

**Request for Modification of  
Earth Station Authorization (Call Sign E990316)**

**I. INTRODUCTION**

Amtech Systems LLC (“Amtech”) is currently licensed to operate 30,000 half-duplex mobile earth terminals (“METs”) with a transmit bandwidth of 20 kHz in the lower L-band (1530-1544/1626.5-1645.5 MHz).<sup>1</sup> These METs operate pursuant to a waiver of the real-time preemption requirement set forth in Footnote US315 to Section 2.106 and Section 25.136(d) of the Commission’s rules.<sup>2</sup> The current expiration date for Amtech’s license is July 2, 2010.

**II. PROPOSED MODIFICATION**

This modification application seeks to (1) reduce the authorized number of METs to 2,500 and (2) extend the license term for an additional two years—to July 2, 2012. To the extent that grant of this modification application requires an additional waiver of Footnote US315 to Section 2.106 of the Commission’s Rules, Amtech requests a waiver.

**III. GRANT OF THIS MODIFICATION APPLICATION SERVES THE PUBLIC INTEREST**

**A. Amtech’s Request is Consistent With FCC Precedent and NTIA Policy Guidance for METS That Do Not Comply With Real-Time Preemptibility Requirements**

In 2002, the Commission established rules and policies for mobile satellite services operating in the L-Band (“*L-Band Order*”)<sup>3</sup> that require the Commission to consider requests to operate half-duplex METs pursuant to waiver of Footnote US315 on a case-by-case basis, in consultation with NTIA. On two prior occasions, the FCC has granted Amtech a waiver of

---

<sup>1</sup> See File No. SES-MFS-20080303-01359, Call Sign E990316 (granted Oct. 21, 2008).

<sup>2</sup> 47 C.F.R. § 2.106, Footnote US315 and 47 C.F.R. § 25.136(d).

<sup>3</sup> *Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Services in the Upper and Lower L-Band*, Report and Order, 17 FCC Rcd 2704 (2002).

Footnote US315 in order to allow Amtech to utilize its METs.<sup>4</sup>

In May 2009, NTIA sent a letter to the Commission recommending three conditions be imposed on METs that are not capable of ceasing transmission and inhibiting further transmission within three seconds.<sup>5</sup> First, NTIA requested an aggregate limit of 10,000 on each Applicant's construction and operation of non-compliant METs. Second, the waivers should be limited to two years. Third, for METs with transmissions exceeding three seconds, NTIA requested a monthly analysis showing the number of packets that exceed three seconds in duration.

Grant of Amtech's requested waiver conforms to the NTIA's policy guidance. Amtech seeks to operate a maximum of 2,500 terminals pursuant to this waiver for a period of only two years. Moreover, because all of Amtech's terminals send transmissions of one second or less, the condition related to monthly reports showing the number of packets each month that exceed three second in duration is not required.

**B. Grant of Amtech's License Extension Request Will Ensure Continued Service to Customers**

Grant of this modification application is in the public interest because it will ensure continued service to customers during Amtech's ongoing, good faith efforts to bring its entire operations into compliance with the NTIA's preemption policy and the requirements of Footnote

---

<sup>4</sup> See *Vistar Data Communications, Inc.*, 17 FCC. Rcd 12899 (Int'l Bur. 2002) (Order and Authorization) (waiving Footnote US315 to permit Vistar to operate 20,000 half-duplex METs using AMSC-1 space segment in the 1530-1544/1626.5-1645.5 MHz band for a two-year term) (Vistar L-band Authorization). The license was assigned to Amtech Systems Corporation pursuant to authority granted by the Commission. See FCC File No. SES-ASG-20031117-01629. The license was renewed in 2004. See File No. SES-RWL-20040528-00740. The Commission renewed waiver of Footnote 315 to permit Amtech's current operations. See *Amtech Systems LLC, Application for Modification to Extend Term of Earth Station Authorization, File No. SES-MOD-20060614-01011*, Order and Authorization, DA 07-266 (Int'l Bur. 2007).

<sup>5</sup> Letter from Karl B. Nebbia, Office of Spectrum Management, NTIA to Julius Knapp, Office of Engineering and Technology, FCC (May 13, 2009) ("NTIA Letter").

US315 of the Commission's rules. Amtech has capped and is reducing the number of terminals that are non-compliant with this shutdown requirement. First, Amtech is currently shipping only 1-second capable terminals to its customers.<sup>6</sup> Second, Amtech has retired many of its non-compliant MT-1000 and MT-2000 METs. Finally, Amtech is upgrading previously deployed MT-2000 METs as they are available for software upgrade.

**C. Grant Poses No Increased Risk of Harmful Interference**

Grant of this request to modify Amtech's current authorization by extending this license for an additional two years will not increase the likelihood of possible harmful interference with maritime safety systems also operating in the L-band. Amtech is neither requesting any additional bandwidth nor any additional half-duplex METs. In fact, due to Amtech's ongoing efforts to reduce the number of non-compliant METs, Amtech currently operates less than 2,500 METs that do not comply with Footnote US315. These terminals will be operated in the same manner as they have been operated for the previous four years.

Significantly, since the Commission first granted Amtech a waiver of Footnote US315, Amtech has not received any indication that its operations in the lower L-band have interfered with any marine communications. The maximum shutdown time of any of Amtech's METs is 15 seconds. The average shutdown time of Amtech's non-one-second compliant METs is 12.5 seconds. As Amtech continues to reduce the number of non-compliant terminals, any possibility

---

<sup>6</sup> Amtech operates one-second capable METs pursuant to a license with a fifteen year term that is not due for renewal until July 14, 2018. See FCC File No. SES-LIC-20030403-00695, Call Sign E030120. See *Vistar Data Communications, Inc.*, 17 FCC Rcd 12899, ¶ 41 (Int'l Bur. 2002) (Order and Authorization) (stating NTIA position that a MET capable of ceasing transmissions and inhibiting further transmissions within one second would be considered to meet the realtime preemption requirements of Footnote 315) ("Vistar L-band Authorization"). Because of Amtech's growth in business and its ongoing efforts to reduce the number of non-compliant METs, Amtech will need to increase the number of METs that can be operated under its license for compliant terminals, call sign E030120. As such, Amtech will simultaneously be filing an application to modify its license to allow operation of up to 100,000 compliant METs.

for interference will be further eliminated.

#### **IV. CONCLUSION**

For the reasons set forth therein, Amtech requests that the Commission grant the requested modification application.