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

In the matter of	)	
	)	SES-STA-20071129-01630 (Call Sign E030120)
Amtech Systems LLC	)	SES-STA-20071129-01633 (Call Sign E990316)

#### PETITION TO HOLD IN ABEYANCE

Mobile Satellite Ventures Subsidiary LLC ("MSV") hereby files this Petition to Hold in Abeyance the above-referenced applications filed by Amtech Systems LLC ("Amtech") for 60-day Special Temporary Authority ("STA") to operate mobile earth terminals ("METs") with the Inmarsat 3F4 satellite which has been relocated to 142°W. The International Bureau ("Bureau") should not grant the applications until after (i) the Bureau requires Amtech to disclose which frequencies it will use on the Inmarsat 3F4 satellite and precludes Amtech from using "loaned" L band frequencies or any other frequencies coordinated for MSV or MSV Canada; (ii) Inmarsat Ventures Limited ("Inmarsat") coordinates the operation of the Inmarsat 3F4 satellite at 142°W with MSV and other L band operators to mitigate the significant risk of interference from its uncoordinated operation; and (iii) Amtech seeks a waiver of the Commission's longitudinal station-keeping rule.

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<sup>&</sup>lt;sup>1</sup> As one of the L band Mobile Satellite Service ("MSS") operators in North America which could be subjected to harmful interference from grant of this application, MSV is a "party in interest" with standing to file this Petition. See 47 U.S.C. § 309(d)(1). Moreover, MSV has standing as a competitor in the MSS market. See FCC v. Sanders Brothers Radio Station, 309 U.S. 475, 477 (1940).

## **Background**

MSV. MSV is the entity authorized by the Commission in 1989 to construct, launch, and operate a United States MSS system in the L band.<sup>2</sup> MSV's licensed satellite (AMSC-1 or MSAT-2) was launched in 1995, and MSV began offering service in 1996. MSV is also the successor to TMI Communications and Company, Limited Partnership ("TMI") with respect to TMI's provision of L band MSS in the United States. Today, MSV offers a full range of mobile satellite services, including voice and data, using both its own U.S.-licensed satellite and the Canadian-licensed L band satellite (MSAT-1) licensed to MSV Canada. In May 2005, the Bureau licensed MSV to launch and operate a replacement L band MSS satellite at 101°W ("MSV-1").<sup>3</sup>

L band coordination process. Spectrum in the L band in North America is shared primarily among five operators: MSV, MSV Canada, Inmarsat, and Mexican and Russian systems.<sup>4</sup> The five Administrations that license these systems reached an agreement in 1996 for a framework for future coordination of the L band spectrum in North America, called the Mexico City Memorandum of Understanding ("Mexico City MoU").<sup>5</sup> Under the Mexico City MoU, the L

<sup>&</sup>lt;sup>2</sup> Order and Authorization, 4 FCC Rcd 6041 (1989); remanded by Aeronautical Radio, Inc. v. FCC, 928 F.2d 428 (D.C. Cir. 1991); Final Decision on Remand, 7 FCC Rcd 266 (1992); aff'd, Aeronautical Radio, Inc. v. FCC, 983 F.2d 275 (D.C. Cir. 1993); see also AMSC Subsidiary Corporation, Memorandum Opinion and Order, 8 FCC Rcd 4040 (1993).

<sup>&</sup>lt;sup>3</sup> See Mobile Satellite Ventures Subsidiary LLC, Order and Authorization, DA 05-1492 (May 23, 2005) ("MSV-1 Order").

<sup>&</sup>lt;sup>4</sup> The L band spectrum in North America is also shared with Japan's MTSAT satellite, but only in and near the Pacific Ocean.

<sup>&</sup>lt;sup>5</sup> See Memorandum of Understanding for the Intersystem Coordination of Certain Geostationary Mobile Satellite Systems Operating in the Bands 1525-1544/1545-1559 MHz and 1626.5-1646.5/1646.5-1660.5 MHz, Mexico City, Mexico, 18 June 1996 ("Mexico City MoU").

band operators are each assigned certain specific frequencies to use on their specific satellites through multi-party operator agreements, called Spectrum Sharing Arrangements ("SSA").

Since 1999, all the L band operators, only recently with the exception of Inmarsat, have been operating on a non-interference basis using spectrum assignments listed in the 1999 SSA for specific satellites, orbital locations, earth stations, services (carrier types and emission levels), satellite antenna beams and the associated main beam and sidelobe roll-off, and service areas. At the last L band operators meeting, held in 1999, Inmarsat committed to abide by the terms of the 1999 SSA. Indeed, Inmarsat's statement made in its April 2005 securities filing that "the amount of spectrum available to each operator is currently frozen at the levels agreed in 1999," is consistent with its earlier commitment to respect the 1999 SSA.

Amtech Applications. Amtech is authorized to operate mobile earth terminals ("METs") with MSAT-1 and MSAT-2. In the above-referenced applications, Amtech seeks STA to operate its METs with the Inmarsat 3F4 satellite in the event MSAT-2 experiences an outage. The Inmarsat 3F4 satellite was relocated to 142°W to replace an uncoordinated Inmarsat-2 satellite at 142°W.

#### **Discussion**

As an initial matter, Amtech's application does not specify which L band frequencies it will use to communicate with the Inmarsat 3F4 satellite. Absent specific frequency information, the Bureau cannot conclude that grant of this STA will not result in harmful interference. For

<sup>&</sup>lt;sup>6</sup> Indeed, even more recently, the Commission was under the impression that "the parties continue to operate under the 1999 assignments pending further negotiations." *See Flexibility for Delivery of Communications by MSS Providers, Report and Order*, IB Docket No. 01-185, 18 FCC Rcd 1962, n.144 (February 10, 2003) ("*ATC Order*").

<sup>&</sup>lt;sup>7</sup> See Inmarsat Global Ltd., Form F-20 (April 29, 2005) (http://www.sec.gov/Archives/edgar/data/1291396/000104746905012474/a2156552z20-f.htm).

example, to the extent Amtech is seeking to use on the Inmarsat 3F4 satellite "loaned" L band frequencies or any other frequencies coordinated for MSV or MSV Canada, such operations will result in harmful interference to the customers of MSV and MSV Canada. The Bureau should require Amtech to specify the frequencies it will use and preclude Amtech from using "loaned" L band frequencies or any other frequencies coordinated for MSV or MSV Canada, as the Bureau has done in other similar proceedings.

The Amtech application should be held in abeyance until after Inmarsat coordinates the operation of its Inmarsat 3F4 satellite at 142°W with MSV and other North American L band operators. Inmarsat's proposed operation of the Inmarsat 3F4 satellite at 142°W is the latest in a growing number of uncoordinated satellite operations Inmarsat is conducting in North America, which will now include uncoordinated satellites operating at 52.75°W, 98°W, 142°W, and 143.5°E. A decision to authorize service at this uncoordinated location would unfairly favor Inmarsat over all of the other satellite operators – both U.S.- and non-U.S. licensed – that diligently follow the ITU coordination procedures. Such a decision would undermine the Commission's obligations under the World Trade Organization (WTO) Agreement on Basic Telecommunications Services<sup>10</sup> as well as the Commission's own commitments made in the

<sup>&</sup>lt;sup>8</sup> The Bureau has defined "loaned" L band frequencies as "those bandwidth segments that were loaned to Inmarsat by MSV and [Mobile Satellite Ventures (Canada) Inc.], either as part of the Revised 1999 Spectrum Sharing Arrangement (October 4, 1999), or later as bilateral arrangements between Inmarsat and MSV and Inmarsat and MSV Canada." *See, e.g.*, Stratos Communications, Inc., Request for Special Temporary Authority, File No. SES-STA-20060310-00419 (granted with conditions on May 12, 2006).

<sup>&</sup>lt;sup>9</sup> See supra note 8.

Amendment of the Commission's Regulatory Policies to Allow Non-U.S. Licensed Satellites Providing Domestic and International Service in the United States, Report and Order, 12 FCC Rcd 24094 (1997) ("DISCO II Order"), at ¶ 22 (explaining that the "critical aspect" of national treatment analysis under the WTO Basic Telecom Agreement "is whether the treatment accorded modifies the conditions of competition in favor of certain foreign or domestic suppliers").

DISCO II Order to create a level regulatory playing field among satellite operators.<sup>11</sup>

Accordingly, the Bureau should defer action on this application until after Inmarsat coordinates the Inmarsat 3F4 satellite at its new location with MSV and the other North American L band operators.

Absent prior coordination, there is a significant risk of interference to other L band operators from Inmarsat's uncoordinated operations. While Inmarsat has operated an Inmarsat-2 satellite at 142°W, Inmarsat never coordinated this satellite with MSV and the other North American L band operators. There is no established and agreed-to technical basis for the operation of the Inmarsat-2 satellites after the *Mexico City MoU* among the five North American L band MSS operators and their respective Administrations. From a technical perspective, the Inmarsat 3F4 satellite is materially different than the Inmarsat-2 satellite it is allegedly replacing, and is more likely both to cause interference to and to suffer interference from other L band systems relative to the Inmarsat-2 satellite. For example, the Inmarsat-2 satellite at 142°W has a global beam only; the Inmarsat 3F4 satellite has a global beam as well as regional beams. The Inmarsat 3F4 satellite has substantially more RF power than the Inmarsat-2 satellite, and to the extent it is used to carry services with low and medium gain mobile terminals (the very services that can only operate in spot beam mode), such use could materially inflate Inmarsat's demand for L band spectrum. Such services cannot reuse spectrum via orbital separation of the Inmarsat

<sup>&</sup>lt;sup>11</sup> In the *DISCO II Order*, in which the Commission adopted policies governing the ability of foreign-licensed satellite systems to serve the U.S. market, the Commission was careful to require "non-U.S. satellite operators to comply with all Commission rules applicable to U.S. satellite operators" because "[t]o do otherwise would place U.S. and foreign operators on an uneven competitive footing." *See DISCO II Order*, at ¶ 173. The Commission explained that "this overall approach does not violate U.S. national treatment obligations because we will be treating foreign service suppliers identically to U.S. service suppliers with respect to their provision of service within the United States." *Id*.

satellites. Thus, there is no basis to conclude that the Inmarsat-2 and Inmarsat-3 satellites are technically and operationally consistent. Assuming Inmarsat uses the regional beams on the Inmarsat 3F4 satellite at 142°W, Inmarsat will be required to use additional spectrum because Inmarsat cannot operate regional and global beams using the same frequencies. Even if Inmarsat uses only the global beam of the Inmarsat 3F4 satellite, the Inmarsat 3F4 satellite has a higher aggregate EIRP than the Inmarsat-2 satellite. Thus, even if Inmarsat had coordinated the Inmarsat-2 at 142°W, the Inmarsat 3F4 satellite is technically different than the Inmarsat-2 satellite, making it infeasible for Inmarsat to operate the new satellite within the parameters of its old satellite. <sup>12</sup>

In addition, the technical information referenced by Amtech in related applications on file with the FCC indicates that the Inmarsat 3F4 satellite at 142°W will operate with ±0.1° East-West station keeping. In acting on MSV's application to operate an MSS satellite with ±0.1° East-West station keeping, the Bureau held that MSV was required to justify a waiver of the rule requiring Fixed Satellite Service ("FSS") satellites to operate with ±0.05° East-West station keeping. MSV has sought reconsideration of this decision, asking the Bureau to clarify that the rule requiring FSS satellites to operate with ±0.05° East-West station-keeping does not apply to MSS satellites. This proceeding is pending. To the extent the Bureau authorizes Inmarsat 3F4

<sup>&</sup>lt;sup>12</sup> Amtech does not claim that the Inmarsat 3F4 satellite at 142°W is a replacement satellite under the *Mexico City MoU*. The *Mexico City MoU* does not contemplate the operation of the Inmarsat 3F4 satellite at any orbital location other than 54°W.

<sup>&</sup>lt;sup>13</sup> See, e.g., Amtech Systems LLC, File No. SES-AMD-20071129-01631, at Attachment p. 1 (citing Vizada Satellite, Inc., File No. SES-MFS-20071011-012413).

<sup>&</sup>lt;sup>14</sup> See MSV-1 Order, at ¶ 21.

<sup>&</sup>lt;sup>15</sup> See MSV, Petition for Clarification and Partial Reconsideration, File Nos. SAT-LOA-19980702-00066 et al. (June 22, 2005).

for service in the United States with  $\pm 0.1^{\circ}$  East-West station keeping without seeking a waiver, the Bureau must afford similar treatment to other MSS satellites proposing to serve the U.S. market, such as MSV-1. Conversely, if the Bureau on reconsideration of the *MSV-1 Order* upholds its decision that MSS satellites are required to comply with  $\pm 0.05^{\circ}$  East-West station-keeping, the Amtech application should be dismissed for failing to seek a waiver of this rule. <sup>16</sup>

<sup>&</sup>lt;sup>16</sup> See Letter from Thomas S. Tycz, FCC, to John K. Hane, Pegasus Development Corporation, DA 03-3665 (November 19, 2003) (dismissing application for failing to seek waiver of Commission's East-West station-keeping rule).

#### Conclusion

Based on the foregoing, the Bureau should not grant the applications until after (i) the Bureau requires Amtech to disclose which frequencies it will use on the Inmarsat 3F4 satellite and precludes Amtech from using "loaned" L band frequencies or any other frequencies coordinated for MSV or MSV Canada; (ii) Inmarsat coordinates the operation of the Inmarsat 3F4 satellite at 142°W with MSV and other L band operators to mitigate the significant risk of interference from its uncoordinated operation; and (iii) Amtech seeks a waiver of the Commission's longitudinal station-keeping rule.

Respectfully submitted,

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Dated: December 6, 2007

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### Declaration of Jennifer A. Manner

- 1. I am the Vice President, Regulatory Affairs of Mobile Satellite Ventures Subsidiary LLC.
- 2. I have read the foregoing Petition to Hold in Abeyance the applications of Amtech Systems LLC.
- 3. I have personal knowledge of the facts stated in the Petition to Hold in Abeyance. The facts set forth in the Petition, other than those of which official notice may be taken, are true and correct to the best of my knowledge, information, and belief.

I declare under penalty of perjury that the foregoing is true and correct.

Jennifer A. Manner

Executed on December 6, 2007

## **Technical Certification**

I, Richard O. Evans, Senior Engineer of Mobile Satellite Ventures Subsidiary LLC, certify under penalty of perjury that:

I am the technically qualified person with overall responsibility for the technical information contained in this Petition to Hold in Abeyance. I am familiar with the Commission's rules, and the information contained in the Petition to Hold in Abeyance is true and correct to the best of my knowledge and belief.

ichard O. Evans

Dated: December 6, 2007

#### CERTIFICATE OF SERVICE

I, Renee Williams, of the law firm of Pillsbury Winthrop Shaw Pittman LLP, hereby certify that on this 6th day of December 2007, I served a true copy of the foregoing by first-class U.S. mail or electronic mail (\*) upon the following:

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