

Before the
Federal Communications Commission
Washington, D.C. 20554

In the Matter of

Aeronautical Radio, Inc. and the
Air Transport Association
of America

File No. I-S-P-90-002

Provision of Aeronautical Services
via the Inmarsat System

Communications Satellite
Corporation

File No. I-T-C-90-085

Application for Authority to Provide
Limited Aeronautical Services within
the U.S. via the Inmarsat System

MEMORANDUM, OPINION AND ORDER

Adopted: January 21, 1992; Released: February 6, 1992

By the Commission:

I. INTRODUCTION

1. On November 7, 1989, Aeronautical Radio, Inc. (Arinc) and the Air Transport Association of America (ATA) jointly filed a three-part request for partial waiver of the Federal Communications Commission's (Commission) *Report and Order* in CC Docket No. 87-75, Provision of Aeronautical Services via the International Maritime Satellite Organization (Inmarsat) System.¹ In this *Memorandum, Opinion and Order*, we will consider only part (a), dealing with a waiver to permit interim domestic aeronautical mobile satellite service (interim service request). Only one entity, American Mobile Satellite Corporation (AMSC), opposed the interim service request. For reasons stated below, we find that a temporary grant of part (a) of the waiver request is warranted. We defer consideration of part (b) dealing with permanent service to a later time and consolidate it with the British Telecom Petition for Reconsideration. We also dismiss as premature part (c) dealing with restoration of service. The dedicated domestic system is at least several years from completion, and the restoration needs of customers of the future dedicated system are still speculative and arrangements for those needs can be better developed at a later time. Finally, as discussed below, we temporarily grant in part the Communications Satellite Corporation (Comsat) application. File No. I-T-C-90-085, requesting authority pursuant to Section 214 of the Communications Act of 1934, as amended, (Act) and the International Maritime Satellite Communications Act, to provide satellite capacity to implement interim domestic aeronautical mobile satellite services via Inmarsat space segment pursuant to part (a) of the Arinc/ATA waiver request.

II. BACKGROUND

2. In 1987, the Commission initiated a Rule Making proceeding in CC Docket 87-75 to determine how international aeronautical mobile satellite services² via Inmarsat will be provided in the United States.³ The radio spectrum that was to be used for this service is known as a portion of the L-band. The L-band frequencies are divided into the lower L-band, 1530-1544 and 1626.5-1645.5 MHz, and the upper L-band, 1545-1559 and 1646.5-1660.5 MHz. The U.S. Table of Frequency Allocations in Section 2.106 of the Commission's Rules specifies how frequencies may be used.⁴ It allocates the lower L-band only to maritime mobile satellite service (MMSS), but the Commission has granted a temporary waiver to allow provision of aeronautical mobile satellite service (R) (AMSS(R))⁵ and mobile satellite service (MSS) in the lower L-band.^{6,7} The upper L-band is allocated to AMSS(R) and MSS, with a requirement that in the portion of the band 1545-1549.5 and 1646.5-1651 MHz, MSS is a secondary service, and in the portion 1549.5-1558.5 and 1651-1660 MHz, MSS communications is co-primary but must give priority and real time preemptive access to AMSS(R). Inmarsat non-AMSS(R) communications such as airline passenger communications must therefore be provided as a mobile satellite service and comply with co-primary or secondary status or provide priority and real time preemptive access to AMSS(R), as applicable.⁸

3. The first generation Inmarsat satellites operate in the frequency bands of the lower L-band, while the second generation space segment operates in the lower L-band plus 3 MHz of the upper L-band at 1545-1548 MHz and 1646.5-1649.5 MHz.⁹ In the *Inmarsat Report and Order*, the Commission held, *inter alia*, that it would authorize the use of Inmarsat space segment in the U.S. for communications to aircraft that are in international flight, both for AMSS(R) functions and non-AMSS(R) functions. The Commission authorized the use of Inmarsat aeronautical services through Comsat via U.S. aeronautical earth stations for aircraft in flight: (1) from the U.S. to a foreign point; (2) from a foreign point into the U.S.; and (3) between any two foreign points. The Commission further determined that aircraft in international flight may also use the domestic MSS system, "to the extent the coverage area of that system permits" and "[a]ircraft in flight between two U.S. domestic points may use only the domestic mobile satellite system for satellite communications to the extent the coverage area of that system permits."¹⁰ Although the Commission has granted AMSC a license to construct, launch and operate the sole first generation domestic MSS system in the upper L-band,¹¹ the Commission recognized that it would require at least three to four years for the domestic MSS licensee to construct and launch its first satellite for domestic MSS. Thus, in a related decision, the Commission stated that it was willing to explore options for interim domestic mobile satellite service when applications were filed seeking such authority and were subject to public notice and comment.¹²

4. The Arinc/ATA waiver request asks for a partial waiver on both an interim and permanent basis of certain of the Commission rules which restrict service by Inmarsat to solely "international" aeronautical satellite communications. Arinc and ATA request that the Commission allow aeronautical satellite services to be provided through Comsat via Inmarsat as follows: (a) on an interim basis to aircraft in flight between two domestic points (until such time as the domestic MSS system licensee can

provide services over its own dedicated mobile satellites); (b) on a permanent basis to aircraft in flight on intradomestic legs of scheduled flights with international points of origin and/or destination (e.g., a Chicago to New York leg of a scheduled Chicago to London service); and (c) on a permanent basis for the restoration of domestic service in the event of a failure of the domestic MSS licensee's facilities.¹³ In this *Memorandum, Opinion and Order*, we will grant the interim service component of the waiver request, that is, part (a), defer consideration of part (b) and consolidate it with the British Telecom Petition for Reconsideration, and dismiss part (c) as premature.

5. In support of the interim service request, Arinc and ATA state that the Commission's grant of interim service via Inmarsat will facilitate the prompt introduction of aeronautical satellite services to 450,000,000 domestic passengers annually and the concomitant benefits to aviation safety and regularity of flight. Arinc and ATA state that the domestic air transport industry and the traveling public have a keen interest in the prompt initiation of an aeronautical satellite communications service that makes significant advances in safety, regularity of flight, and new capabilities. Arinc and ATA urge the Commission to act expeditiously and waive in part the international flight limitation on Inmarsat adopted in the *Inmarsat Report and Order* by authorizing aircraft in domestic flight to communicate via the Inmarsat system. Part (a) of the waiver request covers the period prior to the time when the domestic MSS system is capable of operating in accordance with the procedures and regulatory framework established in Gen. Docket No. 84-1234 and CC Docket No. 87-75.

6. Citing the Commission's prior action granting it an MSS license, AMSC argues that it alone should be the sole point of customer contact for interim service. AMSC claims that Commission policies have established it as the single mobile satellite licensee in the United States and, with the exception of AMSC's use of Inmarsat space segment for "early" service, have limited the use of Inmarsat in the United States to certain international flights. AMSC also alleges that if it is bypassed as the sole interim licensee, it will not be able to meet its role as guarantor of aviation safety communications priority.

7. On November 13, 1989, Comsat filed the above-captioned application to provide domestic aeronautical satellite capacity via Inmarsat space segment to implement the services requested by Arinc and ATA. The Comsat application was put on public notice April 11, 1990. AMSC filed an Opposition, and Comsat replied. Arinc and ATA also responded to AMSC's Opposition. AMSC responded to the pleadings of Comsat and Arinc/ATA.¹⁴

III. DISCUSSION

8. In considering the waiver request for interim service we must consider two issues: (1) whether the Commission's goal of early introduction of aeronautical mobile satellite services within the United States will be advanced by allowing interim service via Inmarsat; and (2) how to provide interim aeronautical mobile satellite service via Inmarsat.

A. Interim Aeronautical Mobile Satellite Services Within the United States Via Inmarsat Space Segment

9. In the *Domestic Licensing Order*, the Commission recognized that a domestic MSS system could not be operational until 1994 at the very earliest.¹⁵ The Commission also found that the provision of domestic MSS will serve the public interest, convenience and necessity. Furthermore, the Commission in the *Inmarsat Report and Order* determined that early introduction of Inmarsat aeronautical services to the U.S. would best promote and protect U.S. interests in the development of aeronautical satellite services.¹⁶ The Commission also indicated its willingness to consider requests for interim domestic service¹⁷ and explicitly left open the possibility that Inmarsat would provide interim domestic MSS.¹⁸

10. In support of their request, Arinc and ATA assert that the international geographical restriction in the *Inmarsat Report and Order* was intended to apply in an environment in which the domestic mobile satellite system would in actuality be capable of providing aeronautical mobile satellite service (both safety and nonsafety) to aircraft in domestic flight, while the Inmarsat system (both space segment and ground segment) would be used to provide aeronautical satellite services to aircraft in international flight. Several of the parties agree with Arinc and ATA that an interim service waiver would serve the public interest by allowing for the speedy introduction of aeronautical services, given that any dedicated domestic space segment will probably not be operational until 1994 or later.¹⁹ The FAA affirms its earlier comments in CC Docket No. 87-75, stating that interim access to Inmarsat space segment is required both to support the implementation of FAA plans for essential air traffic services improvements and to support preoperational trials and demonstrations. U.S.-based access to Inmarsat space segment is also necessary to provide the FAA with the regulatory means to influence uses of the spectrum available for aviation safety applications as they evolve.²⁰

11. We have reviewed the record and find that there is a public interest basis for domestic use of Inmarsat space segment as described by Arinc and ATA in their request for an interim waiver.²¹ We agree with Arinc and ATA that providers of interim Inmarsat services can make available in the near future a wide variety of beneficial aeronautical satellite services to aircraft in domestic flight. These include, for example, search and rescue services, air-to-ground links for the transmission of airlines' operational communications, in-flight performance monitoring data, meteorological information, air traffic control services, and public telephone and data services, which would not be available domestically via satellite prior to inauguration of service on a dedicated domestic system.²² We are persuaded that allowing applicants to provide interim domestic aeronautical mobile satellite service via the Inmarsat system is the only way to make prompt service available to the U.S. domestic market since the Inmarsat space segment is the only L-band satellite system available prior to 1994. In addition, we agree with NTIA's position that allowing Comsat, the U.S. Signatory to Inmarsat, to provide interim domestic AMSS directly to customers using Inmarsat space segment would be consistent with Administration policy of free and fair trade.²³

12. The interim service authorized herein is a domestic service, not an international service, and as such is an exception to the traditional role Inmarsat has played with-

in the U.S. telecommunications policy - that of providing satellite capacity for communications that are international in character. We recognize that the Inmarsat convention does not limit use of the Inmarsat system to only communications that are international in character, but members of Inmarsat are free to establish national policies defining how the Inmarsat system may be used within their respective jurisdictions. In the United States, we have generally authorized the use of Inmarsat for communications that are international in character except in instances where use of Inmarsat facilities for domestic communications fulfilled specific needs. For example, we have authorized on a temporary limited basis the use of transportable "land-based ship earth stations" to access Inmarsat space segment to meet certain satellite communications needs during the aftermath of natural or human disasters such as earthquakes, volcano eruptions and forest fires, and where these stations are the only adequate means of meeting urgent communications requirements.²⁴ We wish to emphasize that our decision herein (and in a companion order involving land mobile service) is also based on the unique need for the development of mobile satellite service within the United States and the specific circumstances surrounding it. While future additional domestic uses of Inmarsat might be found to be in the public interest, Inmarsat should not generally be viewed as an available option for other interim domestic services within the U.S. while the permanent structure for those services is being developed.²⁵

13. AMSC opposes use of Inmarsat facilities on grounds of spectrum efficiency. We do not believe that allowing Inmarsat entry into the U.S. domestic market during the interim period would have a negative effect on spectrum efficiency. AMSC's technical comparison of the efficiency of its proposed domestic system to the Inmarsat system is irrelevant here because we are not choosing one system over the other. Although AMSC claims that it would lose six channels for every channel used by Inmarsat, the argument, even if true, is not applicable here because only the Inmarsat system will be operational during the interim period. Any potential spectrum interference effect that would be caused by the use of the Inmarsat system concurrently with the domestic MSS system is beyond the limited scope of this Order. We are authorizing use of the Inmarsat space segment only until the U.S. permanent MSS system is operational. Pending Commission action on part (b) of the Arinc/ATA waiver request, all domestic AMSS services that customers desire to continue will be required to be transferred to the authorized U.S. domestic AMSS and MSS service provider operating the dedicated satellite system as soon as that system is operational.²⁶

14. Arinc, Comsat and all other operators of interim domestic AMSS shall stand ready to move their traffic over to the domestic system as soon as it is operational. All authority granted pursuant to this Order is strictly interim and conveys no right to continued use of the Inmarsat space segment for domestic AMSS after the domestic licensee begins to offer service. We reiterate our support for the development of a domestic MSS system to serve the needs of U.S. customers. Furthermore, we intend to assure that the transition from interim services to the domestic system will occur quickly, smoothly and efficiently. We recognize that transferral of domestic AMSS traffic to the domestic system will require careful planning and coordination. To that end, we require Arinc, Comsat and other interim domestic AMSS provid-

ers to file with this Commission a transition plan within 90 days after launch of a domestic MSS spacecraft. The transition plan shall detail the steps that will be taken to move domestic AMSS traffic to the new satellite without disruption to customers. Interim providers must serve a copy of their plans on the domestic licensee at the same time.

15. AMSC asserts that granting a temporary waiver of the Commission's restriction on the provision of domestic AMSS by Inmarsat would carve out huge exceptions to and effectively constitute a reversal of the Commission's fundamental policies for mobile satellite service and unnecessarily divert Commission resources.²⁷ We disagree. We find that Arinc and ATA have presented concrete evidence in the public interest sufficient to justify a waiver for providing interim domestic AMSS service via Inmarsat space segment facilities. The waiver would be effective for a limited, temporary period, until the domestic MSS system is operational. Without this waiver the public would be deprived of direct service during this time period. For these reasons, we find the advantages of granting the waiver outweigh any detriments cited by AMSC.

16. In addition to arguing deficiencies in the Arinc and ATA pleadings, AMSC claims that Arinc and ATA lack standing to file their interim service request because Arinc and ATA have not first approached AMSC for such service. AMSC also reasons that the interim service waiver is not needed because AMSC, as a common carrier, would have an obligation to provide service to Arinc and, therefore, Arinc is not aggrieved.²⁸ These arguments are based on AMSC's belief that it has an exclusive right to provide interim domestic AMSS and MSS service. As discussed below, we find unpersuasive AMSC's contention that it should have control over interim domestic AMSS.

B. Provision of Interim Aeronautical Mobile Satellite Services via Inmarsat Space Segment

17. The second issue concerns how interim aeronautical services via Inmarsat space segment facilities should be provided: whether by a single entity or by multiple entities. In the *Domestic Licensing Order*,²⁹ the Commission noted that it was deferring resolution of who should provide interim MSS service until a later time, saying "we are willing to explore a licensee's options for interim service when applications are filed seeking such authority and are subject to public notice and comment." Several arguments are raised for and against a single provider. AMSC maintains that it should be the single provider of interim (and permanent) domestic AMSS.

18. Both Arinc and ATA conclude this approach would thwart the steady developmental track of establishing a U.S.-owned domestic MSS system. Several other parties add that AMSC's proposal is unreasonable, inefficient, anticompetitive, and will lead to artificially inflated prices.³⁰ In NTIA's view, reseller middlemen are unnecessary given the sophistication and expertise of the commercial airlines and their communications collective. Arinc.³¹ BT is also opposed to extending an exclusive license to the tentative domestic licensee during the interim period because the rationale for granting an exclusive permanent license is not applicable in the interim period.³² Several parties thus state that the tentative domestic licensee has no greater claim than anyone else for the right to use the mobile satellite spectrum for interim service.³³ Geostar explains that the tentative domestic li-

censee's authorization is not intended to prevent other operators from using Inmarsat space segment in the MSS-AMSS(R) bands for interim service.³⁴ One of the arguments that Arinc and ATA raise against allowing AMSC to be the single provider is that AMSC would merely act as middleman by reselling Inmarsat capacity obtained from Comsat.

19. Several of the parties indicate that provision of service through multiple entities will also have the positive effect of encouraging the establishment of intra-Inmarsat competition of the variety contemplated in the *Inmarsat Report and Order* and will create an environment in which U.S. leadership in avionics development, equipment manufacturing, and service innovation can be maintained.³⁵ BT argues that extending an exclusive right to provide interim service would impose unnecessary costs on the airline industry and consumers at the same time that it would undercut the domestic provider's incentive to construct its own satellite system. It states that competition would boost the domestic provider's ability to finance its system by demonstrating a viable market and creating a ready customer base for its own satellite facilities when they become available.³⁶ Furthermore, BT believes that maintaining a restriction on the scope of Inmarsat services encourages other nations to develop similar restrictions, thereby multiplying safety and consumer problems that may be inherent in such protectionist schemes.³⁷

20. AMSC disagrees and contends that it is more than a passive reseller and will perform other functions in addition to reselling, such as building facilities, in order to provide early aeronautical and land mobile satellite services.³⁸ AMSC also disagrees with the proposition that denial of the interim waiver request will provoke other nations to erect nationalistic barriers.³⁹ AMSC calls this position alarmist and unsubstantiated. AMSC further argues that the U.S. would not be able to exercise control or ownership over the space segment if what it calls a "foreign entity," Inmarsat, rather than AMSC, were to manage the space segment.⁴⁰

21. When we conditionally authorized a domestic licensee to construct a satellite system for the provision of first generation land, aeronautical, and maritime mobile satellite services in the upper L-band in the United States, we did not state that the licensee was the "only" entity that could provide interim aeronautical mobile satellite service to aircraft in the United States.⁴¹ We conclude that competition in the provision of interim domestic AMSS through a variety of service providers with their own ground segments, if they prefer, and using the Inmarsat space segment will promote efficiency and reasonable rates and lead to the rapid expansion of the aeronautical mobile satellite service.⁴² Furthermore, allowing competitive entry of interim service providers in the domestic market should speed the introduction of new service offerings.⁴³

22. We find that it will not be in the public interest, notwithstanding AMSC's arguments to the contrary, to make the tentative domestic licensee in the upper L-band the exclusive point of customer contact for interim aeronautical mobile satellite service using the Inmarsat space segment. We will apply the same access policy as for international AMSS, i.e., access to Inmarsat aeronautical space segment by other U.S. service providers will be through Comsat.⁴⁴ Comsat will acquire space segment capacity from Inmarsat and provide this capacity both to aeronautical customers via optional Comsat aeronautical

earth stations and to U.S. service providers which may operate their own aeronautical earth stations and resell Inmarsat space segment capacity to aeronautical customers. Other service providers can thus make full service offerings to their customers in competition with Comsat. Comsat must provide both users and other U.S. service providers access to Inmarsat aeronautical space segment. We expect Comsat to make tariff filings for domestic service offerings that reflect the tariff offerings for international aeronautical services. These tariffs should provide several access arrangements at varied prices, terms and conditions.⁴⁵ Thus, as a result of our action here, we expect that some parties may provide only domestic aeronautical mobile satellite service and others may provide both domestic and international services, during the interim period.

23. Finally, with respect to transmissions in the upper L-band, there is no reason to believe that a policy permitting multiple providers of interim AMSS will lead to a diminution of aviation safety or a lack of compliance with FAA standards. We disagree with AMSC that neither Comsat nor Inmarsat will show the degree of commitment to aviation safety communications that can be expected of AMSC if it is awarded the MSS license.⁴⁶ We are satisfied that the FAA supports the use of Inmarsat space segment on an interim basis.⁴⁷ Furthermore, we are satisfied that all interim service operations will be immediately able to satisfy our domestic requirement that AMSS transmissions in this band give priority and preemptive access to any AMSS(R) communications, particularly in accordance with Article 51 of the International Telecommunication Union (ITU) regulations.⁴⁸ For the longer term, the FAA points out that international standards for safety communications will be established by the International Civil Aviation Organization (ICAO), and that safety communications standards for aircraft equipment, space segment and other system elements will be established by the Radio Technical Commission for Aeronautics (RTCA) Special Committee 165. The FAA is confident that worldwide compatible standards for safety and nonsafety communications will be established.⁴⁹ We expect that all interim AMSS operations will conform with any new standards adopted prior to the regular domestic system becoming operational.

IV. CONCLUSION

24. In this *Memorandum, Opinion and Order* we conclude that the public interest requires early introduction of aeronautical satellite services in the U.S. prior to the operation of the dedicated domestic MSS system. We recognize that a policy of open entry via Inmarsat facilities during this interim period will provide U.S. service providers with market opportunities equal to foreign service providers. Thus, we believe that no single entity should be made the exclusive point of customer contact in the provision of interim domestic aeronautical mobile satellite service via the Inmarsat space segment. Accordingly, rather than address waivers of the *Inmarsat Report and Order* on a case-by-case basis, we are adopting a general waiver of the domestic restriction for the interim time period. We will process applications from new entrants for interim domestic service consistent with this order. Applicants should comply with all other provisions of Title III for those wishing to construct and operate aeronautical

earth stations⁵⁰ and with the appropriate requirements of Title II for those wishing to provide common carrier service.

25. We also permit those parties already authorized to provide Inmarsat aeronautical mobile satellite services to aircraft in international flight to provide interim Inmarsat aeronautical satellite services to aircraft in domestic flight. We thus temporarily waive the conditions imposed on IDB Aero-Nautical Communications, Inc. (IDB-A) and CICI, Inc. (CICI) in the *Memorandum, Opinion and Order*, 6 FCC Rcd 2485 (1991), and on Comsat in the *Memorandum Opinion, Order and Authorization*, 4 FCC Rcd 7176 (1989), that limit these companies' provision of aeronautical mobile satellite services to aircraft in international flight as defined by the Commission in CC Docket No. 87-75. Consistent with this Order, Comsat, IDB-A and CICI may provide Inmarsat aeronautical services on an interim basis to aircraft in flight between two domestic points without a necessity to modify their existing Title II or Title III authority (unless technical modifications are required to add these services). Appropriate tariff amendments should be filed. This will allow domestic aeronautical mobile satellite service to be provided immediately.

26. Prior to regular use, aircraft earth stations (AES) aboard U.S. aircraft must be authorized under Part 87 of our rules. At the present time, there are no provisions for the authorization of AES. The licensing procedures and technical standards for AES are being considered in PR Docket No. 90-315.⁵¹ Therefore, any use of AES aboard U.S. aircraft prior to the conclusion of that docket will require a waiver of Sections 87.145 concerning the use of type accepted equipment, and 87.187 concerning available frequencies. Requests for waiver must provide the information required in existing licensing procedures in Part 87, and be submitted to the Private Radio Bureau. After adoption of the Report and Order in PR Docket No. 90-315, all equipment authorized under a waiver will be required to meet the technical standards and operational conditions established.

V. ORDERING CLAUSES

27. Accordingly, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, as amended, 47 U.S.C. Section 154(i), that part (a) of the Arinc and ATA Request for Waiver is GRANTED and, therefore, the prohibition on direct domestic aeronautical mobile satellite service via the Inmarsat space segment is waived for the interim period.

28. IT IS FURTHER ORDERED that AMSC's Motion for Leave to File Further Reply is GRANTED.

29. IT IS FURTHER ORDERED that Comsat's Application for Authority to Provide Limited Aeronautical Services Within the U.S. via the Inmarsat System, File No. I-T-C-90-085, is GRANTED in part, as necessary to implement this Order.

30. IT IS FURTHER ORDERED that part (b) of the Arinc and ATA Request for Waiver and the corresponding part of Comsat's Application ARE DEFERRED.

31. IT IS FURTHER ORDERED that part (c) of the Arinc and ATA Request for Waiver and the corresponding part of Comsat's Application ARE DISMISSED.

32. IT IS FURTHER ORDERED that the conditions imposed on IDB Aero-Nautical Communications, Inc. (IDB-A) and CICI, Inc. (CICI) in the *Memorandum, Opin-*

ion and Order, 6 FCC Rcd 2485 (1991), and on Comsat in the *Memorandum Opinion, Order and Authorization*, 4 FCC Rcd 7176 (1989), that limit these companies' provision of aeronautical mobile satellite services to aircraft in international flight as defined by the Commission in CC Docket No. 87-75 ARE WAIVED for the interim period as defined in this Order.

33. IT IS FURTHER ORDERED that Comsat shall file amendments to its current tariffs and IDB-A shall file tariff provisions with the Commission consistent with this decision before they commence service under the authority granted herein.

34. IT IS FURTHER ORDERED that Comsat shall continue to account for and file its earth station and space segment service investment and operational costs in a manner consistent with the accounting system and cost allocation procedures in CC Docket No. 87-75.

35. IT IS FURTHER ORDERED that Arinc, Comsat and all other interim domestic AMSS providers shall file with this Commission and serve on the domestic licensee a transition plan within 90 days after launch of a domestic MSS spacecraft. The transition plan shall detail the steps that will be taken to move all domestic AMSS traffic to the new satellite without disruption to customers.

36. The Commission retains jurisdiction over this matter to ensure nondiscriminatory use of, and equitable access to, the Inmarsat satellite system.

FEDERAL COMMUNICATIONS COMMISSION

Donna R. Searcy
Secretary

FOOTNOTES

¹ Provision of Aeronautical Services via the Inmarsat System, *Report and Order*, 4 FCC Rcd 6072 (1989), *recon. pending* (hereinafter *Inmarsat Report and Order*). British Telecom filed on September 14, 1989, a Petition for Reconsideration citing alleged problems with the geographical restrictions contained in the *Inmarsat Report and Order*.

² A mobile satellite service is a radio communication service between mobile earth stations and one or more space stations, or between mobile earth stations by means of one or more space stations. See 47 C.F.R. Section 2.1.

³ Provision of Aeronautical Services via the Inmarsat System, *Notice of Proposed Rule Making (NPRM)*, 2 FCC Rcd 1976 (1987).

⁴ The U.S. Table of Frequency Allocations applies to aircraft communicating with non-U.S. aeronautical earth stations via Inmarsat space segment while occupying U.S. airspace in originating or terminating international flights and to all aircraft communicating with U.S. aeronautical earth stations via Inmarsat space segment.

⁵ AMSS(R) is a mobile satellite service in which mobile earth stations are located on board aircraft and in which the spectrum is reserved for aeronautical communications related to the safety and regularity of flight. Survival craft and emergency position-indicating radio beacon stations may also participate in this service. Amendment of Parts 2, 22, and 25 of the Commission's

Rules to Allocate Spectrum for and to Establish Other Rules and Policies Pertaining to the Use of Radio Frequencies in a Land Mobile Satellite Service for the Provision of Various Common Carrier Services, *Memorandum, Opinion, Order and Authorization*, 4 FCC Rcd 6041, 6060 n.6 (1989) (hereinafter *Domestic Licensing Order*) ; *remanded Aeronautical Radio, Inc. v. FCC*, 928 F.2d 428 (D.C. Cir. 1991); *on remand Tentative Decision*, 6 FCC Rcd 4900 (1991); *Final Decision*, FCC 91-427 (released January 6, 1992). See 47 C.F.R. Section 2.1.

⁶ Communications Satellite Corporation and American Mobile Satellite Corporation Requests for Interim Waiver of Section 2.106 of the Commission's Rules to Provide AMSS(R) and MSS Services in the Maritime Bands 1530-1544 MHz and 1625.5-1645.5 MHz, 5 FCC Rcd 4117 (1990).

⁷ The International Table of Frequency Allocations, which designates uses of the spectrum for international purposes only, adds land mobile satellite service (LMSS) as a co-primary or secondary service on various portions of the lower L-band.

⁸ The International Table of Frequency Allocations has no secondary allocation in the upper L-band for MSS. Internationally, the primary allocation in the upper L-band frequencies 1545-1555 and 1646.5-1656.5 MHz is AMSS(R) and in the upper L-band frequencies 1555-1559 and 1656.5-1660 MHz is LMSS.

⁹ We note that the existing authority does not include use of Inmarsat third generation space segment, but only first and second generation space segment. In File No. CSS-91-001-LA, Comsat proposes that the third generation Inmarsat spacecraft will be capable of operating in the entire upper and lower L-band, plus an additional 5 MHz of bandwidth covering the frequency range 1525-1530 MHz in the forward direction to match the corresponding 1626.5-1631.5 MHz subband already allocated in the return direction. Use of the additional 5 MHz, according to Comsat, will be contingent upon approval of such use at the 1992 World Administrative Radio Conference, as well as upon international frequency coordination.

¹⁰ *Inmarsat Report and Order*, 4 FCC Rcd at 6078-79.

¹¹ See, *Domestic Licensing Order*, n. 4, *supra*.

¹² *Domestic Licensing Order*, 4 FCC Rcd at 6058.

¹³ The waiver request was placed on public notice on November 22, 1989. American Mobile Satellite Corporation (AMSC) filed its opposition to the Arinc/ATA waiver request. British Telecommunications, plc (BT), Comsat, the Federal Aviation Administration (FAA) and National Telecommunications and Information Administration (NTIA) filed comments. AMSC, Arinc and ATA, BT and IDB Communications Group, Inc. (IDB), Geostar Messaging Corporation (Geostar) and Qualcomm, Inc. (Qualcomm) filed reply comments. AMSC filed both a motion for leave to file a further reply and a further reply to the waiver request. Arinc and ATA filed an opposition to AMSC's motion for leave to file further reply. AMSC filed a reply to the opposition to motion for leave to file further reply. The U.S. State Department filed a letter after expiration of the Reply Comment filing period. All these filings have been considered.

¹⁴ GE American Communications, Inc., also filed a Petition to Deny the Comsat application, but withdrew its petition, requesting that any grant of Comsat's application be effective only until a dedicated U.S. domestic aeronautical satellite system becomes available.

¹⁵ *Domestic Licensing Order*, 4 FCC Rcd at 6058-60.

¹⁶ *Inmarsat Report and Order*, 4 FCC Rcd at 6078.

¹⁷ *Domestic Licensing Order*, 4 FCC Rcd at 6058.

¹⁸ *Inmarsat Report and Order*, 4 FCC Rcd at 6078, n. 23.

¹⁹ BT Comments at 4-5; Comsat Comments at 2-3; FAA Comments at 1-2; IDB Reply Comments at 3; NTIA Comments at 3-5; State Department Letter at 1.

²⁰ FAA Comments at 1-2.

²¹ Any provision of the Commission's rules may be waived by the Commission on petition if good cause is shown. 47 C.F.R. Section 1.3. The applicant for waiver must "plead with particularity the facts and circumstances which warrant such action." *Rio Grande Family Radio Fellowship, Inc. v. FCC*, 406 F. 2d 664, 666 (D.C. Cir. 1968). A waiver is appropriate in unique circumstances which can be distinguished from the general situations to which the rule applies. *Station WTHR - TV*, 47 Rad. Reg. 2d-1130, 1132 (1980).

²² Arinc/ATA Waiver Request at 6. See *Inmarsat Report and Order*, 4 FCC Rcd at 6078. Part 87 of the Commission's Rules provides for the provision of these services via terrestrial systems.

²³ NTIA Comments at 5.

²⁴ *Inmarsat Report and Order*, 4 FCC Rcd at n. 26.

²⁵ To the extent questions may exist regarding our legal authority under the International Maritime Satellite Act to authorize domestic satellite service within the United States, we believe we have authority under section 4(i) of the Communications Act to authorize such service on an interim basis under the unique circumstances at issue here.

²⁶ Also pending before the Commission is a British Telecom Petition for Reconsideration of the geographical restrictions contained in the *Inmarsat Report and Order*.

²⁷ AMSC Opposition at 20. A grant of a waiver must not undermine the policy served by the rule and must not unnecessarily divert Commission resources. See *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969), *cert. denied*, 409 U.S. 1027 (1972).

²⁸ AMSC Reply at 3, 4.

²⁹ *Domestic Licensing Order*, 4 FCC Rcd at 6058.

³⁰ NTIA Comments at 5; Geostar Reply Comments at 15-16.

³¹ NTIA indicates the commercial airlines have a sufficient level of knowledge to take satellite capacity directly from the space segment provider, without the service assistance or financial mark-up of a series of reseller middlemen. NTIA Comments at 5-6. Furthermore, it is NTIA's understanding that AMSC has not explicitly stated that it should be the "exclusive provider" of interim domestic MSS. NTIA states that Gen. Docket No. 84-1234 and CC Docket No. 87-75, as well as the procompetitive policies of the Commission, place a great burden on AMSC to justify the need and wisdom of granting AMSC the authority to be even the "exclusive reseller" of access to Inmarsat space segment facilities for domestic services. NTIA Comments at 4-5.

³² BT alleges that permanent grant is intended to protect AMSC's proposed capital investment in satellite facilities, and this logic does not apply to its operations as a mere lessee of facilities funded by its competitors. BT Comments at 4.

³³ Arinc/ATA Reply Comments at 30-31; Geostar Reply Comments at 4.

³⁴ Geostar Reply Comments at 4.

³⁵ Arinc/ATA Waiver Request at 6-8; BT Comments at 2-3, 9-10; FAA Comments at 1; IDB Reply Comments at 3.

³⁶ BT Comments at 4-5.

³⁷ BT adds that the Commission's restriction complicates the Commission's own efforts and those of other countries, such as the United Kingdom, to encourage other nations to open their markets and liberalize their telecommunications regimes. BT Comments at 9; Arinc/ATA Waiver Request, Exhibit A.

³⁸ AMSC Reply Comments at 4, 6. This Order does not address interim land mobile satellite service; we only consider the issue of interim aeronautical mobile satellite service.

³⁹ AMSC Opposition at 24-25.

⁴⁰ AMSC Opposition at 6-7.

⁴¹ Arinc/ATA Reply Comments at 18.

⁴² See IDB Reply Comments at 3-4.

⁴³ Arinc/ATA Waiver Request at 7-8; NTIA Comments at 4-5.

⁴⁴ Use of Inmarsat space segment by aircraft flying within U.S. airspace and communicating with non-U.S. aeronautical earth stations will be pursuant to the terms and provisions of the Inmarsat Convention and Operating Agreement.

⁴⁵ *Inmarsat Report and Order*, 4 FCC Rcd at 6082-83.

⁴⁶ AMSC Opposition at 27.

⁴⁷ FAA Comments at 3, 5.

⁴⁸ We also expect the individual aircraft and the Inmarsat network control office centers will be able to control communications to and from aircraft so that non-safety communications can be terminated, if necessary, to support safety services, particularly in the AMSS(R) bands used by the Inmarsat second generation space segment.

⁴⁹ FAA Comments at 2-4.

⁵⁰ Applications for new or modified earth stations to provide interim domestic AMSS should be filed with the Domestic Facilities Division using the new FCC Form 493 and the Fixed Satellite Transmit/Receive Earth Station procedures. Send applications along with the appropriate fees and FCC Form 155 to the Mellon Bank, P.O. Box 358160, Pittsburgh, PA.

⁵¹ Amendment of Part 87 of the Commission's Rules to Establish Technical Standards and Licensing Procedures for Aircraft Earth Stations, PR Docket No. 90-315, 5 FCC Rcd 3933 (1990).