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

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In re Applications of)	
)	
MOBILE COMMUNICATIONS	)	File Nos.: 11 - DSS - P- 91 (6)
HOLDINGS, INC.	)	18 - DSS - P- 91 (18)
	)	11- SAT-LA-95
	)	12- SAT-AMEND-95
For Authority to Construct, Launch, and Operate)	
ELLIPSO™ an Elliptical Low-Earth Orbit Mobile)	
Satellite System in the 1610-1626.5 MHz and)	
2483.5-2500 MHz Bands)	

CONSOLIDATED OPPOSITION

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January 3, 1995

SUMMARY

Mobile Communications Holdings, Inc. ("MCHI"), developer of the ELLIPSO™ elliptical low-Earth orbit mobile satellite system, has conclusively demonstrated that it is fully qualified, legally, technically and financially, to be a Commission licensee. Its applications for authority to construct, launch and operate the ELLIPSO™ system should therefore be promptly granted.

Nothing in the petitions and comments of other parties, filed December 22, 1994, establish otherwise. Although the other parties have vigorously attacked MCHI, relying confidently (and precariously) on their own size and national reputations, their various arguments are wholly without merit and should be summarily rejected as self-serving attempts to eliminate a serious competitor. In fact, MCHI has provided evidence of "current assets and operating income" that is more than sufficient to meet the estimated costs of constructing, launching and operating the ELLIPSO™ system. MCHI corporate shareholders, and industry giants, Israel Aircraft Industries, Westinghouse Electric Corporation and Harris Corporation, among others, have pledged their support for the ELLIPSO™ project in terms that are at least as strong as the management letters submitted by the other parties. (In this regard, MCHI discussed in great detail, in its Consolidated Opposition, the serious flaws in the management letters submitted by the other four applicants and their lack of candor in claiming to rely on internal funding when they have no intention of doing so.)

In order to further demonstrate the baseless nature of the other parties' attacks, and to lay to rest any questions about compliance with Rule 25.140, MCHI is submitting herewith a

clarifying letter from corporate shareholder IAI committing, true to its earlier letter, that it is "prepared to expend the necessary funds" for the ELLIPSO™ project. Although the commitments of IAI, Westinghouse and Harris, standing alone, fully satisfy the Commission's requirements, MCHI has gone one step further. Consistent with MCHI's position (confirmed by the public statements of the other applicants in SEC disclosures and company press releases) that all of the applicants will rely, in whole or in large part, on external debt and equity funding, MCHI has submitted concrete evidence that vendor financing and other external funding, well in excess of the estimated construction, launch and operation costs, has been committed and will be available for the ELLIPSO™ project. No other applicant has been able to make a comparable showing.

Significantly, Barclays de Zoete Wedd, Limited ("BZW"), a world-renowned international investment bank, which has reviewed the submissions of all Big LEO applicants has concluded "given the substance of the Ellipso shareholders and partners and comparative systems costs, Ellipso's financing arrangements are equal or superior to every competing Big LEO system." BZW also provides its expert opinion in this filing that except for MCHI and its corporate shareholders "none of the competing Big LEO systems has made an irrevocable financing commitment that remotely approaches their respective LEO system cost, or has assumed any significant liability (contingent or otherwise) regarding their respective Big LEO systems."

The only other objection to MCHI's qualifications, *i.e.*, Motorola's assertion that MCHI's feeder link request constitutes a major amendment, is similarly without merit. As shown herein,

MCHI's feeder link changes were required to conform to the regulatory changes adopted in the Big LEO proceedings, primarily the global coverage requirement, and to the inter-system sharing environment that developed after filing of MCHI's initial application more than four years ago. As a result of these new obligations, MCHI was required to relocate its proposed feeder links outside of the primary service bands as originally proposed and to specify additional feeder link spectrum because of the less efficient nature of the feeder link operation outside the primary bands and the increase in interference due to new applicants, including Motorola, an increase that required the introduction of major frequency re-use techniques. Most importantly, MCHI's proposed feeder links (i.e., 6725 to 7025 MHz downlink and 15.4 to 15.7 GHz uplink) will not cause interference or increase frequency conflicts with existing services as fully demonstrated in ITU Task Group 4/5 and other ITU activities and submissions.

In sum, grant of MCHI's applications would fully serve the public interest. MCHI filed the first big LEO application in 1990 and has since assembled a high-powered team of corporate shareholders, including industry giants Israel Aircraft Industries, Westinghouse/IBM, Harris, BZW, and, most recently, Cable & Wireless, an international telecommunications service provider with operations in more than 50 countries. MCHI and its corporate shareholders have invested over \$30 million, over the past four years, in research and development, technical design and marketing activities relating to ELLIPSO™. This is truly a remarkable achievement for an entrepreneurial company and a testament to the opportunities that still remain in the telecommunications industry for a small business with a "better mousetrap." Grant of MCHI's applications would send a message that the Commission supports such opportunities, and

encourage other small businesses and entrepreneurs to undertake the time-consuming and onerous regulatory process required to initiate new satellite services as MCHI did in 1990.

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EXHIBITS

- Exhibit 1: Overview of Financial Plan
- Exhibit 2: Letter from Israel Aircraft Industries; Excerpt from Company Brochure; Letter from Clal Industries, Ltd.
- Exhibit 3: Letter from Phillip W. Farmer, President and Chief Operating Officer, Harris Corporation
- Exhibit 4: Letter from Barclays de Zoete Wedd Limited
- Exhibit 5: Letter from Banque Nationale de Paris
- Exhibit 6: Letter from ESKOS
- Exhibit 7: Letter from Spectrum Network Systems; Financial Information for Savage Resources
- Exhibit 8: Letters from Spectrum Astro, Inc.
- Exhibit 9: Additional Vendor Financing Letters from IBM, Northern Telecom and CSC
- Exhibit 10: Petition for Partial Reconsideration of Memorandum Opinion and Order, Geostar Positioning Corp. filed by Ellipsat Corporation, May 31, 1991, and May 2, 1991 Objection of Ellipsat Corporation to April 1, 1991 Public Notice Establishing Filing Window for Big LEO Applications

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CONSOLIDATED OPPOSITION

Mobile Communications Holdings, Inc. ("MCHI"), by its attorneys, hereby submits its Consolidated Opposition to the following pleadings, all of which were filed December 22, 1994 and which address, in whole or in part, MCHI's above-captioned applications for authorization of the ELLIPSO™ satellite system: "Petition to Deny" of TRW Inc. ("TRW"); "Petition to Deny" of Loral/Qualcomm Partnership, L.P. ("LQP"); "Consolidated Comments and Petition to Defer and/or Deny" of Motorola Satellite Communications, Inc. ("Motorola"); "Consolidated Comments" of Constellation Communications, Inc. ("Constellation"); and "Petition to Defer Processing" of AMSC Subsidiary Corporation ("AMSC").

For reasons fully detailed below, MCHI is qualified, legally, technically and financially, to be a Commission licensee. Grant of its application would further the public interest by, inter

alia, fostering diversity in communications services and service providers. The arguments raised by other parties, against MCHI, must be seen for what they are: self-serving attempts to eliminate a potential competitor. In fact, MCHI is the only party in this proceeding to demonstrate that real funds have been committed to its satellite project and to provide a candid disclosure of its financial plans. In contrast, the public companies -- Motorola, TRW and Loral/Qualcomm -- seek to hide behind their size and national reputations with a paper showing that bears no relation to the reality of external funding upon which each of these satellite system applicants has publicly stated (outside of FCC proceedings) it intends to rely.¹¹ MCHI has the financing for ELLIPSO™ and is ready, willing and able to move forward rapidly with system implementation. Not only has MCHI met the applicable financial standards, but there are compelling public interest reasons for grant of its application. The Commission should therefore expeditiously grant MCHI's applications to construct, launch and operate the ELLIPSO™ system.

I. BACKGROUND

In November 1990, MCHI filed the first application for a mobile satellite system in the 1610-1626.5 MHz and 2483.5-2500 MHz bands.²¹ This system, called ELLIPSO™, introduced the concept of small, low-Earth orbiting satellites to provide ubiquitous, cost-effective and technologically advanced mobile voice services (i.e., cellular telephone) in the United States and

¹¹ See Consolidated Petition to Deny of MCHI at 15, 10-22, 30-33, (December 22, 1994). MCHI provided concrete evidence, including SEC filings and company press releases, that the three publicly-owned applicants, Motorola, LQP and TRW, have no intention whatsoever of using internal assets to fund their respective systems contrary to their FCC representations.

²¹ The application was filed by Ellipsat Corporation, MCHI's subsidiary. As a result of corporate restructuring, MCHI is now the applicant. In order to avoid confusion, throughout this filing the applicant will be referred to as MCHI, regardless of whether MCHI or Ellipsat Corporation took the particular action in question.

worldwide. Motorola filed its application one month later and applications were filed by four additional parties in June 1991, seven months after MCHI's initial application. The Commission has consolidated these applications in the same processing window as the ELLIPSO™ application.^{3/}

The ELLIPSO™ system is named for its unique elliptical orbital architecture which allows it to focus system capacity where demand is greatest. This feature offers numerous market advantages, including the ability to provide global coverage with a minimal number of satellites, resulting in reduced service costs to the consumer and more rapid system implementation. ELLIPSO™ meets the Commission's global coverage and other requirements with sixteen or fewer satellites. Its overall system cost and cost of service to the consumer are thus far less than the other proposed systems. Another benefit of elliptical orbits is the ability to deploy satellites in stages, which allows MCHI to begin offering an "early entry" commercial service upon launching only six satellites, instead of having to wait several additional years for the entire constellation to be launched.^{4/}

After initiating this proceeding in 1990, MCHI continued to participate actively in all phases of the Big LEO proceeding over the intervening four years. MCHI and its corporate

^{3/} As discussed below, *infra* at 27, the Commission has never ruled on MCHI's still-pending May 31, 1991 petition for partial reconsideration and May 2, 1991 objection both of which assert MCHI's entitlement to processing in a prior filing window.

^{4/} The financial benefits of this phased deployment have been noted by Barclays Bank among others, which serves as MCHI's financial advisor. Barclays submitted a letter in CC Docket No. 92-166 stating that the ELLIPSO™ business plan and unique system design offer significant investment advantages in comparison to systems which require most or all of their constellations to be launched before acceptable service can be provided. *See* Exhibit A, Ellipsat Comments, filed May 5, 1994.

shareholders have expended substantial time and resources in contributing to the two negotiated rulemaking proceedings conducted by the Commission, and in developing comments in CC Docket No. 92-166, ET Docket No. 92-38 and other related proceedings. It has participated and continues to participate in international telecommunications proceedings, including WARC-92, ITU working groups, and industry advisory groups relating to WRC-95. MCHI also participated in the complex negotiations leading to adoption of a comprehensive Joint Proposal and Settlement Agreement by four of the applicants, including MCHI, which was filed with the Commission on September 9, 1994 and reflected agreement among the parties on many issues, including spectrum sharing and financial qualification standards.

In addition to its regulatory activities, over the past four years MCHI has made significant strides in establishing the technical, marketing and financial infrastructure for implementing the ELLIPSO™ system. The ELLIPSO™ project has attracted major aerospace and technology companies, including Westinghouse Electric Corporation, Harris Corporation, Israel Aircraft Industries, and, recently, Cable & Wireless, a major global telecommunications service provider. MCHI and its corporate shareholders have spent more than \$30 million in technical design, R&D and marketing efforts relating to ELLIPSO™. MCHI has been active in a worldwide marketing effort which has been marked by the creation of successful national partnerships, such as in Australia.

On October 14, 1994, the Commission issued its final rules in CC Docket No. 92-166.^{5/} Pending applicants were given only until November 16, 1994 to file amendments conforming their applications to the final rules.

On November 16, 1994, MCHI filed a conforming amendment to its construction applications and an application for launch and operation authority along with the requisite filing fees. The amendment reflected certain technical changes in the system design necessitated by the Commission's newly-adopted rules, including the global coverage requirement. In addition, MCHI demonstrated its current financial ability to meet the estimated \$564 million in construction, launch and first-year operation costs for the ELLIPSO™ system. The amendment indicates that MCHI has available internal funds, including the current assets and operating income of its corporate shareholders, well in excess of estimated system costs for ELLIPSO™. MCHI also submitted evidence of nearly \$600 million in committed vendor financing and in other external financing for system construction, launch and first-year operation costs. As additional evidence of MCHI's financial ability, a letter was submitted from Barclays de Zoete Wedd Limited, a European-based, international investment bank and member of the Barclays Group, providing its expert opinion that up to 20% of system costs could be funded through public offerings, private placements or other strategic investments if necessary.

^{5/} 47 CFR Parts 25 and 94, Licensing Policies and Procedures, Satellite Communications, 59 Fed. Reg. 53,294 (Oct. 21, 1994) (the "Report and Order").

On November 21, 1994, the Commission released a Public Notice finding MCHI's amendment, and the amendments of four other parties, acceptable for filing.^{6/} Interested parties were invited to submit comments and petitions with respect to the amendments on December 22, 1994 and oppositions on January 3, 1994. On December 22, 1994, MCHI submitted a "Consolidated Petition to Deny" identifying serious deficiencies in the legal and financial qualification showings of Motorola, LQP, TRW and Constellation, and raising material questions of fact as to the lack of candor and other violations of Commission rules that have apparently occurred. These include: (1) Motorola's failure to commit to meet launch costs, or even to indicate how launch costs will be met or to explain the total absence of evidence about Iridium, Inc.'s commitment (and ability) to fund the system even though Iridium, Inc., not the applicant, is responsible for the requisite costs;^{7/} (2) the lack of candor evidenced by the conflicting representations of LQP to the SEC and the FCC, discrediting LQP's purported reliance on internal Loral assets to fund Globalstar; (3) Constellation's major undisclosed ownership change resulting in entirely new parties stepping into the applicant's shoes contrary to Commission rules and policies; and (4) TRW's claim of intent to fund the system from internal assets which is wholly inconsistent with the company's public announcements that it intends to rely on external funding and to limit its exposure to 15%.

^{6/} Public Notice, Report No. DS-1481, DA-1291, November 21, 1994; Public Notice, Report No. DS-1492, November 30, 1994.

^{7/} Nor has Motorola (the applicant) adequately explained its relationship to Iridium, Inc. which is contractually obligated to fund the system and in which Motorola has less than a 29% interest.

Petitions or comments were filed on December 22, 1994 with respect to MCHI's amendment by TRW, LQP, Motorola, AMSC and Constellation. As discussed fully below, these filings fail to raise any legitimate arguments against MCHI's qualifications and should be flatly rejected by the Commission.

II. MOTOROLA'S FEEDER LINK ARGUMENT IS FRIVOLOUS

In its "Consolidated Comments and Petition to Deny and/or Defer," Motorola argues that the additional feeder link requests of the three parties seeking feeder link spectrum below 15 GHz, *i.e.*, MCHI, LQP, and Constellation, constitute a major amendment that must be withdrawn if the parties desire processing in the current group. While MCHI cannot speak for the other two applicants, as to MCHI, Motorola's argument is entirely frivolous.^{8/} Indeed, Motorola's claim of surprise about changes in feeder link proposals is disingenuous. MCHI has made full disclosure of its feeder link requirements over the last two years in various meetings and proceedings before the Commission in which Motorola actively participated and raised no objection to MCHI's feeder link usage.

MCHI's amendment, to relocate the ELLIPSO™ feeder links, was required to conform to the regulatory changes adopted in the Big LEO proceedings and to the inter-system sharing environment that developed after filing of MCHI's initial application. The Commission has stated that "to the extent that amendments are necessary because of obligations that we have imposed upon applications after the cut-off date, the amendments will be accepted without

^{8/} MCHI finds it surprising, and indeed curious, that Motorola chose not to attack TRW's increase in feeder link spectrum from 100 to 300 MHz.

adverse consequence."^{9/} Among the new obligations imposed are the following.

First, in its initial applications, MCHI proposed to operate feeder links in the same frequency bands as the primary service links (i.e., 1610-1626.5 MHz and 2483.5-2500 MHz). This approach was proposed when MCHI was the only applicant and no inter-system interference was anticipated. In this environment, operation of feeder links in the L-Band spectrum would allow for more efficient use of spectrum and facilitate economies in satellite design and operation.^{10/} The proposed operation of feeder links in the primary service bands was vigorously opposed by the other parties at earlier stages of this proceeding. TRW, for example, complained that "use of the primary [MSS/RDSS] bands for feeder link operations would cause harmful interference to the TRW system and render its main operation in this band impractical."^{11/} As a result of these and other comments, the Commission directed that feeder links be located outside of the primary service bands and MCHI agreed to abide by the Commission's decision in order to eliminate interference to the other systems.^{12/} Upon relocating MCHI's feeder links outside of the primary service bands as required by Commission rules, it was necessary to specify additional feeder link spectrum because of the less efficient nature of the feeder link operation

^{9/} Non-Voice, Non-Geostationary Mobile Satellite Service, 74 Rad. Reg. (P&F) 171, 181-2 (1993).

^{10/} See, e.g., ELLIPSO™ II Application at 33 ("should the Commission adopt different rules for the L-Band, then feeder link frequencies in the fixed satellite bands (C or Ku) may be required...Ellipsat reserves the right to amend its system should different rules be mandated by the Commission.")

^{11/} Notice of Proposed Rule Making and Tentative Decision, ET Docket No. 92-28, 7 FCC Rcd 6414, 6417 (1992).

^{12/} See Report and Order, ET Docket No. 92-28, FCC 93-547, released January 12, 1994.

outside the primary bands and the increase in interference due to new applicants, including Motorola, an increase that required introduction of major frequency re-use techniques in the L-Band and the associated impact on feeder link requirements.

Second, MCHI's amended feeder link request is due, in large part, to Motorola's own successful efforts to convince the Commission to adopt a global coverage standard for the Big LEO systems. As Motorola is well aware, in order to comply with the Commission's global coverage standard, MCHI was required to re-configure its system. Although MCHI had originally proposed a more modest satellite design, with the intention of growing to meet demand, the Commission instead mandated a Big LEO system design capable of serving the entire world. This global coverage requirement necessarily required MCHI to expand and maximize system capacity, with a corresponding increase in the feeder link spectrum required.

Third, Motorola's comparison between MCHI's feeder link spectrum requests in the 1990-91 time frame and today is meaningless. When MCHI filed its initial satellite application, that application was the only LEO proposal on file. In this non-competitive environment, MCHI proposed an efficient, market-driven system design that would start small, adding satellites and capacity as the market developed. ELLIPSO™ must now co-exist in a CDMA sharing environment that is much different than originally envisioned. Motorola's efforts to limit MCHI to the amount of spectrum applied for at the time of the original cut-off date (in 1991) are self-serving, given the major developments that have occurred in the intervening four years, including the need to operate in a sharing environment.

Fourth, ELLIPSO™'s feeder links do not increase frequency conflicts with existing services, nor with the Iridium system, as alleged by Motorola. Substantial evidence has been introduced before the International Telecommunication Union (e.g., Task Group 4/5) to show that MSS feeder links in the bands proposed by MCHI can coexist with existing services in those bands, without unacceptably increasing interference. Recent ITU task force activity has concluded that there are a number of fixed satellite bands potentially available for LEO feeder link use.^{13/} Additional work submitted to the ITU has demonstrated that multiple mobile satellite systems can share feeder link spectrum. As a consequence, the proposed use of FSS bands does not create any new frequency conflicts or interference, contrary to Motorola's claims.

Given the frivolous nature of Motorola's attack on MCHI's feeder link usage, and its awareness that feeder link spectrum is directly related to system capacity, the conclusion is inescapable that Motorola's intention is to handicap its competitors, to limit their service capability and restrict their ability to provide hand-held service.^{14/} This conclusion is confirmed by the fact that the proposed feeder link spectrum usage by MCHI will have no effect whatsoever on Motorola, which intends to operate feeder links in the Ka-Band. MCHI has expressed a strong preference for feeder link spectrum in the C and/or Ku-Bands, specifically 6725 to 7025 MHz (downlink) and 15.4 to 15.7 GHz (uplink).^{15/}

^{13/} ITU Doc. 4-5/SUM/...E 5 Dec. 1994.

^{14/} There is a direct correlation between service to hand-held user terminals (which requires a smaller beam footprint and thus many beams) and the amount of feeder link spectrum required.

^{15/} As Constellation correctly points out in its Consolidated Comments (footnote 6), MCHI inadvertently transposed its feeder link requests in the November 16, 1994 Amendment. This typographical error is corrected above.

III. MCHI HAS FULLY DEMONSTRATED ITS FINANCIAL QUALIFICATIONS

A. Overview of MCHI's Financial Plan

In its November 16, 1994 amendment, MCHI outlined its financial plan for meeting the estimated costs of constructing, launching and operating, for one year, the ELLIPSO™ satellite system. Although a start-up company in 1990, MCHI has grown significantly, as reflected by the balance sheet submitted with the amendment which is supplemented in Exhibit 1.^{16/} MCHI indicated that the estimated costs of \$564 million would be met through internal support by the applicant's corporate shareholders, with additional funds available from vendor financing, equity investments and other business arrangements (including sale of regional distribution rights) if and as necessary.^{17/} In fact, MCHI demonstrated in its November 16, 1994 amendment that both internal and external funding is available and, in each case, is sufficient to meet 100% of the estimated costs.

Funding currently available for the ELLIPSO™ project is reviewed below and summarized in Exhibit 1 for the Commission's convenience. This demonstrates, that MCHI has gone beyond the letter of the Commission's rules: MCHI has met the Commission's financial standard solely on the basis of internal funding available to the system, and has provided concrete evidence that vendor financing and other external funds have been committed to the

^{16/} As noted in a footnote to the balance sheet, MCHI has entered into binding contracts for the sale of certain international distribution rights under which phased payments of approximately \$8 million are due upon system licensing and certain project milestones. These revenues are separate and apart from the other business arrangements detailed in the November amendment and herein. A revised balance sheet reflecting payments received and additional receivables is provided in Exhibit 1, which reflects a subsequent agreement with Voyager Communications for an additional \$5 million for regional distribution rights.

^{17/} See MCHI Amendment at Exhibit 3.

project. This evidence provides additional assurance that MCHI has the "current financial ability" to proceed with system implementation. No other Big LEO applicant has been as candid. Nor has any submitted such a comprehensive financing program.

1. Internal Funding

(a) Israel Aircraft Industries

In its November 16, 1994 Amendment, MCHI included a November 8, 1994 letter from one of its corporate shareholders, Israel Aircraft Industries ("IAI"), signed by Shmuel Peretz, Vice President Finance, committing to provide support for the ELLIPSO™ project and attesting that the total sales of IAI in 1994 will "be no less than US \$1.3 Billion."^{18/} Clarifying IAI's November 8, 1994 letter, MCHI is submitting herewith (as Exhibit 2) another letter from IAI. True to what it said in its November 8, 1994 letter, IAI is expressly committing "to expend the necessary funds" for the ELLIPSO™ project.

Since November 16, 1994, IAI has obtained additional evidence of the assistance that its financial strength provides to the ELLIPSO™ project. It has obtained a commitment from Clal Industries Ltd. to invest up to U.S. \$40 million for the ELLIPSO™ project. This letter is

^{18/} As noted in MCHI's Amendment (Exhibit 3), IAI is a government-owned defense contractor and, as such, considers its balance sheet to contain classified information that cannot be publicly released. The November 8, 1994 letter of Mr. Peretz attests to the fact that the company's current assets/sales are well in excess of the amount required to fund the satellite system. An excerpt from company materials, included in Exhibit 2, reflects that annual sales for key divisions are well in excess of \$1 billion. In light of the unique circumstances relating to IAI's status, the legal constraints on financial disclosures by IAI, and the submission of information documenting the relevant facts, a balance sheet is not required and a waiver of Rule 25.140(d)(1) should be granted if necessary.

attached as Exhibit 2. The ESKOS commitment (discussed below) was also a direct result of IAI's efforts.

(b) Westinghouse Electric Corporation

In the November 16, 1994 amendment, MCHI also provided a letter from shareholder Westinghouse Electric Corporation ("Westinghouse"), signed by Milton F. Borkowski, Vice President and General Manager, indicating support for the project. Westinghouse states that the company "has committed significant financial resources and the support of its engineers to the development project, and we are committed to continue the support of the team's efforts to move forward to completion of an operating system, subject to normal business reviews and market conditions." The letter also states that Westinghouse "continues to lend its full support to development of the ELLIPSO™ project." That certainly represents a broad financial and engineering commitment to the project as a whole. MCHI previously submitted a copy of the Westinghouse balance sheet reflecting current assets for 1993 in excess of \$4 billion and annual sales of over \$8 billion.

(c) Harris Corporation

Harris Corporation, also a MCHI shareholder, submitted a letter in the November 16, 1994 Amendment evidencing management support for the project. The letter, signed by Dr. Bill C. Tankersley, Director of Space Systems, indicates that Harris is strongly committed to continuing its support for the ELLIPSO™ project. Harris' balance sheet, reflecting annual sales of over \$3 billion and current assets in excess of \$1.698 billion, was submitted with the

amendment. Submitted herewith as Exhibit 3 is a letter from Phillip W. Farmer, President and Chief Operating Officer of Harris, confirming that Harris "remains committed" to the project. MCHI can thus rely on Harris' strength to ensure that the project will be implemented successfully.

(d) **Barclays de Zoete Wedd Limited**

As a shareholder and financial advisor to MCHI, Barclays de Zoete Wedd Limited ("BZW"), the investment banking arm of Barclays Bank, has pledged "to continue to commit our worldwide professional resources to ELLIPSO™," and "remains strongly committed to the project's success." BZW had pre-tax profits in 1993 of £ 501 million (US \$750 million) and net assets of £ 1.202 billion (US \$1.8 billion), as reflected in MCHI's amendment.

BZW has also provided its expert opinion that up to 20% of the financing required for the system could be obtainable through (a) public offerings and/or private placements of debt or equity securities of MCHI; and (b) other strategic investments. While MCHI is not relying on this opinion to demonstrate its qualifications, the BZW letter provides additional evidence that MCHI has the financial ability and resources to implement the proposed system. It is also worth noting that no other investment bank has been willing to make such a representation in this proceeding with respect to any other applicant.

In this regard, BZW points out in a supplemental letter submitted with this filing "while several applicants appear likely to rely on a much larger proportion of external financing than ELLIPSO™, no other applicant has chosen or was able to provide a similar opinion as to

external financeability." Letter from John F. Ambruz, Managing Director, BZW, to David Castiel, dated January 2, 1995 (Exhibit 4). Significantly, BZW also opines in the attached letter that:

the commitments that MCHI has secured from the ELLIPSO™ partners and shareholders represent strong commercial and financial support for ELLIPSO™ and provide MCHI with the current financial ability to proceed with the deployment of the ELLIPSO™ system.

(e) Spectrum Network Systems

As a corporate shareholder of MCHI, Spectrum has also pledged that it is "willing to expend the necessary funds to construct, launch and operate" the ELLIPSO™ system. See Exhibit 7.

2. Vendor and Other External Funds

(a) Arianespace

In its November 16, 1994 amendment, MCHI also submitted a letter from Arianespace, signed by Charles Bigot, President and CEO, evidencing Arianespace's agreement to provide 15% of the financing (\$45 million) for launch services and to assist with negotiating a credit arrangement with the company's European banks for the remaining ELLIPSO™ launch costs. On November 16, 1994, MCHI and Arianespace, entered into a detailed Launch Services

Agreement and a separate agreement relating to the credit arrangements and the convertible debentures.^{19/}

Following up with its commitment to assist with financing of the entire launch costs, Arianespace has actively engaged the Banque Nationale de Paris (BNP), as evidenced by its letter commitment to the project which is attached as Exhibit 6. Letter from Christian Grégoire, Head of the Telecommunications and Services Division, and Christophe Boucher, Vice-President, BNP to David Castiel, dated December 22, 1994. This letter confirms BNP's willingness to assist with financing of launch costs in amounts up to \$255 million.

(b) **ESKOS**

While MCHI is confident, on the basis of assurances by Arianespace and BNP that 100% of the launch costs will be financed, it has also obtained a commitment from ESKOS through IAI to provide vendor financing against equity for launch of ELLIPSO™'s Borealis constellation in the amount of \$160 million if required. A commitment letter from ESKOS, the representative of the Russian and Ukraine space agencies, is attached as Exhibit 6. (The Borealis constellation consists of up to ten satellites.)

^{19/} These highly confidential and proprietary business agreements have not been submitted. MCHI is willing, however, to submit these agreements for the Commission's review, assuming confidentiality can be assured, if such review is deemed necessary or desirable and is specifically requested by the Commission.

(c) **Cable & Wireless, plc**

In a major coup for MCHI, Cable & Wireless, plc ("C&W") (a leading international provider of telecommunications services and a global player with operations in over 50 countries) has acquired stock in MCHI and entered into a business agreement providing for C&W to increase its participation in MCHI to between 18 and 24% (an investment of \$175 million) and to acquire certain regional operating and distribution rights for an additional \$100 million. A letter from C&W to this effect was submitted with MCHI's November 16, 1994 Amendment. The terms of the business agreement were set forth in an Agreement between C&W and MCHI executed on November 16, 1994.^{20/}

(d) **AEC-Able Engineering Company, Inc.**

In addition to internal shareholder support, MCHI provided evidence of vendor financing in the amount of \$93 million from AEC-Able Engineering for satellite components. This vendor financing commitment was evidenced by a letter signed by Allister F. Fraser, Vice President, committing to provide vendor financing and, if necessary, to arrange for financing of the specified services. This agreement was further evidenced by a Memorandum of Understanding between the two companies dated November 16, 1994.

^{20/} As with the Arianespace agreements, MCHI is not required to submit its proprietary and highly confidential business agreement with C&W. MCHI is willing, however, to submit this Agreement for the Commission's review subject to C&W's concurrence, assuming its confidentiality can be assured, if such review is determined to be necessary or desirable and is specifically requested by the Commission.

(e) **Spectrum Network Systems**

In its amendment, MCHI also submitted a letter agreement with Spectrum Network Systems, agreeing to invest \$100 million in the system in return for participation in certain ELLIPSO™ international distribution rights. Spectrum Network Systems recently completed a successful public offering in Australia (the first successful public offering relating to a Big LEO system of which MCHI is aware) and is affiliated with Savage Resources, a large mining conglomerate in Australia. See Exhibit 7. Savage Resources has current assets in 1994 of \$125.6 million and operating revenues of \$57 million. Spectrum obviously is capable of undertaking investment commitments of over \$100 million.

(f) **Spectrum Astro, Inc.**

MCHI has also received a commitment from Spectrum Astro, Inc., a fast-growing, innovative aerospace company, to provide vendor financing in the amount of \$206 million for the satellite and system architecture. See Exhibit 8.

3. Additional Vendor Financing (Ground Control Station)

MCHI provided further evidence of vendor financing that will be available for the ground system development, including the ground control station. This includes a commitment of \$10 million from Satellite Transmission Systems, and additional commitments from Northern Telecom (\$4 million) and CSC (\$3 million). IBM has also committed \$5 million for the network control center. These additional commitments are attached as Exhibit 9. Although estimated costs and commitments for the ground segment are not required by Commission Rule 25.140

(see footnote 28, infra), these materials are submitted as further evidence of commitments to the ELLIPSO™ project by major corporations.

B. Real Commitments Support MCHI's Financial Plan

In its November 16, 1994 Amendment, MCHI demonstrated that it has external and internal funding available to meet the estimated system costs. Indeed, MCHI could rely on either type of funding: the internal funding and external funding are each sufficient, standing alone, to finance system development, launch and first-year operation. Although the other parties vigorously attack MCHI's financing plan, in reality, MCHI is the only party to demonstrate concretely the availability of sufficient internal and external funds committed to the project. This conclusion is corroborated by BZW (see Exhibit 4) which has independently reviewed the financial showings of all applicants. This world-renowned investment bank states:

We believe that none of the competing Big LEO sponsors has made a definitive financing commitment that remotely approaches their respective LEO system cost, or has assumed any significant liability (contingent or otherwise) regarding their respective Big LEO systems.

In contrast to the other applicants, BZW concludes that MCHI has demonstrated the "current financial ability" to proceed with system implementation as required by Commission rules. See Exhibit 4.

Opposing parties would have the Commission parse the language of MCHI's commitment letters and elevate their own paper showings over the real evidence that MCHI's commitments and financial ability are genuine. Moreover, opposing parties, who are MCHI's business

competitors, will not be satisfied by any showing which does not place on public notice for their meticulous examination and unabashed subsequent commercial exploitation the full text and terms of every vendor and subscription contract into which MCHI has entered, while concealing their own arrangements under the guise of "reliance" on internal financing. In addition, attacks by these competitors on MCHI's external financing are disingenuous. Despite repeated public announcements that they in fact will rely upon external financing to build their respective LEO systems, these competitors have made no showing whatsoever as to the nature and extent of that financing, and in some instances have explicitly stated that such funding has yet to be arranged.^{21/}

1. MCHI Has Provided Evidence of Management Commitments By Its Corporate Shareholders That Are Sufficient To Fund The Entire System

Under Rule 25.140, a satellite applicant may demonstrate current financial ability by submitting a balance sheet, an exhibit demonstrating current assets and operating income sufficient to meet the estimated costs and a management commitment to the proposed satellite program. MCHI has met this standard, at least to the same extent as have the other applicants in this proceeding.^{22/} IAI, Westinghouse and Harris have pledged support for the project in strong

^{21/} Indeed, MCHI submits that it has been more candid than the other applicants with respect to its financial plans. See MCHI Consolidated Petition at 20-23, 30-32 (exposing Loral and TRW public disclosures regarding reliance on yet-to-be-arranged external debt financing to fund the Globalstar and Odyssey LEO systems, respectively, and Motorola's disclosures that a third party, Iridium, not the applicant, is obligated to fund system development).

^{22/} As discussed below, there is no functional difference between the language in management letters submitted by Motorola, LQP, and TRW, and the language used by Westinghouse, Harris and IAI. AMSC correctly points out in its "Petition to Defer Processing" of the LQP application that a commitment to finance a multi-billion dollar project can only be made by the Board of Directors. Petition to Defer Processing at 6 and fn. 11. This applies equally to Motorola and TRW.

language. Their letters must be read in the context of the substantial expenditures (i.e., more than \$30 million) that have already been made by these companies, MCHI and MCHI's other corporate shareholders towards development of the ELLIPSO™ system. Each of these corporations has made a true commitment to the ELLIPSO™ project, and reaffirmed that commitment.^{23/}

Petitioners seek to require specific language of their own selection as evidence of commitment. Yet, in neither the Report and Order, nor in the domsat proceeding where the rule was initially established,^{24/} does the Commission demand the use of a particular verbal formulation as suggested by petitioners. (Under such a rigid test, equitably applied, the financial showings of all of these petitioners would fail.) In any event, petitioners' semantic objections are mooted by IAI's clarifying letter submitted herewith (Exhibit 2). This clarification commits that IAI is "prepared to expend the necessary funds" for the ELLIPSO™ system. No more is required and, indeed, this goes far beyond what Constellation, LQP, Motorola, and even, TRW have provided.

^{23/} TRW makes a frivolous argument that the management letters submitted by MCHI should only be given weight to the extent of the corporation's equity interest. The letters clearly evidence support for the entire project. Carried to its logical conclusion, TRW's argument would be equally applicable to the other parties, including TRW, all of whom have indicated their intention to have a minority interest in their respective satellite systems. As pointed out in MCHI's Consolidated Opposition, Motorola has less than a 29% interest in Iridium, and TRW and Teleglobe together will have less than a 15% equity investment in Odyssey (15% of TRW's stated assets is only \$350 million.)

^{24/} See Licensing Space Stations in the Domestic Fixed-Satellite Service, 58 Rad. Reg.2d (P & F) 1267, 1269-74 (1985).

In addition to the language of commitment, the Commission should look to the real-world indicia of financial commitment underlying the management letters submitted by MCHI's corporate shareholders. IAI, Westinghouse, and Harris, each of which has current assets and operating income sufficient to finance several times the total cost of the ELLIPSO™ system, have committed to support the project in their respective letters to the Commission.^{25/} In reality, these companies have already committed significant financial and human resources to develop ELLIPSO™ and have a major stake in the project's success.^{26/} Westinghouse indicates, for example, that "we are committed to continue the support of the team's efforts to move forward to completion of an operating system, subject to normal business reviews and market conditions." Letter from Milton F. Borkowski, Vice President and General Manager, Westinghouse Electronic Systems Group, to Dr. David Castiel (Nov. 15, 1994) (emphasis added), MCHI Amendment at Exhibit 3. "Completion of an operating system" necessarily entails the construction and launch of all planned satellites and explicitly includes the operation thereof. There is no justification for Loral's claim that Westinghouse's support relates only to development of the ground segment.^{27/} No such limitation is contained in the Westinghouse

^{25/} As noted above, the petitioners' attacks are largely mooted by the clarifying letter submitted in Exhibit 2. Although IAI has not submitted a balance sheet, this is because IAI's balance sheets contain classified information, and IAI is therefore precluded from putting them on public notice with the Commission. See note 18, supra. IAI's inability to reveal the details of its balance sheet has no relation to whether it has the financial muscle to back its ELLIPSO™ commitment. IAI is generally acknowledged to be one of the premier aerospace companies in the world and an outstanding innovator in aerospace technology. Were this not so, the whole history of the Middle East, Israel's security and the strategic position of the United States would be dramatically different.

^{26/} See Westinghouse Comments in CC Docket No. 92-166, May 5, 1994; Harris Comments in CC Docket No. 92-166, May 5, 1994.

^{27/} See LQP Petition to Deny at 8-9.

letter. Westinghouse is a shareholder in MCHI, with a significant stake in the successful outcome of the entire ELLIPSO™ project, and with much to gain in future business and employment.

With respect to the Harris letter, an objection is raised by Constellation that the signer of the letter does not have authority to commit the corporation to the ELLIPSO™ project. While this attack is clearly a red herring, MCHI has included, at Exhibit 3 of this pleading, a letter of commitment signed by Phillip W. Farmer, President and Chief Operating Officer of Harris Corporation, reconfirming Harris commitment to the ELLIPSO™ project. As noted in the letter originally submitted with MCHI's amendment, Harris has already committed significant financial and technical resources to ELLIPSO™. Harris has much to gain. A successful ELLIPSO™ project will mean new business and greater employment in Florida. The Harris letters must therefore be viewed in the context of the corporation's significant prior financial support and commitment to the ELLIPSO™ system, which is reflected in the letters submitted to the Commission.

The other applicants have therefore failed to provide any evidence contradicting the clear statements of financial support by MCHI's corporate shareholders for the ELLIPSO™ project.^{28/} MCHI has therefore met the requirements of Commission Rule 25.140(d)(1).

^{28/} Although a passing effort was made by other parties, LQP and TRW in particular, to discredit MCHI's cost estimates, these attacks are entirely without substance and can be readily addressed. For example, MCHI did not include the cost of a ground control station in its amendment (as LQP points out) because this estimate is not expressly required by Commission Rule 25.140. However, MCHI is more than able to cover the estimated \$22 million that development and first-year operation of a ground control facility would require based on the internal and

Footnote continued on next page

2. MCHI Has Provided Evidence of Vendor Financing and Other External Funds Committed To The Project Sufficient, Standing Alone, To Meet The Estimated System Costs

The other applicants also attack MCHI's evidence of external financing committed to the project. As discussed above, the evidence of external funding provided in MCHI's November 16, 1994 amendment and supplemented in this filing is provided to demonstrate that **in addition to** the availability of internal funding from MCHI's corporate shareholders, MCHI has available committed funds from external parties in amounts sufficient to fund the entire system. The applicants' attacks on the vendor financing and other business arrangements identified by MCHI are therefore irrelevant. These materials were submitted to demonstrate the high level of support for the ELLIPSO™ project from major U.S. and international corporations. This support is even more impressive given the short time period provided by the Commission for assembling these materials (only 30 days) and the fact that none of the other parties has submitted any evidence whatsoever of external funding commitments (even though stating publicly that they intend to rely on such funding.)

Footnote continued from previous page

external funding available for the project. In addition, on their face, the STS, CSC, IBM and Northern Telecom letters, expressly refer to the ELLIPSO™ project so there can be no question as to the vendors' underlying intentions.

Similarly, although LQP tries to suggest that MCHI's omission of a specific line item for launch insurance costs and interest expense is significant, in fact there is no obligation to include either item in the cost estimates. To the extent that MCHI intends to rely on internal funds, no debt (and therefore no interest expense) would be incurred. With respect to launch insurance, MCHI notes that the Ariane launch service agreement provides a reflight guarantee so launch insurance is not required. Satellite insurance typically costs 16% (approximately \$42 million). As discussed above, the funds available to MCHI are more than enough to cover these incremental costs.

A common theme in the attacks by other applicants is that the commitments submitted by MCHI are not fully documented. Commission Rule 25.140(d)(2) does not, however, require the applicant to submit actual documentation of external financing. The applicant has discretion to submit the information in whatever form it believes is sufficient to establish the relevant terms of the arrangement. A review of MCHI's submissions demonstrates that the critical terms of the credit arrangements have been supplied. It is well-established that the actual agreement need not be executed or performed to be qualifying. See Licensing Space Stations in the Domestic Fixed-Satellite Service, 58 Rad. Red. 2d (P&F) 1267, 1273-74 ¶ 15. The Commission specifically permits consideration of unexecuted agreements, provided "the agreement [is] signed and binding within 30 days of the date of [Commission] authorization." Id. at 1274 ¶ 15.

In contrast to domestic satellite proceedings, where the parties typically rely upon traditional bank loans, the record in the Big LEO proceeding has established that banks are unlikely to extend first stage financing for a new and unproven technology like the Big LEOs. Indeed, it is highly significant that MCHI is the only party to submit letters from financial institutions -- BZW and Banque Nationale de Paris -- in support of the project. No other party has provided as much or, indeed, any independent evidence of its system's external financeability. See Exhibit 4. This is significant given the fact that all of them in the future will have to arrange for such funding.

Exhibit 1 provides an overview of the external funding committed to the ELLIPSO™ project and other funds available to the project. As demonstrated in Exhibit 1, more than \$639

million of external funding is committed to the project.^{29/} This does not include the expected equity investment by Cable & Wireless, which has expressed support for the project and entered into a business agreement providing C&W with the right to increase its stock holdings in MCHI for an equity investment of \$175 million and to acquire certain regional operating and distribution rights for an additional \$100 million.

The evidence of external business arrangements was also submitted to demonstrate MCHI's extraordinary success in international marketing of its system, as reflected by the distribution arrangements entered into with Spectrum Network Systems (Australia), Voyager Communications (Thailand) and others.

In sum, the evidence of external funds that have been committed to the project establishes that MCHI is ready, willing, and able to move forward expeditiously with implementation of the ELLIPSO™ system and, indeed, that MCHI is uniquely qualified compared to the other applicants.

IV. THE PUBLIC INTEREST COMPELS GRANT OF MCHI'S APPLICATION

MCHI has fully met the Commission's financial standard as demonstrated in Section III above. In addition, there are compelling public interest reasons for grant of MCHI's application, as discussed in greater detail below.

^{29/} For purposes of this discussion, the term internal funding is used to designate a shareholder's general management commitment to support the project. External funding may include commitments and business arrangements between the corporation and its stockholders. For example, MCHI shareholders Arianespace and C&W have entered into business arrangements with MCHI involving substantial debt and/or equity investments. These arrangements have been classified as external funding for discussion purposes.

A. MCHI Initiated and Was the First Applicant to File in This Proceeding

MCHI initiated this proceeding in 1990 with the filing of an application to authorize the ELLIPSO™ system. At that time, MCHI had sought consideration in a separate processing group precipitated by the filing of a major amendment by Geostar. Although the Commission later ruled that the Geostar amendment was, in fact, tantamount to a new application, the Commission never applied its own rules requiring establishment of a 60-day cut-off period for the filing of applications to be considered in conjunction with an original application. 47 CFR § 25.141(b).^{30/} MCHI filed a petition for partial reconsideration and an objection to the Commission's failure to treat MCHI in a separate processing group, both of which are still pending and have never been addressed. See Exhibit 10 hereto.

The Commission has never addressed MCHI's bona fide arguments and, instead, provided competing applicants with more than seven months, from the time that MCHI's application was filed, to develop and submit their proposals. Not surprisingly, the proposals submitted in June 1991 drew extensively from the technical and development work previously undertaken by MCHI and made available for public review (over the intervening seven months) as a result of the FCC process.^{31/}

Moreover, in the intervening four years, MCHI and its corporate shareholders have expended substantial amounts of money (in excess of \$30 million) and time to assist the Commission in developing appropriate rules for this new service and in implementing the

^{30/} See Geostar Positioning Corp., 69 Rad. Reg. (P&F) 257 (1991).

^{31/} Although MCHI applied for a pioneer's preference, no preference was awarded in this proceeding.

ELLIPSO™ system. Grant of MCHI's application would serve the public interest by acknowledging its major contributions to the initiation and development of the Big LEO service and encouraging the filing of similar proposals for new and innovative communications services in the future.

B. MCHI is the Only Party to Provide Evidence of Internal and External Funding Committed to the Project

As demonstrated here and in the petitions filed by MCHI and other parties (e.g., AMSC), serious questions have been raised about the submissions of the three public companies in this proceeding and their lack of candor in claiming to rely upon internal funding while stating publicly (in SEC disclosures and company press releases) that their true intention is to rely upon external funding. Although MCHI has available the resources of its corporate shareholders, including IAI, Westinghouse and Harris, it has gone well beyond the Commission's financial requirements to demonstrate that 100% of the system costs can be met by either internal or external funding, including vendor financing. This showing meets and exceeds the Commission's financial standards.

In its Consolidated Petition, MCHI established that the financial reality is that all of the systems will rely in whole or in large part on external debt and equity funding. This is further substantiated by the BZW letter attached as Exhibit 4 hereto. BZW points out that the "high projected costs of some of the competing LEO systems . . . are too large to be supported by the balance sheet of any single applicant." BZW also notes that "competing Big LEO system sponsors have publicly stated that their respective deficiencies in financing will be met through unidentified outside sources of capital and that each of those deficiencies are multiples of the

entire cost of ELLIPSO™.^{32/} In contrast to the other companies, MCHI provided evidence of its successes in raising external funding for its system, even though the assets of its shareholders are more than enough to cover the system costs. None of the other applicants has done so.^{33/}

MCHI's achievement is even more impressive given the unprecedented brevity of the 30-day amendment period provided by the Commission which, arguably, fell with disproportionate impact on the more entrepreneurial companies. Most importantly, under normal financial practices, a company does not typically secure committed funding years before the funds would be required. A requirement to fund the entire system on "day one" is inconsistent with normal business practices pursuant to which investors evaluate market conditions and risks before committing additional funds to a project (particularly in the case of a new technology and service like the Big LEOs.)^{34/}

Although it can be argued in the abstract that applicants were put on notice by the Notice of Proposed Rulemaking that a strict financial standard would be applied and therefore should have used the intervening months to arrange financing, in reality the significant regulatory risks presented by those portions of the rules not relating to financial qualification, such as the critical

^{32/} Exhibit 4

^{33/} As discussed at length in MCHI's Consolidated Petition, Motorola's letter omitted any reference to launch costs and was carefully worded to avoid any commitment to fund system costs. Similarly, Loral's letter was stated in the alternative, allowing unfettered discretion to arrange funding or use internal assets. TRW's careful wording (i.e., that it is "committed," not that it "commits") indicates that a corporate decision has not been made, consistent with MCHI's and AMSC's point that Board approval is required for such fundamental corporate commitments of funds (and TRW's own public statements that it will fund a maximum of 15% of the cost.)

^{34/} See Affidavit of Davinder Sethi, Exhibit A to MCHI's May 5, 1994 Comments in CC Docket No. 92-166.

spectrum sharing issue, precluded negotiating any firm commitments during that time. No lender or investor could take the risk of irrevocably committing funds to a project subject to such significant regulatory uncertainty and risk.^{35/}

Thus, despite the difficulties entailed, in a one month period, MCHI was able to obtain support letters and/or financing commitments from large company shareholders such as IAI, Westinghouse and Harris, and international companies in distant locations including Australia, Israel, France and the United Kingdom. These commitments have since been supplemented with additional commitment letters from Spectrum Astro, Voyager Communications and ESKOS.

C. Grant of MCHI's Application Would Promote Small Business Opportunities

Creation of opportunities for small business ownership of telecommunications facilities is a well-established national policy objective.^{36/} Congress and the Executive Branch have called upon the Commission to ensure that small businesses are represented in the telecommunications industry.

^{35/} MCHI also believed that the Commission would give greater weight to the September 9, 1994 Joint Settlement Agreement between four of the Big LEO applicants which reflected a consensus on a modified financial standard.

^{36/} See Communications Act of 1934, as amended § 309(j)(3)(B), 47 U.S.C.A. § 309(j)(3)(B) (West Supp. 1994)(stating an objective of Congress is to disseminate telecommunications licenses among "a wide variety of applicants, including small businesses"). See also H.R. Rep. No. 111, 103d Cong., 1st Sess. 254, reprinted in 1993 U.S.C.C.A.N. 378, 581 (same); H.R. Conf. Rep. No. 213, 103d Cong., 1st Sess. 482, reprinted in 1993 U.S.C.C.A.N. 1088, 1171 (indicating that the Communications Act, as amended, requires the Commission to distribute licenses, *inter alia*, to small businesses). The Commission has responded by establishing a wide variety of small business preferences in auction design. See CC Docket No. 93-253.

As an entrepreneurial company, MCHI has achieved unique successes, including its success in convincing major aerospace manufacturers and global telecommunications service providers --- Westinghouse/IBM, Harris, IAI, C&W and others (a veritable "who's who" of international corporate giants) -- to join the ELLIPSO™ team and to invest in the company. This support corroborates MCHI's market vision and demonstrates that an entrepreneurial company with a "better mousetrap" can succeed in the satellite industry.

The Commission has long recognized that opportunities for new entry by entrepreneurial companies in particular, increase the likelihood of innovation and improved efficiencies in the use of the orbit-spectrum resource to the benefit of the using public.^{37/} The courts have emphasized the importance of ensuring a meaningful opportunity for participation by entrepreneurial companies. See Northwest Cellular Telephone v. FCC, 897 F.2d 1164, 1166 (D.C. Cir. 1990). In this regard, the Court of Appeals has appropriately cautioned against use of financial standards as an arbitrary device to "winnow" the applicant field or to eradicate nonconformity. ARINC v. FCC, 928 F.2d 428, 447 (D.C. Cir. 1991).

Grant of MCHI's application would send a message, consistent with national policy objectives, that the Commission supports opportunities for small business and new entrants. This would encourage future small business applicants to initiate and persist in the time-consuming and onerous regulatory process for licensing of new satellite services, as MCHI was first to do in November 1990.

^{37/} See Domestic Fixed-Satellite Service re: Amendment Part 25, 84 FCC 2d 318 (1981). See also U.S. v. FCC, 652 F.2d 72, 104 (D.C. Cir. 1980).

V. FAILURE TO GRANT MCHI'S APPLICATION WOULD BE ARBITRARY AND CAPRICIOUS

The Commission is required, under Section 706(2)(A) of the Administrative Procedure Act and other long-standing precedent, to treat parties alike when they participate in the same proceeding. See, e.g., New Orleans Channel 20, Inc. v. FCC, 830 F.2d 361, 366 (D.C. Cir. 1987); Melody Music, Inc. v. FCC, 345 F.2d 730, 732-3 (D.C. Cir. 1985). See also Crain Broadcasting, Inc., 8 FCC Rcd. 4406 (1993). This is a fundamental precept of administrative conduct. To do otherwise constitutes arbitrary and capricious administrative conduct, requiring reversal by the courts. Failure to grant MCHI's application, given the serious deficiencies noted in the applications of the other parties and the overwhelming evidence of MCHI's qualifications, would be highly discriminatory.

The Commission must apply its rules fairly and impartially. MCHI has worked closely with the Commission throughout this complex regulatory process. MCHI is deeply committed to succeed with its project. MCHI has few pretensions as far as size is concerned. It is a start-up company which through entrepreneurship has succeeded in designing a system which has attracted participation by and commitments from industry giants such as Westinghouse/IBM, Harris, IAI and, now, Cable & Wireless.

MCHI's success, up until now and in the future, could only take place in an impartial regulatory environment and a free market economy. MCHI must insist that rules such as those relating to financial standards be applied so as to constitute a level playing field. As the Commission knows, MCHI would far have preferred that the Commission not undertake the difficult judgmental and technical task of evaluating financial qualifications. It is not equipped

to do so; the free market can do the job far more quickly, efficiently and definitively -- and you cannot sue the marketplace. All of the applicants recognize that. Their real behavior, in contrast to their paper submissions to the FCC, shows their realism in understanding that the money will come from external financial markets and success ultimately will be determined by the consumer.

But the FCC having set the rules, and represented to the Court of Appeals that they are "exactly equivalent" for large and small companies,^{38/} MCHI will be very determined in pursuing the impartial application of those rules. Motorola, TRW, Loral, and Constellation must conform, as MCHI must, to the same sets of tests which are represented as "exactly equivalent." That is, after all, the meaning of a level playing field.

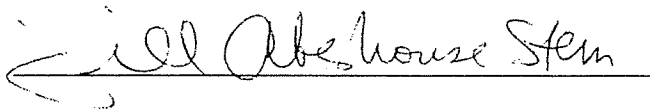
^{38/} See Opposition of the Federal Communications Commission to Petitioner's Emergency Motion for a Stay Pending Review at 14, Mobile Communications Holdings, Inc. v. Federal Communications Commission, No. 94-1695 (D.C. Cir. Nov. 14, 1994).

VI. CONCLUSION

For reasons set forth above, MCHI is fully qualified to be a Commission licensee. Its pending applications for construction, launch and operation of ELLIPSO™, an elliptical low-Earth orbit mobile satellite system, should be granted expeditiously.

Respectfully submitted,

MOBILE COMMUNICATIONS HOLDINGS, INC.

By: 

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January 3, 1995

CERTIFICATE OF SERVICE

I, FELECA B. DELDATCH do hereby certify that a true and correct copy of the foregoing document was sent by first-class mail, postage prepaid, or hand-delivered, on this 3rd day of January, 1995, to the following persons:

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Loral Qualcomm
7375 Executive Place, Suite 101
Seabrook, MD 20706

* Hand Delivered

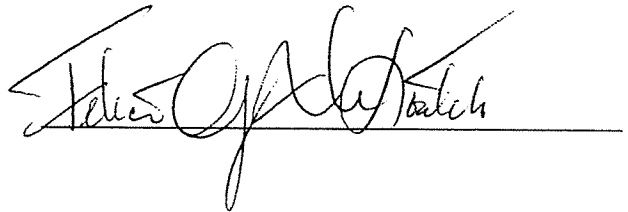
A handwritten signature in black ink, appearing to read "Dale Gallimore", is written over a horizontal line.

EXHIBIT 1

OVERVIEW OF ELLIPSO™ FINANCIAL PLAN

INTERNAL FUNDING

	Current Assets ^{1/} (in millions)	Operating Income ^{1/}
Israel Aircraft Industries	See Note 2	\$1,300.0 (gross sales) ^{2/}
Westinghouse Electric Corporation	\$ 4,774.0	(\$ 326.0)
Harris Corporation	\$ 1,698.3	\$ 111.8
Barclays de Zoete Wedd Limited	£ 1,202.0	£ 501.0
Mobile Communications Holdings, Inc.	\$ 8.0	

Total Management Commitments: \$ 600,000,000 +

VENDOR FINANCING

	Committed Funds	Additional Funds Available
	(in millions)	
Arianespace/Banque Nationale de Paris	\$ 45.0	\$ 255.0
AEC-Able Engineering	\$ 93.0	
ESKOS	\$ 160.0 ^{3/}	
Satellite Transmission Systems	\$ 10.0	
IBM	\$ 5.0	
Northern Telecom	\$ 4.0	
CSC	\$ 3.0	

^{1/} As of the end the of last annual reporting period for which data are available.

^{2/} Information on current assets is not publicly available.

^{3/} While MCHI is confident that BNP will arrange 85% of the financing for launch costs in accordance with the letter submitted herewith, it also has the option of using vendor financing committed by ESKOS.

VENDOR FINANCING (continued)

	Committed Funds	Additional Funds Available
	(in millions)	
Spectrum Astro	\$ <u>206.0</u>	
Total	\$ 526.0	

OTHER SOURCES OF FUNDS

	Committed	Additional Funds
	(in millions)	
Spectrum Network Systems	\$ 100.0	
Cable & Wireless		\$ 275.0
Voyager Communications	\$ <u>5.0</u>	\$ 15.0
Total	\$ 105.0	
Grand Total Vendor and Other Sources	<u>\$ 639.0</u>	

103616

MOBILE COMMUNICATIONS HOLDINGS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEET
November 30, 1994

ASSETS

CURRENT ASSETS

Cash		\$ 1,257,445
Prepaid Expenses		\$ 2,740
Total Current Assets		\$ 1,260,185

PROPERTY, PLANT, AND EQUIPMENT

Computer and Office Equipment		\$ 45,324
Less: Accumulated Depreciation		\$ (13,786)
Net Property, Plant, and Equipment		\$ 31,537

OTHER ASSETS:

Work-in-Progress		\$ 400,000
Deposits & Advances		\$ 35,400
Organization Costs		\$ 4,600
Total Other Assets		\$ 440,000
TOTAL ASSETS		\$ 1,731,722

LIABILITIES AND STOCKHOLDERS' EQUITY

CURRENT LIABILITIES

Accounts Payable		\$ 875,880
Accrued Expenses		\$ 52,668
Total Current Liabilities		\$ 928,548

STOCKHOLDERS' EQUITY

Common Stock		\$ 33,322
Paid-in-Capital		\$ 4,603,289
Retained Deficit		\$ (3,833,437)
Total Stockholders' Equity		\$ 803,174
Total Liabilities and Stockholders' Equity		\$ 1,731,722

NOTES: Other Amounts Due

1. Mobile Communications Holdings, Inc. and its subsidiary Ellipsat International, Inc. have entered into contracts with outside parties that allow them to receive up to approximately \$7,400,000, contingent upon their obtaining certain license approvals and reaching certain project milestones.

2. Noncontingent receivables of \$5M as of January 2, 1995 must be added.

3. Total irrevocable financing from MCHI is \$1.7M + \$7.4M + \$5M = \$14.1M

EXHIBIT 2



Ben Gurion International Airport, 70100 Israel
TEL: 972-3-9712513, FAX: 972-3-9358172

January 3, 1995

Dr. David Castiel
President & CEO
Mobile Communications Holdings, Inc.
1120 19th Street ,NW, Suite 460
Washington, D.C. 20036

Dear Dr. Castiel:

This letter is submitted by Israel Aircraft Industries Ltd. ("IAI") in support of the application of Mobile Communications Holdings, Inc. ("MCHI") for a new low-Earth-orbit mobile satellite system (the "Ellipso Project").

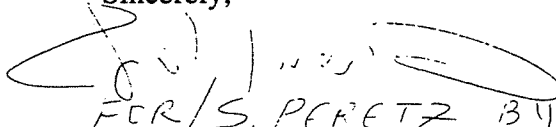
As Chief Financial Officer of IAI, I can attest that the revenues of IAI for 1994 exceeded US\$ 1.4 Billion and the assets of IAI for 1994 were more than US\$ 1.6 Billion.

IAI, as part of our continuous support of the Ellipso Project, has obtained a commitment from ESKOS S.A., the official representative of the Russian Space Agency (RKA) to finance the entire launch requirements of the first deployment of the Ellipso™ System (see copy of the Letter of Commitment attached hereto as Annex 1). As you know, the value of this commitment is approximately US \$160 Million. In addition, we have obtained a letter of intent from a major Israeli investment firm, CLAL Industries Ltd. ("CLAL"), for the finance of up to US\$ 40 Million of the IAI workshare in the Ellipso project (see a copy of the letter of intent attached hereto as Annex 2).

IAI has reviewed the MCHI FCC application and its business plans for the satellite system construction and operation and based thereon we are highly confident that Ellipso's progressive deployment approach will ensure the project's ultimate success in the marketplace.

Based upon all of the above, we therefore are prepared to expend the necessary funds to support the Ellipso™ Project, subject to normal business reviews of market and business conditions and progress to assure acceptable levels of risk and return.

Sincerely,


FCR/S. PERETZ BY
Chief Financial Officer
Israel Aircraft Industries Ltd.

J. FISHMAN

January 1st, 1995

CLAL INDUSTRIES LTD. כ"ל תעשיות בע"מ



Mr. Moshe Keret, President
Israel Aircraft Industries Ltd.
Ben Gurion International Airport
ISRAEL

Dear Mr. Keret,

Re: "Ellipso" Project

This Letter is submitted by Clal Industries Ltd. ("Clal") to Israel Aircraft Industries Ltd. ("IAI") in support of IAI participation in the project (the "Project") of Mobile Communications Holdings, Inc. ("MCHI") for a new low-Earth-orbit mobile satellite system (the "Ellipso System"). As we have been informed by IAI, MCHI has applied to the Federal Communication Commission of the United States Government ("FCC") for a license to operate the Ellipso System. We have also been supplied various documents and data concerning the Project, including the MCHI business plan for same.

After a preliminary review of the material received and in reliance thereon with no independent verification of any of its assumptions, we would like to inform you that in the event that MCHI is awarded a License by the FCC, it is our intention to commit an investment of up to US\$ 40 Million toward the workshare of IAI in the Project. Such intention is subject to, among others, (i) the finalizing of the specific terms of the proposed financing, (ii) the finalizing of the necessary business agreement with IAI regarding Clal's equity and workshare participation in the Project, (iii) the completion of all required "due diligence" process including all business, economic, legal and accounting issues and (iv) the approval by all required Clal's committees of the final terms of such financing.

As you know, the revenues of Clal Industries Ltd. for 1994 is projected to exceed US\$ 1,070 million. For September 30, 1994, "Clal Industries" Shareholders Equity was \$ 643.7 million and the Assets were US\$ 1,776 million.

I am looking forward for the possibility of a joint-venture between our companies in such exciting project. Please do not hesitate to call me with any question you may have.

Sincerely,

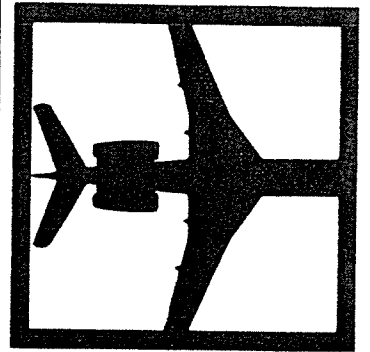
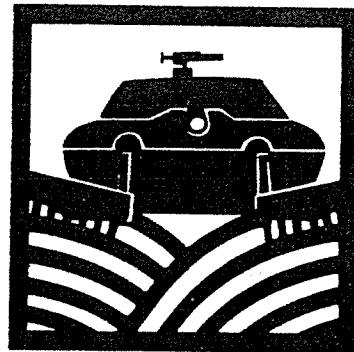
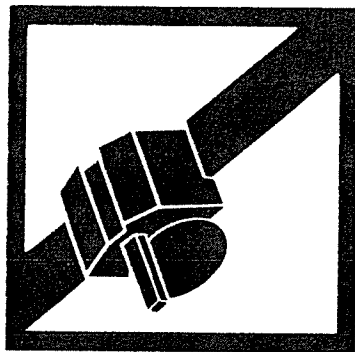
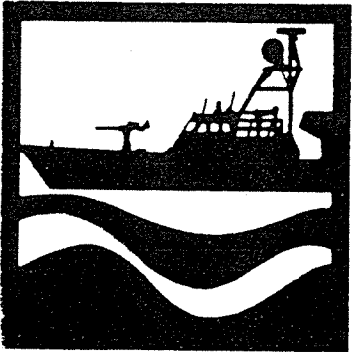
Mair Leiser, President
Clal Industries Ltd.

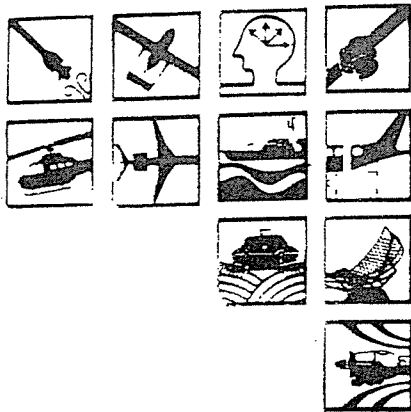
BOOKART.DOC
01/01/95

CLAL HOUSE, 9 UNUYANOV ST., TEL-AVIV 61114
P.O.B. 11600, TEL-AVIV 61114, ISRAEL. TEL. 072-5280260. FAX. 072-5280263
ת.ד. 11600, תל-אביב 61114, טל. 072-5280260, פקס 072-5280263



Capability
The True
Measure
Of Competence





CORPORATE SCOPE

IAI's multinational aerospace organization provides clients world wide with custom to standard military and civil air, sea, land and space platforms, systems, structures and components, and a wide range of equipment, upgrades, conversions and associated services. From 1953 to the present and into the future, IAI is a proven single source for trusted applied-technology solutions.

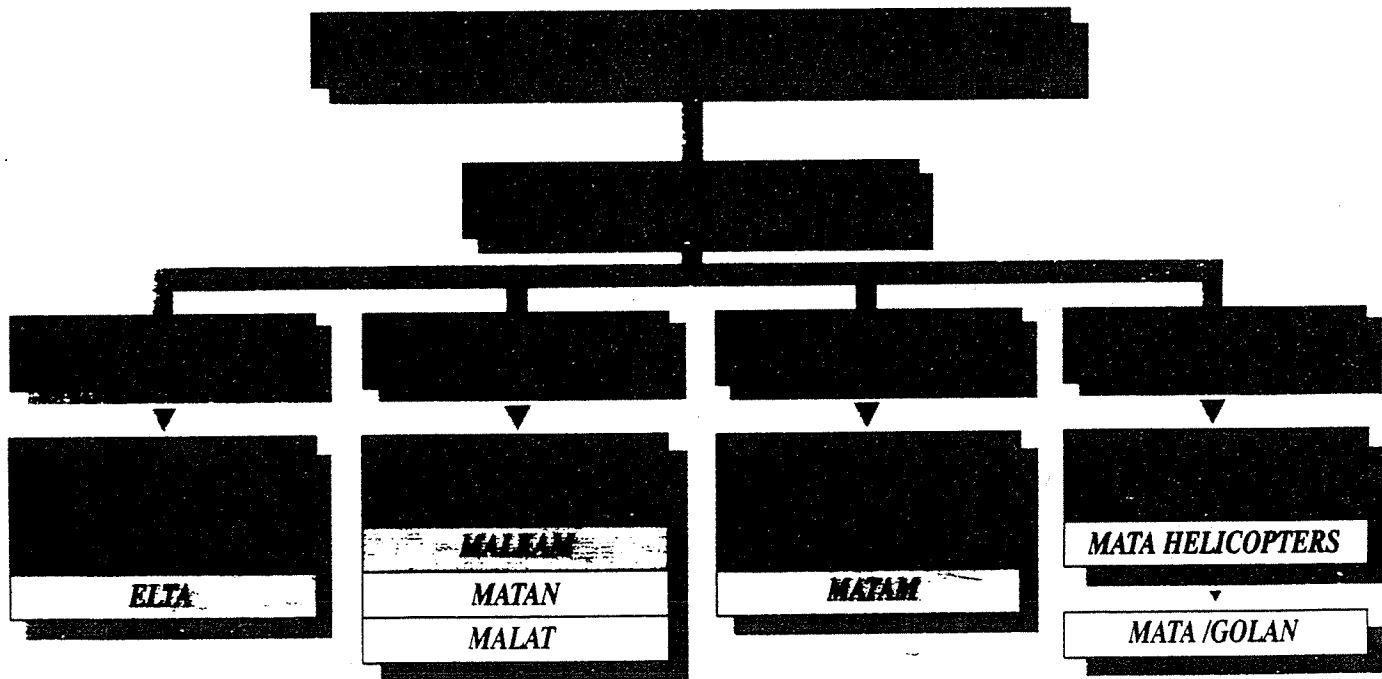
Civil Aircraft Products and Services: Manufacture of the Astra series of business aircraft; service of narrow and wide body transport aircraft.

Military Aircraft: Service and upgrading of multi-mission combat and trainer aircraft.

Space Technology: Mini-satellites, launchers, payloads, subsystems, components; services; system integration; cryogenic transfer modules.

Electronics and Electro-optics: Radars stabilized multi-functional day/night payloads; active and passive EW; signal processing; COMINT/SIGINT/ELINT /ESM; secure communications; C²I and C³I; air traffic control systems .

Combat Systems and Missiles: ATBM; Ship Point-Defense System, Tactical Battlefield Missile; S/S Anti-Ship Missile; guided bombs; fire command and control systems; manned and unmanned mine-clearing and engineering systems; AFV's; MBT and AFV upgrades; FPB's and missile craft; integration and upgrading of major sea platforms.



BEDEK AVIATION DIVISION

A total single-site aircraft service center. Local and customer base airline, support. Repair, overhaul, retrofit, modification, conversion, remanufacture and customizing of civil and military airframes; 30 types of aircraft, 25 types of engines, 6,000 types of accessories and components. The Division provides a comprehensive engineering capability approved by the Israel CAA, Chile CAA, German LBA, Kenya CAA, UK CAA, US FAA-125F (MKIY-325K). Military authority approvals include the Israel Air Force (IAF), U.S. Air Force (USAF) and others.

Tel: 972-3-9357141
Fax: 972-3-9354577

IAI's Bedek Aviation Division is made up of four autonomous business plants:

SHAHAM

Aircraft Maintenance and Upgrading

Tel: 972-3-9358202
Fax: 972-3-9358953

Service and conversion of B-747s, including Section 41; retrofit and upgrading of numerous types of combat and trainer aircraft.

The former is accomplished in three special large aircraft service facilities, the latter on a production line basis.

The plant also performs on a continuing basis maintenance of numerous heavy transport aircraft and conversion of airframes to customer defined transport, tanker, EW recon and maritime patrol mission configurations. The facility is approved by major civil and defense agencies and OEM's.

MASHAM

Engine Maintenance

Tel: 972-3-9354156
Fax: 972-3-9358988

Overhaul, repair, retrofit, outfitting and testing of 25 types of civil and military engines. In addition to JT9D turbo-fan and turbo-jet power plants, service includes JT9D, JT3C, JT4, JT8 series, PT6, F-100, J52, TF33, J79, F-110, T-64, T-53, C-250 and ATAR-9C. The facility is approved by major civil and defense agencies and OEM's.

MATAM

Aircraft Maintenance

Tel: 972-3-9357181, 9353017
Fax: 972-3-9358992

Provides complete 24-hour on-site airline support throughout customer network. Offers tailored fly-by-hour maintenance services. Approved by major civil and defense regulatory agencies and OEM's.

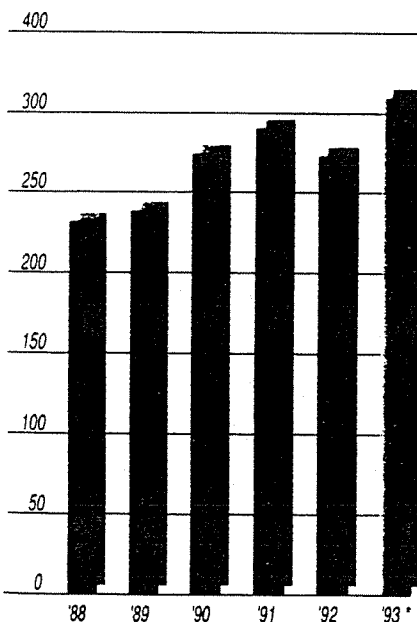
MASHAV

Components Maintenance

Tel: 972-3-9357395
Fax: 972-3-9357757

Maintenance, overhaul, repair, modification and test of 6,000 types of aircraft accessories and instruments. Approved by major civil and defense regulatory agencies and OEM's.

Bedek Aviation Division Sales (In Millions Of Dollars)



* Forecasted



AIRCRAFT DIVISION

Integrated development, CAD/CAM, assembly, test and certification of aircraft structures civil and military, including: Astra business jet and UAV's, subcontracting, machining and fabrication of primary and secondary aircraft structures, engine subassemblies, and parts, including hot-end components.

Tel: 972-3-9353246
Fax: 972-3-9353453

IAI's Aircraft Division is made up of five autonomous business plants:

TASHAN Engineering Center

Tel: 972-3-9353047
Fax: 972-3-9355048

A full-spectrum aerospace technologies plant providing analysis, design, development, integration and test for customer platforms, systems, and materials requirements. Facilities include a full range of wind tunnels, stress and materials testing.

Tashan's engineering capabilities are utilized by international and local civil and defense aerospace clients.

MATAN Civil Aircraft

Tel: 972-3-9358561
Fax: 972-3-9358071

Performance encompasses continued development for future civil aircraft. This activity is undertaken on an independent and potential joint venture basis. Matan manufactures IAI's Astra family of business jets and provides conversion on Westwind aircraft as well as undertaking product support on IAI-produced Astra, Westwind and Arava STOL aircraft.

MALKAM Aeronautical Manufacturing and Subcontracting

Tel: 972-3-9353154
Fax: 972-3-9355031

The plant provides major substructures and components, manufactured for domestic and foreign clientele. Customers and risk-sharing associates include a large number of major U.S. and

other offshore prime contractors as well as a cross section of other IAI cost centers. Specialized performance encompasses the fabrication of standard and advanced material structures, nacelles and other engine parts including hot-end components.

LAHAV

Tel: 972-3-9353163
Fax: 972-3-9353687

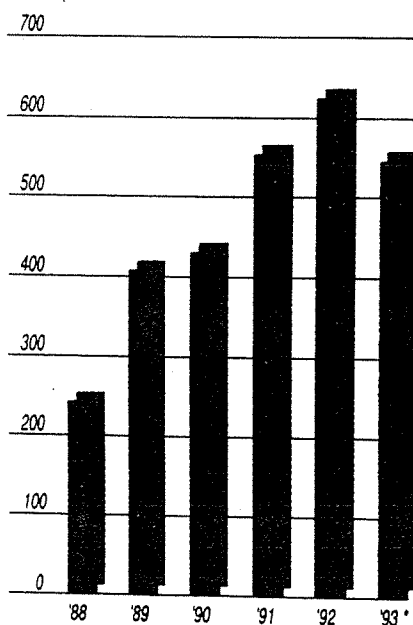
The facility performs the development and manufacture of customer-specified advanced combat aircraft. It also undertakes the retrofit, design, integration, and assembly of advanced KFIR aircraft. IAI continues to actively market upgraded Kfir combat aircraft formerly serving the Israel Air Force. To date, both new and repeat customers in several countries have expressed a strong interest in these modernized platforms. The Kfir remains the most accurate ground attack platform in the IAF inventory and has the proven ability to fight its way to the target and safely home, even in today's adverse air combat environment.

MALAT Unmanned Air Vehicles

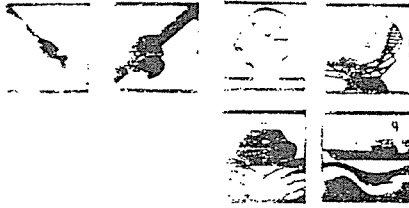
Tel: 972-3-9357349
Fax: 972-3-9354175

Concept, design, integration and assembly of a family of multimission UAV's, their airframes, on-board components, operational control systems, launch and retrieval systems and equipment. Newest system offered by the plant is the high-endurance Searcher.

Aircraft Division Sales (In Millions Of Dollars)



* Forecasted



ELECTRONICS DIVISION

Divisional scope encompasses the analysis, concept, design, development, integration, manufacture and testing of defense and civil systems; air-land-sea electronic, optronic, inertial systems and components, and performs a complete space technologies products and services capability.

Tel: 972-3-5360450
Fax: 972-3-5363975

IAI's Electronics Division is made up of four autonomous business plants:

MBT

Systems and Space Technology

Tel: 972-3-5314005
Fax: 972-3-5314130

Design and manufacture of smart bombs, fire control systems, seeker heads, offensive and defensive precision missiles, training and simulator systems and image processing. Space capability: complete civil satellite development and ground service.

TAMAM

Precision Instruments Industries

Tel: 972-3-5315003
Fax: 972-3-5315140

Design, manufacture and inetgration of inertial stabilized platforms, navigation and optronic systems and components for land, sea and air. Specialized civil space components.

MLM

System Engineering and Integration

Tel: 972-8-272511
Fax: 972-8-272890

The C³I house of IAI.MLM offers: integrated real time video compression systems, image processing and enhancement, tactical switching, communication networks and systems, air traffic control systems, avionics products, 1553 bus, communication test equipment, telemetry work stations and products, and image processing systems. MLM is the prime contractor for the development of the arrow anti tactical ballistic missile (ATBM).

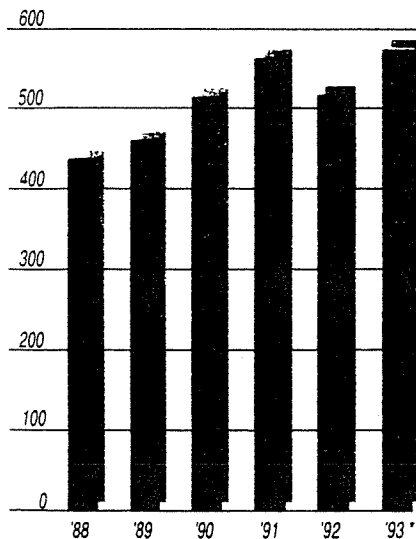
ELTA

Electronics Industries, Ltd.

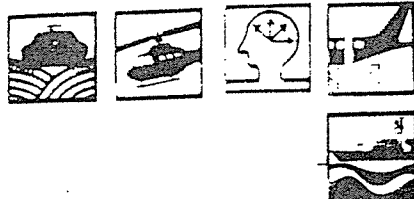
Tel: 972-8-572543. 561872
Fax: 972-8-564568

Design and manufacture of military electronic systems and components; air-land-sea radars; EW, ECM, SIGINT, ELINT, COMINT systems; secure communications; computer and automatic test equipment, signal processing and AI; command and control. DME systems for civil and defense needs.

Electronics Division Sales (In Millions Of Dollars)



* Forecasted



TECHNOLOGIES DIVISION

Design through production of civil and military aircraft assemblies, hydraulic, electro-mechanical and pneumatic components and dynamic systems. Combat vehicles and engineering equipment, guns and platforms, fast patrol boats and aircraft seats.

Tel: 972-8-239000
Fax: 972-8-246629

The Technologies Division is made up of three autonomous business plants.

RAMTA

Aerostructures and Systems

Tel: 972-57-272231
Fax: 972-57-276770

Combat engineering equipment; fighting and support vehicles; fast patrol boats; ground support equipment and aircraft structures; advanced materials; applications, design and manufacture.

SHL

Servo Systems Lod

Tel: 972-8-222780
Fax: 972-8-222792

Design, development and manufacture of military and civil hydraulic systems and components for land, sea and air. Aircraft landing gears and shock absorbers, servo-hydraulic actuators for flight control systems. Vehicle hydraulic power packs and shock absorbers, turret stabilization systems.

Know-how transfer training and test equipment.

MATA

Helicopters

Tel: 972-2-841351
Fax: 972-2-841319

Helicopter structures, systems, and components maintenance; crash repair; overhaul, modification and upgrading. CAD/CAM-assisted cable and harness design and fabrication.

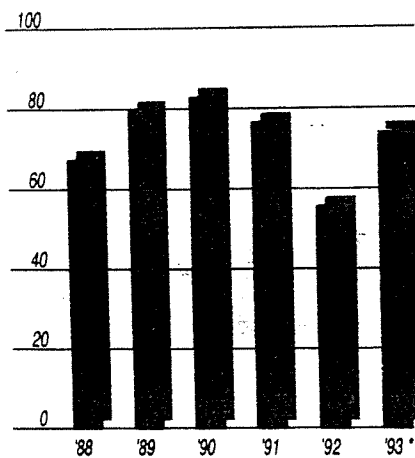
MATA/GOLAN

Industries

(a subsidiary of MATA Helicopters)

Design and manufacture of aircraft crew and passenger seats, including innovative crash attenuating seats; aircraft wheels and cockpit controls.

Technologies Division Sales (In Millions Of Dollars)



* Forecasted

CORPORATE UNITS

MAMAN

Data Systems Center

Tel: 972-3-9353493

Fax: 972-3-9355040

Total software design for main frames, minis and micros. Products include: budget control systems, data collection systems, data processing software, decision support systems, ILS (Integrated Logistic Support) packages, inventory control systems, maintenance packages and management information systems.

MHT

Technical Publications
& Training Center

Tel: 972-3-9357801

Fax: 972-3-9358985

IAI's facility for the provision of custom multilingual technical publications and training service.

Services supplied in many languages at MHT or at customer's specified facilities.

EXHIBIT 3



PHILLIP W. FARMER
PRESIDENT AND
CHIEF OPERATING OFFICER

December 21, 1994

Dr. David Castiel
President and Chief Executive Officer
Mobile Communications Holdings, Inc.
Suite 460
1120 19th Street, N.W.
Washington, D.C. 20036

Dear Dr. Castiel:

I was pleased to have the opportunity to meet with you last week and review the progress you have made with the Ellipso satellite system. It is clear that your system has significant advantages over the other solutions being proposed. I was equally impressed with your success in ensuring the financing necessary to construct, launch, and operate the system.

I want to assure you that Harris Corporation remains committed to providing the significant financial and technical resources to the Ellipso project consistent with the terms of our present business agreement with MCHI.

You may certainly provide a copy of this letter to the Federal Communications Commission as part of your application to construct the Ellipso system.

Yours truly,

A handwritten signature in black ink, appearing to read 'P. W. Farmer', written in a cursive style.

EXHIBIT 4



BZW DIVISION

Investment Banking

222 Broadway New York NY 10038

Telephone 212 412 7508 (direct) or 412 4000 Fax 212 412 5711-7669

JOHN F. AMBRUZ

Managing Director - Mergers & Acquisitions

January 2, 1995

Dr. David Castiel
Chairman and CEO
Mobile Communications Holdings, Inc.
1120 19th Street, N.W.
Washington, D.C. 20036

Dear David:

BZW has reviewed the petitions to deny submitted by the other applicants for Big LEO licenses filed with the FCC on 22 December, 1994.

We note that competing Big LEO applicants have attacked the financial qualifications of MCHI. There also appears to be confusion among the petitioners to deny regarding the purpose of MCHI's inclusion of Barclays de Zoete Wedd Limited's letter dated 16 November 1994 which stated, subject to certain conditions, that should there be a shortfall in financing from the sources which you had identified, a significant portion of Ellipso's Financing Requirement (as defined in that letter) could be available through a combination of a variety of public and private financing mechanisms. The purpose of that letter was to enhance MCHI's filing by providing investment banking advice as to the potential availability of external financing. It is interesting to note that while the other applicants appear likely to rely on a much larger proportion of external financing than Ellipso, no other applicant has chosen, or was able, to provide a similar opinion as to external financeability. In fact, some of the competing applicants have explicitly stated in their SEC filings that there can be no certainty that external financing will be available and offer no opinion on the likelihood of its availability, even though their stated intent is to rely on it. By contrast, in support of MCHI's filing, Barclays de Zoete Wedd Limited has given its explicit view that external financing is likely to be available.

As you are aware from our previous discussions, we believe that the key attributes for successful financing of a Big LEO application are a combination of the financial support of credible technical partners, superior system design, speed of implementation and manageable overall cost. The overall cost is a particularly important factor given the high projected costs of some of the competing LEO systems which, arguably, are too large to be supported by the balance sheet of any single applicant.



Dr. David Castiel

2 January 1995

Page 2.

This point is explicitly recognized by other applicants which, while purporting to comply with the FCC requirements, are making arrangements to finance the projects from sources other than those referred to in their filings. We note that competing Big LEO system sponsors have publicly stated that their respective deficiencies in financing will be met through unidentified outside sources of capital and that **several of these deficiencies are multiples of the entire cost of Ellipso**. In our role as investment bankers, we regularly review companies' financial statements to assess their capacity to finance various projects and acquisitions and to evaluate the amount and nature of their financial commitments. Similarly, we have reviewed the competing Big LEO system filings and the public filings of their respective sponsors. Based on that information, we believe that none of the competing Big LEO sponsors has made an irrevocable financing commitment that remotely approaches their respective LEO system cost, or has assumed any significant liability (contingent or otherwise) regarding their respective Big LEO systems.

We have examined MCHI's various vendor and shareholder commitments. Based on the documents which we have reviewed and on the identity of MCHI's partners and shareholders, all of which are world class organizations and leaders in their respective fields, we believe that the commitments that MCHI has secured from the Ellipso partners and shareholders represent strong commercial and financial support for Ellipso and provide MCHI with the current financial ability to proceed with the deployment of the Ellipso system. This, combined with our review of competing LEO filings, leads us to conclude that, given the substance of the Ellipso shareholders and partners and comparative systems costs, Ellipso's financing arrangements are equal or superior to every competing Big LEO filing.

Sincerely yours,

A handwritten signature in black ink, appearing to read "Dr. David Castiel", with a long, sweeping horizontal line extending to the right.

EXHIBIT 5



DIVISION INTERNATIONALE
Direction des Financements Spécialisés
Département des Financements de Projets
27 Boulevard des Italiens
75450 PARIS Cedex 09

Tel : 40.14.57.75
Fax: 40.14.69.25
Telex : 281950

December 22nd, 1994

Mr David Castiel
President and Chief Executive Officer
Mobile Communications Holdings, Inc
1120, 19th Street NW,
Suite 460,
Washington, D.C. 20036
USA

Dear Mr Castiel,

Further to our various discussions, we understand that your company is presently applying to the Federal Communications Commission of the United States for a licence to launch and operate a constellation system of low earth orbit satellites by the name of ELLIPSO providing mobile voice services ("the Project"). This licence would allow the Project to have orbital slots for such satellites constellation and to provide mobile voice services within the United States.

We understand that your equity partners in this Project are presently Cable & Wireless Plc, Westinghouse Electric Corp, Harris Aerospace, Arianespace, Barclays Bank plus other international investors, and that the Project overall cost is today estimated to US dollars 650 million.

Given the present informations that we presently have on the Project, we believe that the financing of the US dollar 300 million Launch Contract signed with Arianespace under a medium-term export credit structure (guaranteed by European Export Credit Agencies) could be envisioned, and we confirm our interest in principle to assisting you in arranging on a best effort basis such financing subject to the following conditions :

- Issuance of an FCC licence in favour of your company to launch and operate the hereabove mentioned satellites system,
- Export Credit Agencies guarantees issued for such financing,

- Reception of all updated relevant informations and documentation on the Project,
- Review of all aspects of the Project : legal (structure and procurements contracts), regulatory (licences to operate the system in various parts of the world), technical and economic feasibility,
- Independent review of consultants of our Bank and Export Credits Agencies of :
 - * potential markets,
 - * projected costs (including the capital expenditures programme),
 - * technical feasibility (including projected capacity),
- Completion of the overall financing of the Project (i.e. : equity and debt sources of financing) under a scheme acceptable to our bank.

At this stage of the Project where many parameters are still evolving, it is not possible to provide a full outline of the terms and conditions of such financing, but certainly such export credit facility would include typical features as follows :

a) Amount

Up to 85 % of the price of the launch services, optional and associated services as provided in the Launch contract signed with Arianespace.

b) Duration and repayment

Overall duration ; approximately 6 to 7 years.

The credit facility would be divided in two phases ; a utilisation phase followed by a 5 year repayment phase that would start from the Launch Date or at the latest at a fixed calendar date to be determined at signing, and repayments would be made during that phase in equal semi-annual instalments.

c) Interest Rate

The facility would pay interest based on LIBOR plus a margin to be determined which would take into account the level of guarantees provided to our bank by the Export Credit Agencies. Fixed rates are not available any longer.

d) Fees and expenses

Other fees (i.e. : Commitment, Arrangement, Management fees) would have to be defined in due course.

We would ask you to pay or reimburse all out-of-pocket expenses, including fees to all external experts and legal advisors retained by us in connection with our services, and especially in the preparation, negotiation, syndication and signature of such facility agreement.

e) Covenants

The facility would be subject to financial ratios to be defined that would certainly include inter alia ratios of senior debt to equity , senior debt to operational cash-flow , senior debt service to operational cash-flow.

f) Security Package

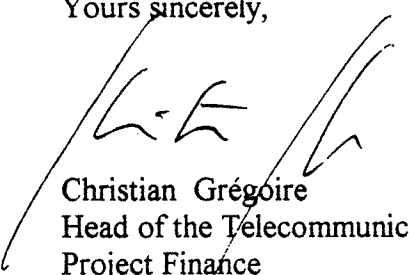
The security package that would be acceptable to the Export Credit Agencies and our bank should include inter alia an assignment of assets and revenues of the Project during the life of the financing and an adequate scheme covering all technical risks, either by insurance, by commitments from suppliers or by any other mean. Such security package should address among other things the following issues which are specific for this type of project :

- delays in the delivery of the satellites (including in that case indemnity to be paid to the launcher and financial costs),
- delays in the launch of the satellites (including risk that incentive payments might become due before launch, and financial costs),
- necessity to change launcher (additional cost, consequential delays and financial costs) should a major failure occur on a previous flight of the selected launcher.

Obviously the security package would include launch and in-orbit insurances which are a pre-requisite for this type of financing. We understand that the launch insurance (covering the launch portion itself but excluding the satellites) is provided by Arianespace for the Ariane 5 launchers with a right to relaunch, in the case of a failure, at no additional cost to the customer.

We look forward to further discussions and working with you on this important Project and remain,

Yours sincerely,

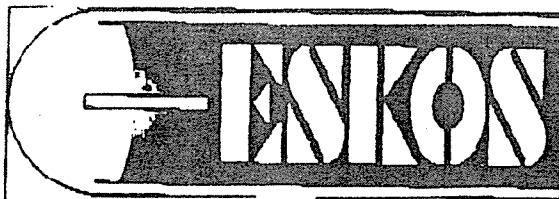


Christian Grégoire
Head of the Telecommunications and Services Division
Project Finance



Christophe Boucher
Vice-President

EXHIBIT 6



3, rue des Buttes Montmartre
93400 SAINT-OUEN, FRANCE
Tél : 33 (1) 40 11 66 34 - Fax : 33 (1) 40 12 03 17

FAX

FROM: V. KOUZNETSOV

TO: Dr. David CASTIEL
President & Chief Executive Officer
COMPANY: Mobile Communication Hld.
Inc., 1120 19th N.W., suit 460
Washington, D.C. 20036
FAX: 001(202)466.44.93

N/Ref : 94/379/YI

V/Ref :

Saint Ouen, le 3/1/95

COPIES:

This facsimile consists of 1+ pages including this page

SUBJECT: Vendor Financing

Dear Dr. CASTIEL,

The ESKOS S.A. company is the representative of the Russian Space Agency and the National Space Agency of Ukraine in Europe. As the president of ESKOS, I hereby confirm our intention to launch MCHI's ELLIPSO™ project eight (8) BOREALIS satellites in inclined elliptical orbits. This could be accomplished utilising four launch vehicles at a cost of \$160 million U.S. dollars if services are rendered not later than 1998.

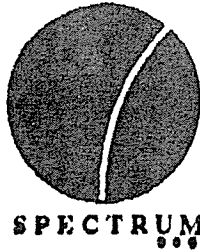
ESKOS agrees to provide the launch of the BOREALIS satellites in exchange for equity in MCHI, calculated at a rate of the most recent post-license transaction.

We have reviewed MCHI's Amended FCC Application and business plans and are highly confident of MCHI's ability to see this project through to completion, and look forward to providing the launch service. If, however, it appears to us that there is a material change in circumstances affecting acceptable levels of risk and return or if MCHI is unsuccessful in obtaining an FCC license, we retain the right to terminate at any time our efforts in this regard.

Sincerely

V. KOUZNETSOV
President

EXHIBIT 7



Spectrum Network Systems Limited
Level 11
50 Margaret Street
GPO Box 5121
Sydney NSW 2000, Australia

+61 2 262 4232
Facsimile +61 2 262 4001

December 30, 1994

Dr. David Castiel
President & CEO
Mobile Communications Holdings, Inc.
1120 19th Street, NW, Suite 460
Washington, D.C. 20036

Re: Amended Application of Mobile Communications Holdings, Inc. for Authority to Construct, Launch, and Operate the Ellipso™ Satellite System

Dear Dr. Castiel:

The purpose of this letter is to clarify our support of the November 16, 1994 amendment of the FCC license application of Mobile Communications Holdings, Inc. ("MCHI").

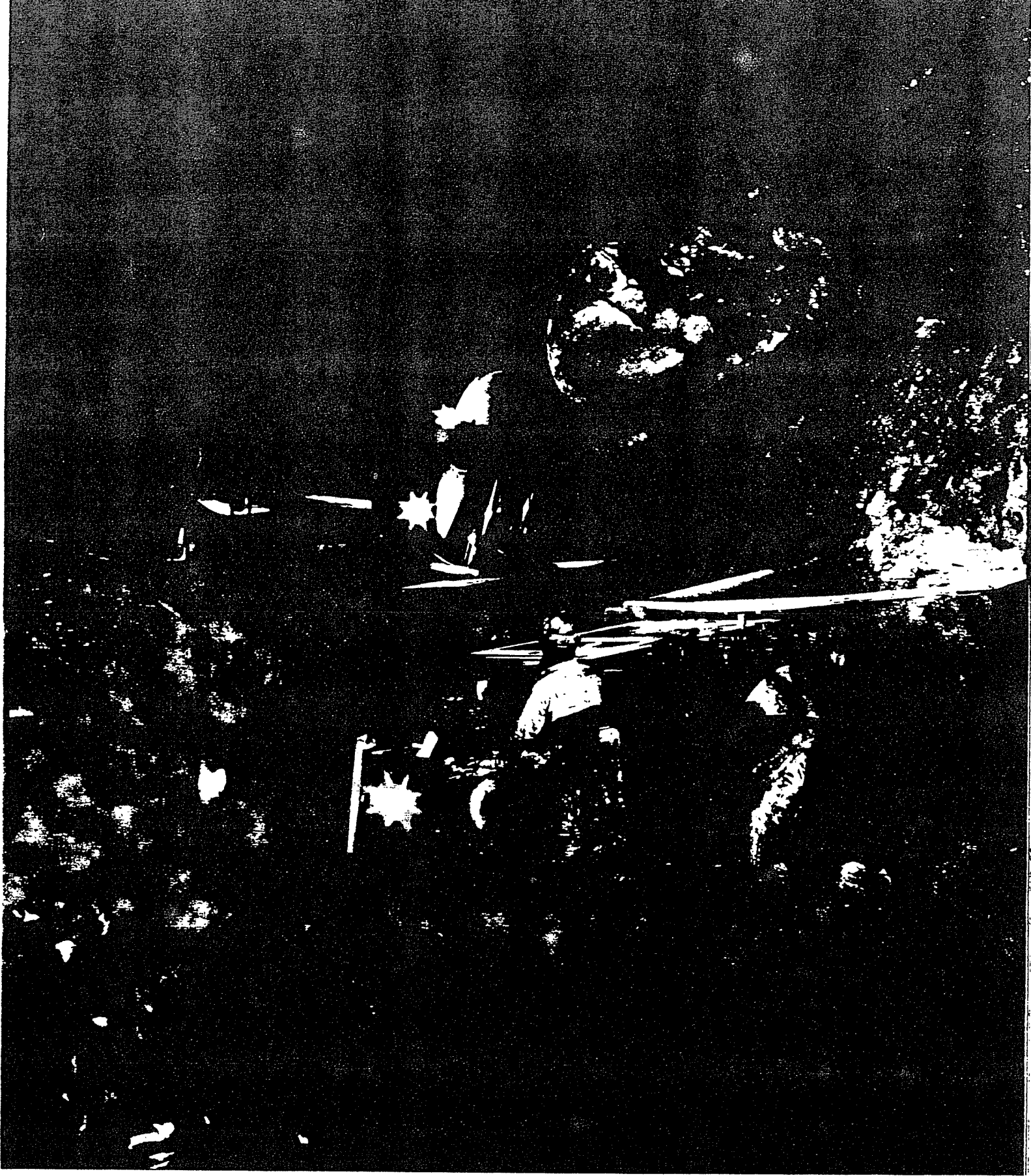
As a participant in the Ellipso™ project we support the development of the Ellipso™ Satellite System and are willing to expend the necessary funds to construct, launch and operate the satellite system for one year after launch of the first satellite in the constellation.

Our involvement in the Ellipso™ project, together with that of the other shareholders and technology partners, guarantee the development and deployment of the Ellipso™ satellite system.

Absent any material change in circumstances, and subject to a grant of license to MCHI, we are committed to the Ellipso™ project.

Spectrum Network Systems Limited
By: David Archer
Title: Director

SAVAGE



The continuous long term objective of Savage Resources is to be the safest, most efficient, most reliable and most profitable diversified minerals producer in the world and to earn and maintain the reputation of being focused on producing the best sustainable returns for the shareholders and of being the most desirable employer in the minerals industry.

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SAVAGE

SAVAGE RESOURCES LIMITED HAS BECOME A SUBSTANTIAL AUSTRALIAN MINING HOUSE WITH THREE MAIN OPERATING DIVISIONS SUPPLYING A SPREAD OF MARKETS. THE COMPANY HAS PARTICULAR EXPERTISE IN BASE METALS AND THIS WAS FURTHER ENHANCED DURING THE FIRST HALF OF 1994 WITH THE ACQUISITION OF ONE OF THE USA'S LARGEST ZINC PRODUCERS, UNION MINES INC (NOW SAVAGE ZINC INC).

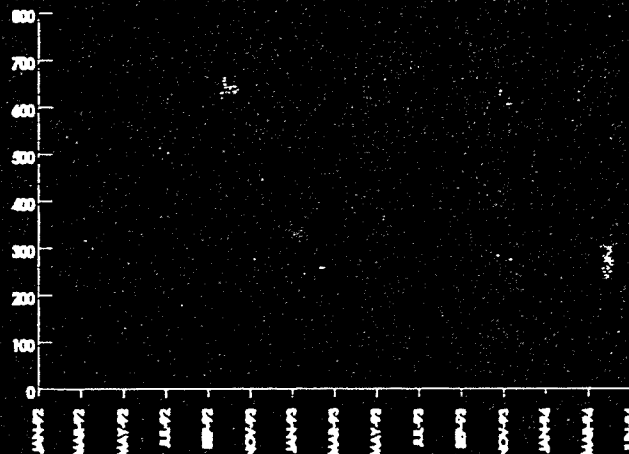
THIS JOINED THE COMPANY'S TWO OTHER MAIN ASSETS, THE ERNEST HENRY COPPER GOLD DEPOSIT IN NORTH QUEENSLAND, NOW IN THE EARLY STAGES OF DEVELOPMENT AND EXPECTED TO BEGIN PRODUCTION IN 1996-97, AND AN OPERATING COAL ARM. SAVAGE IS ALSO COMPLETING A FEASIBILITY STUDY OF AN IRON OXIDE PIGMENT BUSINESS IN TASMANIA (SAVOX COLOURS) AND IS AN ACTIVE MINERAL EXPLORER IN AUSTRALIA, NORTH AND SOUTH AMERICA.

THE COMPANY HAS ASSEMBLED A MANAGEMENT TEAM WITH INTERLOCKING SKILLS IN ALL ASPECTS OF MINERAL EXPLORATION, DEVELOPMENT, PRODUCTION AND MARKETING, AS AN ESSENTIAL PART OF REALISING ITS LONG TERM DEVELOPMENT PLANS.

SAVAGE IS ONE OF THE TOP 100 COMPANIES LISTED ON THE AUSTRALIAN STOCK

EXCHANGE AND THE MARKET CAPITALISATION GRAPH REFLECTS THE DRAMATIC TRANSFORMATION OF THE COMPANY IN THE PAST YEAR, FOLLOWING CONFIRMATION OF SAVAGE'S OWNERSHIP OF THE ERNEST HENRY DEPOSIT AND THE SERIES OF DEVELOPMENT INITIATIVES MADE SINCE THEN.

\$ Australian million



SAVAGE

Savage Resources Limited

ZINC OPERATIONS

COPPER/GOLD MINE DEVELOPMENT

COAL OPERATIONS

PIGMENTS

SAVOX

SAVOX

Deposits of yellow, brown, black and red natural iron oxide pigments in northwest Tasmania were developed to feasibility study stage.

EXPLORATION



ERNEST HENRY MINING PTY LTD

The development of the Ernest Henry copper gold mine is on track for commissioning in late 1996. Depending on finalisation of the mining rate, copper production is forecast at 80,000 to 100,000 tpa together with up to 120,000 oz gold per year. The mine life is expected to be at least 15 years.

100%

**SAVAGE ZINC
SAVAGE ZINC INC.**

Savage Zinc produces around 100,000 tonnes of zinc metal per year representing about 10% of US consumption from four mines, three concentrators and an electrolytic zinc refinery based in Tennessee employing 673 people.



33.3%

TOGARA NORTH JOINT VENTURE

Drilling commenced on a potentially large, high grade underground steaming coal resource located in the South Bowen Basin, Queensland.



LIDDELL COAL PROJECT

Production rate from the Liddell and Foybrook joint ventures was raised to 1.8 mtpa and productivity increased dramatically over the past year. Forecast production for current year is 2 mtpa.

5%

COPPER/GOLD, EARNING 50-75%

MUNDI MUNDI

Exploration for copper gold orebodies commenced on geophysical anomalies located northwest of Broken Hill.

DIAMONDS 100%

LAKELAND DOWNS

Reconnaissance exploration for diamonds in an area of kimberlitic diatremes in North Queensland.

COPPER/GOLD 49%

CLONCERRY

Ernest Henry Mining identified drill targets on leases located over magnetic anomalies in the vicinity of Ernest Henry.

ZINC, GOLD & BASE METALS 100%

SOUTH AMERICA

The search for zinc resources primarily as feedstock for the Clarksville Refinery and other base metal and gold resources was initiated in Peru, Bolivia and Chile.

ZINC 100%

NORTH AMERICA

Exploration programmes designed to increase reserves at Savage's Tennessee mines were put into place.

IRON ORE 100%

LONG PLAINS

Exploration commenced on a lens of potentially high grade iron ore located 1.5 kilometres south of the Savage River iron ore mine.

Year ended 30 June (A\$'000 unless stated)

For the Year	1994	1993
Operating revenue	57,326	31,371
Operating loss before abnormal items	(3,298)	(4,820)
Operating loss after tax	(2,396)	(4,441)
Cash flow from operating activities	(1,030)	(7,471)
Capital investment	291,840	6,816
Divestment	525	5,221
Proceeds from share issues and convertible notes	296,885	24,541
Proceeds from borrowings	75,000	3,354

At Year End		
Paid up capital	113,622	35,662
Shareholders' equity	470,723	181,195
Cash and deposits	75,518	16,333
Current assets	125,695	20,151
Total assets	528,616	218,423
Current liabilities	32,987	22,440

General Statistics		
Current ratio (Current assets/Current liabilities)	3.81	0.9
Employees	821	134

Sales Volume (tonnes)		
Coal	553,700	446,000
Zinc	15,721	-

EXHIBIT 8

30 December 1994

Attn: Dr. David Castiel
President & CEO
Mobile Communications Holdings, Inc.
Suite 460
1120 19th Street, NW
Washington, D.C. 20036

Re: Amended Application of Mobile Communications Holdings, Inc. for Authority to
Construct, Launch, and Operate the Ellipso™ Satellite System

Dear Dr. Castiel:

The purpose of this letter is to clarify our support of the November 16, 1994 amendment of the FCC license application of Mobile Communications Holdings, Inc. ("MCHI").

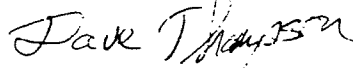
As a participant in the Ellipso™ project we support the development of the Ellipso™ Satellite System and are willing to expend the necessary funds to construct, launch and operate the satellite system for one year after launch of the first satellite in the constellation.

Our involvement in the Ellipso™ project, together with that of the other shareholders and technology partners, guarantee the development and deployment of the Ellipso™ satellite system.

Absent any material change in circumstances, and subject to a grant of license to MCHI, we are committed to the Ellipso™ project.

Sincerely,

W. David Thompson
President



WDT:ms

19 December 1994

Attn: Dr. David Castiel
President and CEO
Mobile Communications Holdings, Inc.
Suite 460
1120 19th Street, NW
Washington, DC 20036

Dear Dr. Castiel:

In connection with our discussions about manufacturing the Ellipso system satellite bus for Mobile Communications Holdings, Inc. ("MCHI"), we are able to supply the satellite bus vehicles and related elements along with vendor financing in the amount of \$206 million under standard terms and conditions. We have reviewed MCHI's current business plans and Amended FCC Applications. We are highly confident of MCHI's ability to complete this project and we look forward to providing this vendor financing.

As you know, Spectrum Astro is America's leading developer of high performance smaller space systems. We are also the fastest and one of the lowest-cost manufacturers of spacecraft bus systems. For example, we design and build the Department of Defense's (DoD) Miniature Sensor Technology Integration (MSTI) satellites, a series of sophisticated low-earth-orbit infrared surveillance satellites for ballistic missile detection and tracking. These satellites incorporate the forefront of sophisticated, lightweight small satellite technology developed by the Ballistic Missile Defense Organization. We recently received a United States Patent on the unique spacecraft bus design configuration which allows such a sophisticated design to be manufactured quickly and at low cost. We developed and delivered the first unit to the launch site in only 10 months -- a testimonial to the speed and efficiency of our design and manufacturing methods.

Spectrum Astro's superior performance on MSTI and over 35 other advanced space system research and development contracts between 1989 and 1993 made our company one of the fastest-growing technology companies in America during that period. We were listed at #19 on the most recent INC 500 list of America's fastest-growing technology companies.

Dr. David Castiel
19 December 1994
Page 2

We have participated in the Ellipso satellite system's development as system engineering and technical consultants since the origin of the project, so we thoroughly understand the system and its potential. Our current DoD bus design has over \$30 million in development cost previously invested which is readily applied to this commercial project. We look forward to working with you on this exciting effort. If, however, MCHI is unsuccessful in obtaining an FCC license or in the event of a material change in circumstances effecting acceptable levels of risk and return, we reserve the right to terminate our efforts in this regard.

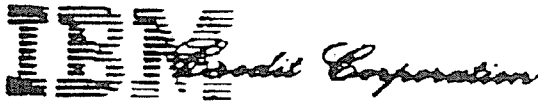
Sincerely,

A handwritten signature in cursive script that reads "W. David Thompson". The signature is written in dark ink and is positioned above the printed name and title.

W. David Thompson
President

WDT:bg

EXHIBIT 9



Office of the General Manager
End-User Customer Financing

P.O. Box 10099, 200 Harbor Drive, Stamford, CT 069

December 22, 1994

Mr. Jeff Amerine
Program Manager
Westinghouse
P.O. Box 746-MS B295
Baltimore, Maryland 21203

Dear Jeff:

This letter confirms our intent to work with Westinghouse for the ground network portion of the ELLIPSO project. IBM Credit Corporation agrees to provide financing, up to \$5 million, to Westinghouse for the two initial IBM SP2 systems including software over a period of four years, under mutually acceptable terms and conditions, providing Westinghouse maintains a satisfactory financial condition and outlook.

In addition, IBM Credit Corporation, through IBM's international customer financing organizations, is very interested in offering financing for the systems which will be marketed by Westinghouse, in the countries where we are offering customer financing at that time. These offerings will be based on the credit worthiness and the financial stability of the particular end-user enterprise and the financial market conditions at that time and will be subject to mutually acceptable terms and conditions, including any potential payment deferrals.

Future offerings are contingent upon several factors, including but not limited to:

1. The granting by the FCC of an operating license to the Ellipsat Corporation or the ELLIPSO project;
2. The successful marketing and implementation of the ELLIPSO ground network systems;

Mr. Jeff Amarine
December 22, 1994
Page 2

3. No material changes in the ELLIPSO project, international business climate, U.S. or international law, regulation or statute which would substantially alter the legal or financial basis of the involvement of IBM Credit Corporation or IBM's other customer financing organizations.

IBM Credit Corporation is very pleased to be working with you on this project and we look forward to continuing our business relationship.

If you have any questions, please contact your financial marketing advisor, Rick Schwitzer, at (410)332-2749.

Sincerely,


John S. Carries

/mac

bcc: Mr. R. B. Schwitzer

== TOTAL PAGE.003 ==

** TOTAL PAGE.003 **

CSC INTELICOM
A Unit of Computer Systems Corporation

COPY

16 November 1994

Westinghouse Electric Corporation
Electronic Systems
Post Office Box 746 - MS B295
Baltimore, Maryland 21203

Attention: Mr. Jeff Amerine
Program Manager

CC

Subject: ELLIPSO Mobile Satellite Communications System
Letter of Commitment

Dear Mr. Amerine:

This letter is to confirm that CSC Intelicom, Inc. (CSCI) is finally committing to support Westinghouse in the development of the subject project. CSCI intends to provide software licensing on a per market basis, plus nonrecurring engineering and development services, for CSCI's ISIS® software product to support the ELLIPSO program by providing billing and customer care on a world-wide basis.

CSCI has committed to provide ISIS® licenses, including the requisite nonrecurring engineering and development, on a market-by-market basis for a per market Not To Exceed charge of \$1 Million for an established, mutually defined geographical area with up to 100,000 subscribers. This commitment includes the projected forty (40) initial ELLIPSO markets, as well as up to \$3 Million in non-recurring engineering. The initial CSCI commitment is therefore approximately Forty-Three Million Dollars (\$43,000,000). All payments will be deferred until system start-up, currently projected to be June, 1996, and all incurred costs will be subject to a financing charge of the prime interest rate plus 3.5% per annum, compounded quarterly, as against the incurred balance to date.

This commitment is contingent upon the following:

- The granting by the FCC of an operating license to the Ellipast Corporation for the ELLIPSO program;
- Westinghouse granting to CSCI the exclusive rights to provide world-wide billing and customer support for the ELLIPSO program;
- There are no material changes in the program, marketplace or international business environment which would render CSCI's continued participation in this project financially adverse or technically inadvisable; or
- There are no substantive changes in US or international law, statute or regulation which would substantially modify the legal, business or financial bases upon which CSCI is currently tendering its commitment.

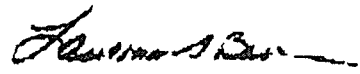
6707 Democracy Boulevard, Suite 1000
Bethesda, Maryland 20817
301.424.0600
Fax 301.371.0590

Washington Electric Corporation
ELLIPSO Commitment

16 November 1984
Page 2

CSCI understands that this commitment will be contingent upon a negotiated agreement between the parties and such agreement will contain a termination provision which will provide for the reimbursement of the reasonable costs expended by CSCI, subsequent to issuance of an FCC license, in support of the ELLIPSO program, if CSCI's services are so terminated prior to completion thereof. The specific pricing will be clarified in such agreement, based upon a more finite definition of the requirements and functionality necessary to support the ELLIPSO program.

Sincerely,

CSC 
Lawrence S. Baker
President & CEO

COPY



November 16, 1994

2400 Lakeside Blvd.
Suite 700
Richardson, TX 75082
Tel. (214) 684-2541
Fax (214) 684-3749

Mr. Jeff Amerine
Elilpeo Program Manager
Westinghouse Electric Corporation
Pittsburgh, Pennsylvania

Dear Mr. Amerine:

In response to your request to Harold Coleman, Northern Telecom Inc., in your letter dated November 9, 1994, please consider the proposed financing plan from NTFC Capital Corporation (NTFC) for the Elilpeo Project with Westinghouse Electric Corporation.

Upon review of Westinghouse's business plan, NTFC will consider providing a credit facility up to \$150,000,000 for the purchase of Northern Telecom equipment and related services provided by Northern Telecom Inc., based on and contingent upon the following terms and conditions, additional terms and conditions may apply:

Term: Funds would be available beginning 2/1/95 through 6/1/98. The entire facility, including all principal and interest, would be due and payable as of 6/1/98.

Interest Rate: 10.95%, rate will fluctuate from the date of this letter until the date of funding for each advance, indexed to a matching maturing U.S. Treasury Bill Index.

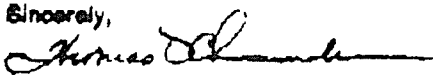
License Award: The availability of the credit facility is contingent upon the award of a license to Westinghouse/Elilpeo for this project.

Purchase Agreement: The availability of the credit facility is contingent upon the execution of a mutually acceptable purchase agreement between Northern Telecom Inc. and Westinghouse.

Credit: This offer is based upon the full faith and credit of Westinghouse Electric Corporation for the repayment of any monies and interest due under the credit facility, regardless of the success of the Elilpeo project. This transaction will be secured with the equipment financed and other collateral typical of this type of transaction.

Approval Required: This proposal is contingent upon appropriate due diligence and the final approval and acceptance by HTFC Capital Corporation and the execution of mutually acceptable documentation. This is not a commitment to provide financing.

Please contact me at 214-884-2516 with any questions or to discuss any of the above items.

Sincerely,

Thomas D. Chambers
Manager, Networks

cc: Tom Swanson
Harold Coteman

EXHIBIT 10

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

In the Matter of)	
)	
GEOSTAR POSITIONING CORP.	)	File Nos. 1145/1146/1147
	)	-DSS-MP/ML-89; CSS-89-
	)	003-(3); 43/44/45-DSS-MP/
For Modification of its	)	ML-90; 46/48-DSS-P/LA-90;
RDSS Space Station	)	51/52/53-DSS-EXT-90; CSS-
Authorizations	)	90-012/013/014/015 (ML)
)	
)	

PETITION FOR PARTIAL RECONSIDERATION

Ellipsat Corporation ("Ellipsat"), by its attorneys and pursuant to Rule 1.106, hereby requests partial reconsideration of the Commission's Memorandum Opinion and Order dismissing the above-captioned applications of Geostar Position Corporation ("Geostar").¹

I.
BACKGROUND

In May 1990, Geostar filed a set of applications in which it proposed extensive modifications to its first two dedicated RDSS satellites, authorized in 1986,² and requested authority to build two new satellites. In response to the Commission's September 4, 1990 Public Notice accepting Geostar's applications for filing,

¹ Memorandum Opinion and Order, DA 91-528, released April 30, 1991 (hereinafter "Geostar Order").

² See Memorandum Opinion, Order and Authorization, 60 RR 2d 1725 (1986).

and pursuant to Commission Rule 25.392(b),³ Ellipsat filed an application on November 5, 1990 for ELLIPSOTM, an elliptical low earth orbit satellite system using frequencies in the RDSS bands.⁴ Ellipsat sought concurrent consideration with the Geostar applications on the grounds that Geostar had filed an "original application" within the meaning of Rule 25.392(b), thereby triggering a cut-off period for the filing of applications to be considered concurrently. The Ellipsat application was accepted for filing pursuant to an April 1, 1991 Public Notice, Report No. DS-1068, DA 91-407, in which the FCC invited the filing of comments, petitions and applications relating to the Motorola and Ellipsat applications.⁵

On April 30, 1991, the Commission released a Memorandum Opinion and Order in which it, among other things, dismissed the May 1990 Geostar applications. The Commission concluded that Geostar's modified system would not be compatible with its

³ Rule 25.392(b) provides that each application for a space station in the radiodetermination satellite service shall be placed on public notice for 60 days. The rule further specifies that "a 60 day cut-off period shall also be established for the filing of applications to be considered in conjunction with an original application." See 47 C.F.R. § 25.392(b) (emphasis added). Ellipsat timely filed its application within sixty days of the September 4, 1990 Public Notice accepting the Geostar applications for filing.

⁴ Application of Ellipsat Corporation, File No. 11-DSS-P-91(6).

⁵ By letters of May 2 and 21, 1991 to the Commission, attached hereto as Exhibit A, Ellipsat objected to the invitation of applications to be considered concurrently with Ellipsat's application.

licensed system which represents the "baseline" architecture for RDSS systems.⁶ as adopted in the RDSS Licensing Order. Geostar's applications were dismissed on the grounds that the system differed so significantly from the system authorized in 1986 that, in effect, it constituted a new system which was incompatible with the baseline RDSS system.⁷ In the Geostar Order, the Commission directed Geostar to re-file its applications for consideration in the new processing group established by the April 1, 1991 Public Notice accepting the Ellipsat and Motorola applications for filing.

II.
HAVING TIMELY FILED WITHIN
THE CUT-OFF PERIOD TRIGGERED
BY GEOSTAR'S APPLICATIONS, ELLIPSAT
IS ENTITLED TO SEPARATE CONSIDERATION

While Ellipsat agrees with the Commission's findings that Geostar's May 1990 applications constituted applications for a new system, and that the system as modified would not be compatible with Geostar's licensed system, it believes that the Commission's findings were not carried to the logical conclusion. In finding the Geostar applications to be new applications, the Commission essentially confirmed Ellipsat's position that the September 4, 1990 Public Notice created a 60-day cut-off period for the filing of applications. Although the Commission did not

⁶ See Second Report and Order, Gen. Dkt. Nos. 84-689 and 84-690, 66 RR 2d 298 (1986) (hereinafter "RDSS Licensing Order").

⁷ See Geostar Order, DA 91-528, released April 30, 1991, at 3.

expressly invite applications, it was clear on the face of the September 4, 1990 Public Notice that Geostar had filed applications for at least two new satellites, and, therefore, that the filing of applications for the same frequencies was appropriate.

Commission Rule 25.392(b) establishes a 60-day cut-off period for new RDSS applications, but does not expressly require a public notice inviting such applications. Interested parties are placed on notice by Rule 25.392(b) that a 60-day cut-off period is created for the filing of applications to be considered in conjunction with an original application.⁸ This approach is not uncommon in other radio services. In the broadcast area, for example, the Commission's rules provide for filing of applications that are mutually exclusive with renewal applications by a certain date. See 47 C.F.R. §73.3516(e). It is noteworthy that the FCC does not release a public notice expressly inviting competing applications in the broadcast renewal context, but merely provides public notice of acceptance of the renewal applications for filing (see attached Exhibit B), and places the burden on the applicant to apply the rules to determine the appropriate filing date. See Prairie Broadcasting

⁸ Notice of Commission procedures with respect to RDSS applications is also provided in the RDSS Licensing Order. The Commission there stated: "Each application for a space station will be placed on public notice, during which time interested parties may comment and applications to be considered concurrently may be filed." RDSS Licensing Order, 60 RR 2d at 311 (emphasis added).

Co., 47 F.C.C. 2d 373 (1974); Pictronics, Inc., 32 F.C.C. 2d 325 (1971).

Ellipsat's position was previously set forth in its letters of May 2, 1991 and May 21, 1991 to the Commission, copies of which are attached hereto as Exhibit A. The arguments made in those letters are hereby incorporated by reference. This petition for reconsideration is filed to preserve any rights Ellipsat may have to consideration and processing in a separate processing group. Under this approach, the next procedural step would be to consider comments on Ellipsat's application, and move forward with processing of the Ellipsat application.

Ellipsat's position is consistent with the RDSS rules which contemplate that multiple systems can be accommodated in the RDSS bands. See RDSS Licensing Order, 60 RR 2d at 298, 301, 311. Thus, processing of the Ellipsat application would not prejudice future RDSS systems or conforming operators who will be processed in due course. In contrast, if the FCC proceeds with its present course of action, Ellipsat will be prejudiced by the delay and uncertainty now introduced in the process. The fact remains that Ellipsat was the first, after Geostar, to file an application in the RDSS bands -- on November 5, 1990. Now, potential competitors have been given more than six months to analyze the Ellipsat system and develop competing systems. Ellipsat should not be penalized for being an innovator and the first to file.

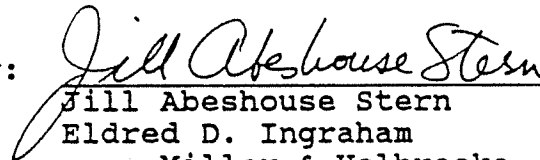
III.
CONCLUSION

For the foregoing reasons, the Commission should (1) grant partial reconsideration of the Geostar Order by treating Ellipsat's application as timely filed within the cut-off window created by the September 4, 1990 Public Notice accepting the Geostar applications for filing; and (2) move forward to consider Ellipsat's application in a separate processing group apart from and prior to the processing group for later-filed applications.

Respectfully submitted,

ELLIPSAT CORPORATION

By:



Jill Abeshouse Stern
Eldred D. Ingraham
Miller & Holbrooke
1225 19th Street, N.W.
Suite 400
Washington, D.C. 20036
(202) 785-0600

Its Attorneys

May 31, 1991

EXHIBIT A

MILLER & HOLBROOKE

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OFFICE OF THE
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May 2, 1991

Ms. Donna R. Searcy
Secretary
Federal Communications Commission
1919 M Street, N.W.
Washington, D.C. 20554

RE: Public Notice of Acceptance
of Satellite Applications,
Reports Nos. DS-1068, -1071

Dear Ms. Searcy:

Reference is made to order DA 91-407, adopted April 1, 1991, giving notice of the acceptance for filing of the applications of Motorola and Ellipsat for low-earth-orbit satellite systems and providing, pursuant to Section 25.392(b) of the rules, for a June 3, 1991, cut-off for applications of others for satellite systems to provide RDSS service in the 1610-1625.5 MHz and 2483.5-2500 MHz bands to be considered concurrently with Motorola's and Ellipsat's applications. The April 1, 1991, notice was corrected by DA 91-438, released April 18, 1991.

Applicant Ellipsat Corporation submits that the order fails to reflect a correct application of Section 25.392(b) of the Rules, in that the window governing Ellipsat's application had already closed. As recited in the Bureau's order in Geostar Positioning Corporation, DA 91-528 (released April 30, 1991) at ¶ 6, "In May 1990, Geostar filed a set of applications seeking more extensive modifications to the system." These applications proposed major changes in Geostar's authorized system. As the recent Geostar order notes,

Geostar's proposal radically changes its RDSS system design and significantly reduces its capacity. In fact, the satellite system as modified is so at variance with Geostar's licensed system and with our

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RDSS licensing policies that it is tantamount to a "new" RDSS system and all four applications must be processed as such.

* * *

[T]he modified system is so significantly different from the system as authorized that it must be considered as a new system and should not become the new "baseline" for coordination purposes without the benefit of a new RDSS processing group.^{30/}

^{30/} Section 25.392(b) of the Commission's rules states that when an application for a new RDSS system is filed, it will be placed on public notice and a 60 day cut-off will be established for the filing of applications to be considered in conjunction with it. 47 C.F.R. § 25.392(b).

Geostar, supra, at ¶¶ 11, 15 (emphasis supplied). Only where "no other potential applicants were adversely affected" would such modifications be considered outside of a new processing group. Id. at ¶ 16.

The Geostar order vindicates the procedural analysis set forth in Ellipsat's application. Ellipsat's application was filed in early November, 1990,

in response to the Commission's Public Notice, Report No. DS-999, released September 4, 1990, in which applications of Geostar Positioning Corporation ("Geostar") were accepted for filing. In that the Geostar applications involve substantial and material modifications of its authorized system, Geostar has effectively applied for a new satellite system. Accordingly, pursuant to Commission Rule 25.392(b), the September 4, 1990 Public Notice establishes a sixty day cut-off period for the filing of applications to be considered in conjunction with the Geostar applications. The subject application is timely filed and entitled to be considered concurrently with the Geostar applications. * * *

Application of Ellipsat Corporation, file no. 11-DSS-P-91(6), at 3 n. 3.

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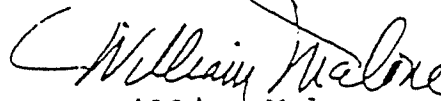
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Section 25.392(b), in turn, mandated a sixty-day cut-off period with reference to the Geostar applications of May, 1990. The rule itself uses the word "shall."

The Commission was bound to process the RDSS applications in accord with the rule. In another case involving the question of which applications were entitled to comparative consideration, Reuters Ltd. v. FCC, 251 U.S.App.D.C. 93, 781 F.2d 946 (1986), the Court identified as "a precept which lies at the foundation of the modern administrative state", the proposition "that agencies must abide by their rules and regulations." Id. at 94, 781 F.2d at 947. In Maxcell Telecom Plus v. FCC, 259 U.S.App.D.C. 350, 359, 815 F.2d 1551, 1560 (1987), the Court held that a major amendment triggered a sixty-day window under the Commission's rules.

Accordingly, the Bureau is requested to recognize the priority of Ellipsat's application and to modify accordingly its order DA 91-407 to conform to Section 25.392(b) of the rules.

Respectfully submitted, ..


William Malone

Attorney for
Ellipsat Corporation

cc: ~~Philip L. Stern, Esquire~~ **
Michael Yourshaw, Esquire

** Sent to Philip L. Malet, Esquire

