the decrease in the value of user equipment being leased by customers from the Company.

Research and development costs decreased to \$158,675 in the second quarter of 1990 from \$187,973 in the second quarter of 1989. Such costs relate to development costs of System 2C (Phase 1) and System 3.0 (Phase 2).

Interest expense increased to \$1,574,808 in the second quarter of 1990 from \$876,908 in the second quarter of 1989 due primarily to increased space segment obligations, increased capital lease obligations and increased short term debt which was obtained in the fourth quarter of 1989 and the first quarter of 1990.

Other nonoperating expenses increased to \$143,368 in the second quarter of 1990 from \$106,500 in the second quarter of 1989. The \$143,368 relates primarily to a write down of user equipment held by the Company for lease and/or sale to customers and a write off of certain costs associated with a contract which has been suspended by the Company, while the \$106,500 resulted from a foreign transaction loss related to Technology license revenue.

Interest and other income decreased to \$155,782 in the second quarter of 1990 from \$329,428 in the second quarter of 1989 due to a decrease in cash and short-term investments.

Six Months Ended June 30, 1990 Compared to the Six Months Ended June 30, 1989

Total revenues increased to \$6,615,638 for the six months ended June 30, 1990 from \$6,448,136 for the six months ended June 30, 1989. This net increase resulted primarily from the increase of approximately \$1,264,000 in contract revenues due to an increase in the level of work performed on one of the Company's government contracts and an offsetting decrease in Technology license revenue of approximately \$1,409,000.

The direct costs of the Company's operations increased to \$3,617,606 for the six months ended June 30, 1990 from \$2,501,615 for the six months ended June 30, 1989. Direct contract costs consist principally of subcontract costs incurred for the Company's contracts with the government. Direct hardware and software costs represent the cost of the hardware and software sales. The increase in direct costs is due to an increase in subcontractor costs caused by an increase in the level of work performed by the subcontractor on the government contract. Direct costs increased as a percentage of revenues to 55% for the six months ended June 30, 1990 from 39% for the six months ended June 30, 1989 due primarily to the decrease in Technology license revenue in 1990 for which there are no associated material direct costs.

Space and ground segment operating expenses increased to \$2,629,980 for the six months ended June 30, 1990 from \$987,351 for the six months ended June 30, 1989. Space and ground segment operating costs consist primarily of satellite transponder services, in-orbit insurance costs and technical equipment leases and software and hardware maintenance and support contracts. The increase in space and ground segment operating costs is due primarily to increased space segment redundancy which increases transponder costs and in-orbit insurance costs. Such redundancy was put in place in the fourth quarter of 1989.

General and administrative (G&A) expenses increased to \$3,449,486 for the six months ended June 30, 1990 from \$3,199,830 for the six months ended June 30, 1989 or \$249,656. For the six months ended June 30, 1990 the Company incurred one-time legal expenses of approximately \$310,000 which related to an issue settled prior to June 30, 1990, and due to a decrease in capitalized labor and overhead, G&A expenses increased by approximately \$396,000. However, due to the successful implementation of a cost reduction program, net G&A expenses, exclusive of the above items, decreased by approximately \$456,000 for the six months ended June 30, 1990.

Depreciation and amortization decreased to \$749,127 for the six months ended June 30, 1990 from \$792,910 for the six months ended June 30, 1989. This net decrease resulted from the decrease in the value of user equipment being leased by customers from the Company and an offsetting increase in equipment acquired through capital leases.

Research and development costs increased to \$390,980 for the six months ended June 30, 1990 from \$370,845 for the six months ended June 30, 1989. Such costs relate to development costs of System 2C (Phase 1) and System 3.0 (Phase 2).

Interest expense increased to \$3,137,012 for the six months ended June 30, 1990 from \$1,855,753 for the six months ended June 30, 1989. This increase resulted from an increase in short term debts, an increase in space segment obligations and a decrease in capitalized interest due to suspension of construction on the dedicated satellites.

Other nonoperating expenses increased to \$619,813 for the six months ended June 30, 1990 from \$106,500 for the six months ended June 30, 1989. The \$619,813 relates primarily to a write down of user equipment held by the Company for lease and/or sale to customers and a write off of certain costs associated with a contract which has been suspended by the Company, while the \$106,500 resulted from a foreign transaction loss related to Technology license revenue.

Interest and other income decreased to \$259,880 for the six months ended June 30, 1990 from \$664,534 for the six months ended June 30, 1989 due to a decrease in cash and short-term investments.

Liquidity and Capital Resources

The Company's working capital deficit increased to (\$23,611,354) at June 30, 1990 from (\$7,677,905) at December 31, 1989 primarily due to the net loss incurred during the first six months of 1990, the reclassification of certain notes payable and convertible subordinated debentures due within 12 months as current liabilities and capital expenditures made during the period.

In December 1989, the Company completed a financing transaction in which it obtained loans and commitments to defer payments aggregating approximately \$12,100,000 from various entities with which it does business and certain of its stockholders, including members of the Board of Directors or their affiliates. Of the loans and deferrals outstanding at June 30, 1990 of \$12,100,000, \$1,100,000 matures on January 15, 1991, \$1,000,000 matures on September 30, 1990 and the remaining \$10,000,000 is payable upon demand of the lenders.

In August 1990, the Company secured \$2,000,000 in debt financing which is due October 31, 1990. The Company has not made interest payments totalling \$720,000 which were due on August 1, 1990 on \$14,420,000 principal amount of its convertible subordinated debentures.

As of June 30, 1990, the Company's material financing commitments (excluding current liabilities as of June 30, 1990) for the twelve months ending June 30, 1991 totalled approximately \$8,100,000.

The Company believes that it can meet its minimum operating cash requirements into the fourth quarter of 1990 from existing funds, revenues from commercial operation of the System, and contracts with United States government agencies, assuming no repayment of existing indebtedness payable upon demand or the acceleration of payment of convertible debentures resulting from the occurrence of any event of default pursuant to those debentures, and assuming that the Company can continue to defer amounts due to certain vendors and other creditors. The Company will require additional financing for its operations during the fourth quarter of 1990. The Company is in the process of exploring and evaluating financing and other alternatives which may be available to it. There can be no assurance that the Company will be successful in obtaining financing.

PART II - OTHER INFORMATION

Item 1 - Legal Proceedings

Railstar Control Technology, Incorporated ("Railstar") filed a Complaint in the Superior Court for Hillsborough County in the state of New Hampshire against the Company on June 27, 1990. This legal proceeding concerns a royalty payment in the amount of \$144,790 allegedly owed by the Company to Railstar pursuant to a license agreement executed by the parties. The Company has filed a Notice of Appearance with the New Hampshire state court and intends to pay the royalty amount after deducting amounts owed by Railstar to the Company for services provided. Timothy Mellon, a director of Railstar and the principal stockholder and Chairman of the Board of Railstar's parent, Guilford Transportation Industries, Inc. is the beneficial owner of more than 5% of the Company's outstanding shares of Common Stock (approximately 6.1%).

Item 6 - Exhibits and Report on Form 8-K

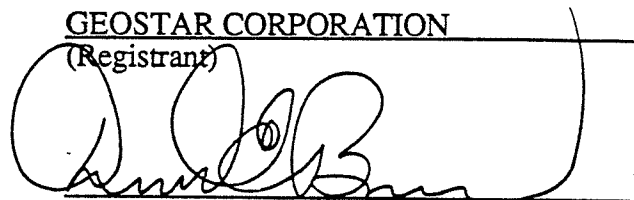
- a) Exhibits: No documentation of the Registrant qualified, under the requirements of Regulation S-K Item 601, to be filed as an exhibit to this Report.
- b) Reports on Form 8-K: No reports on Form 8-K were filed during the quarter.

SIGNATURES

Pursuant to the requirements of the Securities Exchange Act of 1934, the Registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

GEOSTAR CORPORATION

(Registrant)



Donald E. Brown
Senior Vice President,
Corporate & International



Mary A. DiMarco
Treasurer (Principal Financial and
Accounting Officer)

Date: August 14, 1990

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EXHIBIT B

Problems Cause Geostar to Delay Satellite Launch

By John Burgess
Washington Post Staff Writer

Geostar Corp., the Washington company that is helping bring satellite communications to vehicles on the move, has postponed its next launch as it faces financial problems that its auditors feel threaten the company's long-term viability.

In the firm's most recent quarterly filing with the Securities and Exchange Commission, Geostar's auditors, KPMG Peak Marwick, said that losses at the firm, a deficiency in working capital and a need for new financing create doubt about its future as a "going concern."

The seven-year-old company plays down the auditors' assessment, arguing that all young start-ups have money troubles and noting that the filing does not take into account new contracts that Geostar won recently but are not yet bringing money in.

Geostar is raising new loans and equity that will "enable us to keep operating now and step right into the next systems," said Michael J. Breslin, senior vice president.

From its headquarters on 22nd Street NW, Geostar has been trying to make a paying business of technology that would bring the world a step closer to an age of instant communications, anywhere, anytime.

It is one of two American firms licensed by the federal government to run national satellite networks for mobile communication. Ultimately, those services could include car phones that work anywhere in the country, fax machines that could send from commercial airliners and tiny battery-powered phone units that backpackers could carry into the wilderness.

For now, the service is aimed largely at the long-distance trucking industry. Small computer terminals in truck cabs allow drivers to communicate with their dispatchers from anywhere in the country by typing out electronic messages. Messages can go in either direction, relayed by satellite.

The equipment can be used to automatically report a truck's position to its dispatch center, allowing closer management of fleets from headquarters and, if used correctly, to reduce the time that trucks travel empty. The units' beacons also have allowed police to recover stolen trucks on several occasions.

About 1,700 trucks are outfitted for Geostar's service. About 300 boats, train cars and aircraft also carry the gear. The company says it has contracts to serve 8,000 other units, most of them on trucks. Its only competitor, Qualcomm Inc. of San Diego, says it has about 7,500 units in operation and contracts for 5,000 more.

To date, however, growth is behind what some analysts had predicted. "As with many of

Geostar Postpones Next Launch

GEOSTAR, from page 5

these new technologies," said Irwin Jacobs, president of Qualcomm, "they always end up developing a little more slowly than you would hope."

Still, some analysts predict that these and other "mobile" satellite services eventually will evolve into a vibrant business as capacity grows and costs drop.

"The market for these services is just emerging," said John Pemberton, an analyst at the Gartner Group of Stamford, Conn., "and it's going to be really intense." He sees the U.S. mobile satellite services and equipment industry expanding from \$220 million in sales this year to \$2.6 billion in 1994.

Geostar has partial use of three satellites. It plans to launch two more that would be dedicated to its service and employ a more advanced positioning technology than the system now

uses. Under its revised schedule, the company will delay the start of satellite construction by one year and the launch of the first by four months, to December 1993.

Breslin said reassessment of the market indicated that the current satellites were adequate for the next two to three years. In the meantime, the firm shifted its focus away from providing geographic positioning reports to stressing driver-dispatcher communications instead, which has turned out to be the bigger attraction in customers' eyes. "We maybe got a little too hung up on the technology and didn't focus on the business," said Breslin.

Geostar has continued to lose money heavily, \$10.5 million in 1989 on revenue of \$10.7 million. Breslin said the break-even point should be reached in 1993, assuming that events unfold as the company hopes.

Qualcomm, a private company, does not release detailed financial figures.

WASHINGTON BUSINESS/May 21, 1990

but says it had sales last year of about \$31 million, about two-thirds of it from satellite services, and expects to begin making money in the fiscal year beginning in October.

Part of Geostar's positive outlook comes from recently won contracts, Breslin said. Last fall it signed up Burlington Motor Carriers, which has a 2,000-truck fleet. This year it has signed deals with moving company United Van Lines (it has 5,000 trucks) and KLLM, an operator of refrigerated trucks.

"Big guns are choosing to go with the Geostar system," said company spokeswoman Janet Bennett. "We think that's a vote of confidence."

At the Federal Communications Commission, meanwhile, Qualcomm has been sniping at its rival. Qualcomm earlier this month wrote a letter to the FCC pointing out Peat Marwick's financial assessment and urging the FCC to reconsider Geostar's license. The FCC must rule on Geostar's request to put off its launch. ■

EXHIBIT C

Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	File Nos. 43-DSS-MP/ML-90
	)	44-DSS-MP/ML-90, 45-DSS-
	)	MP/ML-90, 46-DSS-P/LA-90,
	)	48-DSS-P/LA-90, 51-DSS-
GEOSTAR POSITIONING	)	EXT-90, 52-DSS-EXT-90, 53-
CORPORATION	)	DSS-EXT-90, CSS-90-012 (ML),
	)	CSS-90-013 (ML), CSS-90-014
	)	(ML), CSS-90-015 (ML)
)	
For Modification of the)	
Geostar RDSS Space Station)	
Authorizations)	
)	
State of California)	
	) ss:	
County of San Diego)	

AFFIDAVIT OF ANDREW J. VITERBI

I, Andrew J. Viterbi, being duly sworn, depose and state:

1. I am Chief Technical Officer and Vice Chairman of the Board of QUALCOMM, Inc. ("QUALCOMM").
2. I make this affidavit in support of QUALCOMM's Petition to Deny in the above-referenced proceeding.
3. I have read the attached Petition to Deny and state that all the facts contained therein are true to the best of my knowledge and belief.

DATED this 9th day of October, 1990.

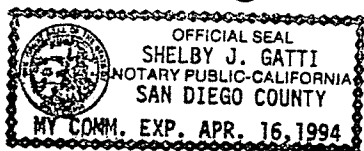
Andrew J. Viterbi

 Dr. Andrew J. Viterbi
 Chief Technical Officer, Vice
 Chairman of the Board
 QUALCOMM, Inc.
 10555 Sorrento Valley Road
 San Diego, California 92121

Sworn to before me this
9th day of October, 1990

Shelby J. Gatti

 Notary Public



CERTIFICATE OF SERVICE

I, Susan J. Calloway, a secretary of Nixon, Hargrave, Devans & Doyle, hereby certify that copies of the foregoing Comments have been served via first-class U.S. mail, postage prepaid on this day of October 10, 1990 to the following parties:

Robert D. Briskman
General Manager
Geostar Positioning Corporation
1001 22nd Street N.W., Suite 500
Washington, DC 20037

Michael Yourshaw, Esq.
Wiley, Rein and Fielding
1776 K Street, N.W.
Washington, DC 20006

*Chairman Alfred C. Sikes
Federal Communications Commission
1919 M Street, N.W., Room 814
Washington, DC 20554

*Commissioner James H. Quello
Federal Communications Commission
1919 M Street, N.W., Room 802
Washington, DC 20554

*Commissioner Sherrie P. Marshall
Federal Communications Commission
1919 M Street, N.W., Room 826
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*Commissioner Andrew C. Barrett
Federal Communications Commission
1919 M Street, N.W., Room 844
Washington, DC 20554

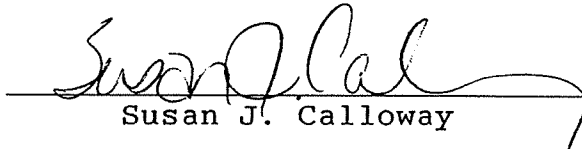
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Susan J. Calloway

*Hand delivered.