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

MAR 5 - 1992

DOMESTIC FACILITIES DIVISION
SATELLITE RADIO BRANCH

Federal Communications Commission
Office of the Secretary

In the Matter of the)
Applications of)
AMSC SUBSIDIARY CORPORATION)
For Blanket License for)
30,000 Mobile Earth Stations)
ROCKWELL INTERNATIONAL CORPORATION)
For Blanket License for)
15,000 Mobile Earth Stations)
GEOSTAR MESSAGING CORPORATION)
For Blanket License for)
10,000 Mobile Earth Stations)
COMMUNICATIONS SATELLITE)
CORPORATION - WORLD)
SYSTEMS DIVISION)
For authority pursuant to Section)
214 of the Communications Act of)
1934, to establish and operate)
communications channels via the)
INMARSAT System using a MARISAT)
satellite and an earth station at)
Southbury, Connecticut (WB-36) for)
interim use by the authorized)
domestic mobile satellite service)
(MSS) carrier in its provision of)
domestic MSS services)

File No. 420-DSE-P/L-90

File No. 933-DSE-P/L-90

File No. 2306-DSE-P/L-89

File No. I-T-C-90-038

PETITION FOR PARTIAL RECONSIDERATION

AMSC Subsidiary Corporation ("AMSC"), by its attorneys and pursuant to Section 1.106 of the Communications Rules, hereby petitions for partial reconsideration of the Commission's Order

and Authorization in the above-captioned proceedings.^{1/}

Specifically, AMSC urges the Commission to establish technical guidelines now that will permit mobile terminals used for interim Mobile Satellite Service ("MSS") to transition easily to the dedicated U.S. system. Such guidelines will not add materially to the cost of interim service mobile terminals and are essential to a seamless and inexpensive transition. In addition, the Commission should require any interim service customers using Inmarsat space segment for domestic service to transition to the dedicated U.S. system within 60 days of the time that AMSC begins operations.

In its order, the Commission took the following actions:

- authorized AMSC and Rockwell International Corporation to operate mobile terminals that would provide interim domestic MSS using Inmarsat space segment in the 1530-1544 MHz and 1626.5-1645.5 MHz bands;
- authorized Comsat to provide Inmarsat space segment and coast earth station facilities to AMSC for the provision of interim MSS; and
- established a requirement that within 90 days after the launch of AMSC's first satellite all interim service providers using the Inmarsat system file with the Commission and serve on AMSC a transition plan that details the steps that will be taken to move all domestic MSS traffic onto the AMSC system without disruption to customers.

The subject of this petition is the third of these actions.

The Commission's requirement that interim service providers file

1/ FCC 92-26 (February 4, 1992). AMSC is licensed to construct, launch and operate the U.S. Mobile Satellite Service system. See Final Decision on Remand, 7 FCC Rcd 266 (1992) (reaffirming grant of MSS license to AMSC). AMSC commenced construction of the first of its satellites in July 1990.

a transition plan is not enough to ensure that customers will be able to transition easily from Inmarsat space segment to that of the dedicated U.S. system after the U.S. system is launched. To ensure a smooth transition, the Commission should establish minimum technical requirements for mobile terminals. Such requirements will protect interim service customers from having to buy new equipment or make costly and time-consuming modifications to existing equipment. Without such standards, interim service customers may be harmed, the credibility of the new MSS industry may be hurt, and there may be a delay in compliance with the Commission's fundamental policy that domestic service should be provided by a U.S. domestic system.^{2/}

The imposition of the technical requirements discussed below will not burden interim service providers or end users. AMSC estimates that requiring these features now will increase by less than five percent the cost of constructing MSS mobile terminals; adding these features later will cost much more and will greatly inconvenience customers who have installed equipment that is obsolete or needs to be modified. Moreover, the features that would be required are desirable for network management purposes, adding value to the equipment.

In order to ensure a seamless transition to AMSC space

2/ The Commission has authorized the use of Inmarsat space segment on an interim basis only. Order and Authorization, at para. 9. Interim service providers and users must not have any expectation that they might be grandfathered for permanent operation on Inmarsat space segment if their mobile equipment cannot be used on the dedicated U.S. system.

segment, the Commission should require the following for the mobile terminals of any applicant seeking authority to provide interim MSS:

1. Mobile terminals should be constructed to be capable of operating throughout the bands 1530-1559 MHz and 1626.5-1660.5 MHz. Interim operations will be limited to the bands 1530-1544 MHz and 1626.5-1645.5 MHz. AMSC is currently authorized to operate in the band 1545-1559 MHz and 1646.5-1660.5 MHz. AMSC has applied for a modification to its authorization to permit it to operate in the lower frequencies.^{3/} Even if this application is granted by the Commission, however, there is no assurance that international frequency coordination will provide AMSC with access to a substantial amount of this spectrum. Moreover, AMSC would want to maintain the flexibility to assign frequencies to users throughout the licensed bandwidth.

2. Mobile terminals should be capable of operating at a reduced EIRP. The AMSC satellites have a higher G/T ratio than the Inmarsat satellites. As a result, mobile terminals that are part of the AMSC system require less power than mobile terminals that communicate with Inmarsat satellites. A proper mobile terminal power level is necessary for the efficient operation of the AMSC satellites and to minimize the effect of adjacent channel interference.

3/ Application of AMSC to operate in the 1530-1545 MHz (downlink) and 1626.5-1646.5 MHz (uplink) bands. (Filed January 20, 1990.)

3. Mobile terminals should be capable of working through a spot beam satellite. The Inmarsat system is a global beam system, whereas the U.S. system will be a spot beam system. In a spot beam system, the mobile terminal must be capable of storing signalling channel frequencies to enable the terminal to lock onto the system regardless of the beam in which the user is located.

4. Mobile terminals, feeder link earth stations and network control facilities must be designed to provide real-time priority and preemptive access for AMS(R)S and provide protection against interference from other systems. AMSC is required by the Commission to provide priority and preemptive access to aeronautical safety communications in the 1545-1559 MHz and 1646.5-1660.5 MHz bands. As a result, AMSC has been working diligently with the Radio Technical Commission for Aeronautics on developing Minimum Operational Performance Standards for AMS(R)S systems that will become the basis for the United States domestic standard.^{4/} Although these standards cannot be applied until they are finalized, when that occurs the Commission should apply the new standards to all mobile equipment.

In addition, rather than permitting interim service providers to wait until 90 days after the launch of AMSC's system to submit a plan for transitioning, the Commission should require any such service providers to work with AMSC from the start to

4/ See Notice of Proposed Rulemaking, PR Docket No. 90-315 (Aircraft Earth Stations), 5 FCC Rcd 3933 (1990).

provide for the future transition. The goal of these efforts should be to complete the transition of all interim service users from Inmarsat space segment to AMSC's system no later than 60 days after AMSC launches its satellite into orbit and certifies to the Commission that it is operating in compliance with the terms and conditions of AMSC's authorization. (AMSC anticipates that such certification would be provided approximately two months after launch.) Such a requirement will ensure that from the start any interim service providers are focused on the eventual transition to the dedicated U.S. system and that a dialogue develops between those providers and AMSC, so that the transition will be planned in advance.

Conclusion

For the above-stated reasons, AMSC respectfully requests that the Commission issue an order on reconsideration consistent with these suggestions.

Respectfully submitted,

AMSC SUBSIDIARY CORPORATION



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Date: March 5, 1992



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DECLARATION

I, Michael Ward, under penalty of perjury, do hereby declare as follows: I have reviewed the foregoing Petition for Reconsideration. The facts contained therein are true and correct to the best of my knowledge and belief.

A handwritten signature in blue ink that reads "Michael Ward". The signature is written in a cursive style and is positioned above a horizontal line.

Michael Ward
Senior Scientist
American Mobile Satellite
Corporation

Date: March 4, 1992

CERTIFICATE OF SERVICE

I, Julie Berringer, a secretary in the law firm of Fisher, Wayland, Cooper and Leader, do hereby certify that true copies of the foregoing "PETITION FOR RECONSIDERATION" were sent this 5th day of March, 1992, by first class United States Mail, postage prepaid, to the following:

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