

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

In the Matter of	)	
	)	
<b>Mobile Satellite Ventures Subsidiary LLC</b>	)	File Nos. SAT-MOD-20070523-00073
	)	SES-MOD-20070523-00072
Application for Limited Waiver of On-Ground	)	
Spare Satellite Rule	)	Call Signs: S2358, E980179

**MEMORANDUM OPINION AND ORDER**

**Adopted: November 26, 2007**

**Released: November 26, 2007**

By the Chief, Satellite Division, International Bureau:

**I. INTRODUCTION**

1. By this Order, we grant a request for waiver of the Commission's rule that operators of Mobile Satellite Service ("MSS") systems with geostationary-orbit satellites must have a spare satellite on the ground within one year after commencing operation of Ancillary Terrestrial Component ("ATC") facilities. Grant of the waiver is based upon the licensee's plans to have in-orbit back-up capacity.

**II. BACKGROUND**

2. Mobile Satellite Ventures Subsidiary LLC ("MSV") and its predecessors in interest have provided L-Band<sup>1</sup> MSS in the United States since 1996 via AMSC-1, a U.S.-licensed geostationary-orbit satellite operating at 101° W.L. Pursuant to a Commission license for mobile-terminal operation, MSV also provides MSS in the United States via MSAT-1, a Canadian-licensed geostationary-orbit satellite operating at 106.5° W.L.

3. *Next-generation satellites.* In May 2005, the International Bureau granted authority for MSV to launch and operate MSV-1, a second-generation L-band satellite that would replace AMSC-1 at 101°W.L. The authorization is subject to a milestone schedule requiring the satellite to be launched by May 2010.<sup>2</sup> In April 2005 Industry Canada granted authority for Mobile Satellite Ventures (Canada) Inc. ("MSV Canada") to launch and operate "MSV-2," a second-generation L-band satellite to replace MSAT-1, subject to a milestone schedule requiring launch by April 2011.<sup>3</sup> In January 2006, MSV announced that it had entered into a contract with Boeing Satellite Systems, Inc. for construction and delivery of the technically identical MSV-1 and MSV-2 satellites.<sup>4</sup> MSV reports that Boeing is currently

<sup>1</sup> As used in this order, "L Band" refers to the 1525–1559 MHz and 1626.5–1660.5 MHz frequency bands, which are domestically and internationally allocated on a primary basis for MSS transmission from space to Earth and from Earth to space, respectively.

<sup>2</sup> *Mobile Satellite Ventures Subsidiary LLC, Order and Authorization*, 20 FCC Rcd 9752 (Int'l Bur. 2005).

<sup>3</sup> Letter from Jan Skora, Director General, Radiocommunications and Broadcasting Regulatory Branch, Industry Canada, to Mr. Larry Boisvert, President, Mobile Satellite Ventures (Canada) Inc., File No. 6215-3-3 (April 5, 2005).

<sup>4</sup> "Mobile Satellite Ventures Engages Boeing to Develop Next Generation Satellites" (Jan. 11, 2006), available at [http://www.msvlp.com/pr/news\\_releases\\_view.cfm?id=80](http://www.msvlp.com/pr/news_releases_view.cfm?id=80). MSV submitted a copy of the satellite construction contract to the Commission. See letter from Jennifer A. Manner, MSV, to Marlene H. Dortch, FCC Secretary, in (continued....)

ahead of schedule in the construction of MSV-1 and MSV-2 and is contractually obligated to deliver MSV-2 within six months after delivering MSV-1.<sup>5</sup> MSV has contracted with ILS International Launch Services, Inc. and Sea Launch Company, LLC for launch of the two satellites in 2009 and 2010, respectively.<sup>6</sup>

4. *ATC Ground-Spare Rule.* In 2003, the Commission adopted rules under which an MSS operator can obtain authority to operate an ATC – that is, terrestrial base stations and mobile terminals that re-use frequencies assigned for the MSS system’s operations.<sup>7</sup> In order to obtain ATC authority, an applicant must satisfy certain “gating” requirements, which are prescribed in Section 25.149(b) of the Commission’s rules, to ensure that the ATC operation will be ancillary to MSS operation. Among other things, Section 25.149(b) requires an ATC applicant with a geostationary MSS system to certify that it will have a spare satellite available on the ground within one year after commencing ATC operations and will launch the spare satellite in the first commercially reasonable launch window following failure of an operational satellite.<sup>8</sup> The Commission adopted this rule to ensure that there would be redundancy of satellite service, while at the same time, retaining ATC operations as an “ancillary” service in the event of launch failures or satellite malfunctions, in response to concern that MSS operators with ATC authority “might not exercise sufficient diligence in returning an MSS system to full operation [after a satellite failure] if the operator can continue to generate operating revenues from its ancillary terrestrial system.”<sup>9</sup>

5. *MSV’s ATC Authorization and Prior Waiver Request.* In November 2004, the Bureau granted MSV license authority for operation of ATC mobile terminals and base stations in the U.S. in L-band spectrum used by MSV and MSV Canada.<sup>10</sup> MSV had requested waiver of the ground-spare rule, arguing that it had no need for a ground spare because it had signed an agreement with MSV Canada under which either operator would allow the other to use its first-generation satellite for in-orbit backup in the event the other’s first-generation satellite failed. MSV indicated that it also planned to sign a similar agreement with MSV Canada covering operation of second-generation satellites. The Bureau denied the waiver request for the following reasons: 1) MSV had provided no assurance that enough capacity would be reserved on either operator’s first-generation or second-generation satellite for a full backup of the other operator’s companion satellite; 2) neither first-generation satellite could provide a satisfactory backup for a second-generation satellite because the former could not be accessed by handsets, unless they utilized external power boosters; 3) it was not clear when, if ever, MSV Canada would launch a second-generation satellite, because at that time Canadian regulatory approval for that

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File No. SAT-LOA-19980702-00066 et al. (January 11, 2006). The International Bureau has determined that MSV satisfied its initial milestone requirement to enter into a binding contract for construction of MSV-1. Public Notice, Report No. SAT-00356, DA No. 06-918 (April 21, 2006).

<sup>5</sup> Application for Limited Waiver at 4.

<sup>6</sup> *Id.*

<sup>7</sup> *Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz Bands; Review of the Spectrum Sharing Plan Among Non-Geostationary Satellite Orbit Mobile Satellite Service Systems in the 1.6/2.4 GHz Bands, Report and Order and Notice of Proposed Rulemaking*, IB Docket Nos. 01-185 and 02-364, 18 FCC Rcd 11,030 (2003) (“ATC Order”), modified *sua sponte* by *Order on Reconsideration*, 18 FCC Rcd 13590 (2003), further modified by *Memorandum Opinion and Order and Second Order on Reconsideration*, 20 FCC Rcd 4616 (2005).

<sup>8</sup> See 47 C.F.R. § 25.149(b)(2)(ii).

<sup>9</sup> *ATC Order* at ¶81.

<sup>10</sup> *Mobile Satellite Ventures Subsidiary LLC, Order and Authorization*, 19 FCC Rcd 22,144 (Int’l Bur. 2004) (“*MSV ATC Order*”).

satellite had not yet been granted.<sup>11</sup>

6. *Filing of Current Application.* On May 23, 2007, MSV filed the captioned application for modification of its ATC authorization, in which it renewed and updated its request for waiver of the ground-spare rule. The application was placed on public notice.<sup>12</sup> ICO Satellite Services G.P. filed comments in support of MSV's request, and no opposition comments were filed.<sup>13</sup>

### III. DISCUSSION

7. The Commission may waive its rules "for good cause shown."<sup>14</sup> Good cause for waiver is generally found in cases where allowing deviation from a rule requirement would not disserve the rule's underlying purpose and would better serve the public interest than requiring strict compliance.<sup>15</sup>

8. In support of the current waiver request, MSV has submitted a copy of a contract between MSV and MSV Canada in which each party promises that in the event of a failure of the other party's second-generation satellite it will make available capacity on its own second-generation satellite to provide "continuing service" to all the other party's customers and will reserve sufficient capacity for that purpose on its satellite "at all times."<sup>16</sup> MSV maintains that this in-orbit backup arrangement would better serve the public interest than reliance on a ground spare because it would minimize service disruption following a satellite failure. MSV states that MSV's and MSV Canada's gateways will be fully interconnected to both second-generation satellites and consequently that service will be restored by software configuration changes within a matter of hours in the event of a satellite failure. In contrast, MSV estimates that service restoration after a satellite failure would be delayed for 18 months or more if it depended on the launch of a ground spare.

9. MSV states that in the event of an in-orbit failure of either second-generation satellite, routing all customer traffic through a single satellite will result in at most a 3 dB loss in link margin in each direction compared to operation with two satellites, which would not materially affect service quality or force end-users to employ power boosters. Moreover, MSV states that each second-generation satellite can independently cover the entire geographic area where service coverage is required by the Commission's rules.<sup>17</sup> Hence, MSV contends that if MSV-1 or MSV-2 were to fail in orbit the remaining satellite would be fully capable of providing substantial satellite service to customers of both licensees.

10. MSV argues that the requested waiver is warranted for three reasons. First, the proposed

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<sup>11</sup> *Id.* at ¶24. The Bureau said, however, that it would consider granting a limited waiver that would extend the one-year deadline for obtaining a ground spare, based on a showing that a second-generation spare satellite was under construction with scheduled delivery no later than six months after the milestone deadline for launching MSV-1. *Id.* at ¶25. Such a waiver would have allowed MSV to commence ATC operation more than a year before launching MSV-1 without having to construct a duplicate of its obsolete first-generation satellite.

<sup>12</sup> Policy Branch Information, Satellite Space Applications Accepted for Filing, Report No. SAT-00449 (June 8, 2007).

<sup>13</sup> Comments on Application for Limited Waiver, filed July 9, 2007.

<sup>14</sup> 47 C.F.R. § 1.3.

<sup>15</sup> See *Northeast Cellular Telephone Co., LP v. FCC*, 897 F.2d 1164 (D.C. Cir. 1990) and *WAIT Radio v. FCC*, 418 F.2d 1153 (D.C. Cir. 1969).

<sup>16</sup> Application for Limited Waiver, Exhibit 2.

<sup>17</sup> See 47 C.F.R. §§ 25.143(b)(iii) and 25.149(b)(1)(ii) (requiring fulltime coverage of the fifty states, Puerto Rico, and the U.S. Virgin Islands).

reciprocal in-orbit backup arrangement would better serve the public interest than reliance on a ground spare because an in-orbit backup would enable service to be restored much sooner in the event of a satellite failure. Second, the proposed in-orbit backup arrangement would not entail the risk of the further satellite launch that would be necessary to effect backup by deployment of a ground spare. Third, construction of a third satellite to serve as a ground spare would be prohibitively expensive, as it would require an additional upfront expenditure of hundreds of millions of dollars.

11. There are significant differences between the circumstances presented here and those that we considered when denying MSV's earlier request for waiver of the ground-spare rule in 2004. MSV is no longer proposing to rely on first-generation satellites for backup of second-generation satellites. MSV and MSV Canada now have a reciprocal backup agreement covering operation of the second-generation satellites. License authority has been granted for both second-generation satellites, and both are under construction, pursuant to a contractual schedule that requires MSV-2 to be delivered within six months after delivery of MSV-1. In the waiver request now before us, moreover, MSV has provided detailed information about the backup capacity that would be afforded by the proposed in-orbit backup arrangement.

12. We conclude that grant of the requested waiver will strike an appropriate balance between ensuring continuity of satellite service to customers and minimizing cost burdens on the satellite operator. We request that MSV provide, within 90 days of the release of this Order, a report outlining contingency plans in the event of a failure of an on-orbit spare satellite. Grant of the waiver will ensure that ATC remains an "ancillary" service, in the event of a satellite failure by providing adequate satellite redundancy. Hence, grant of the waiver will serve the public interest better than requiring strict compliance with the rule.

#### **IV. ORDERING CLAUSES**

13. Accordingly, IT IS ORDERED, that the applications for modification of license, SAT-MOD-20070523-00073 and SES-MOD-20070523-00072, ARE GRANTED, and 47 C.F.R. § 25.149(b)(2)(ii) IS WAIVED.

14. This Order is issued pursuant to the Commission's rules on delegated authority, 47 C.F.R. § 0.261.

#### **FEDERAL COMMUNICATIONS COMMISSION**

Robert G. Nelson  
Chief, Satellite Division  
International Bureau