

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

In the matter of )  
 )  
Facilitating the Provision of Spectrum-Based )  
Services to Rural Areas and Promoting ) WT Docket No. 02-381  
Opportunities for Rural Telephone Companies )  
To Provide Spectrum-Based Services )

**REPLY COMMENTS OF MOBILE SATELLITE VENTURES SUBSIDIARY LLC**

Mobile Satellite Ventures Subsidiary LLC (“MSV”) hereby files these Reply Comments in the above-captioned proceeding in which the Commission seeks input as to how it should modify its current spectrum policies to promote the deployment of terrestrial wireless services to rural areas.<sup>1</sup> MSV agrees with those Commenters who note the difficulties carriers face in providing terrestrial wireless services to rural areas and how large “national” terrestrial carriers often ignore these areas. In response, MSV notes herein that satellites today play a critical role in providing communications to rural areas though their ability to overcome the economic barriers terrestrial carriers face in serving rural America.

**Background**

MSV is the successor to Motient Services Inc. (f/k/a AMSC Subsidiary Corporation) (“MSI”), the entity authorized by the Commission in 1989 to construct, launch, and operate a

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<sup>1</sup>*Facilitating the Provision of Spectrum-Based Services to Rural Areas and Promoting Opportunities for Rural Telephone Companies to Provide Spectrum-Based Services, Notice of Inquiry*, WT Docket No. 02-381, FCC 02-325 (rel. December 20, 2002) (“*NOI*”). Although Comments were due in this proceeding on February 18, 2003, the Commission was closed on February 18, 2003 due to inclement weather. Thus, these Comments are timely filed on February 19, 2003. See 47 C.F.R. § 1.4(e)(1); see also *FCC Public Notice, “FCC Closed February 18, 2003”* (rel. Feb. 19, 2003).

U.S. mobile satellite service (“MSS”) system in the L-band.<sup>2</sup> MSV’s licensed satellite (MSAT-2, also known as AMSC-1) was launched in 1995, and MSV began offering service in 1996. MSV is also the successor to TMI Communications and Company, Limited Partnership (“TMI”), formerly Telesat Mobile Inc., with respect to TMI’s provision of L-band MSS in the United States and TMI’s L-band mobile earth terminal authorizations granted by the Commission. TMI was licensed by the Canadian government in 1988 to provide L-band MSS to Canadian customers and launched its satellite, MSAT-1, in 1996. In November 1999, the Commission granted TMI the first of two blanket earth station licenses to provide MSS with MSAT-1 to mobile terminals located in the United States.<sup>3</sup> The second followed in September 2000.<sup>4</sup> On November 21, 2001, the Commission granted the assignment of MSI’s and TMI’s Commission authorizations for MSS in the L-band to a wholly owned subsidiary of a limited partnership formed by and between Motient Corporation (the parent of MSI), TMI, and a group of investors.<sup>5</sup>

Today, MSV offers a full range of land, maritime, and aeronautical mobile satellite services, including voice and data, throughout the contiguous United States, Alaska, Hawaii, the Virgin Islands, and coastal areas up to 200 miles offshore. MSV customers include hundreds of federal, state, and local governmental agencies, including critical public safety organizations like the Federal Emergency Management Agency, U.S. Coast Guard, and local fire and police departments. In addition, MSV serves many private sector customers in critical industries such

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<sup>2</sup>*Memorandum Opinion, Order and Authorization*, 4 FCC Rcd 6041 (1989); *Final Decision on Remand*, 7 FCC Rcd 266 (1992); *aff’d sub nom. Aeronautical Radio, Inc. v. FCC*, 983 F.2d 275 (D.C. Cir. 1993) (“*Licensing Order*”).

<sup>3</sup>*TMI Communications and Company, L.P., Order and Authorization*, 14 FCC Rcd 20798 (November 30, 1999).

<sup>4</sup>*TMI Communications and Company, L.P., Order and Authorization*, 15 FCC Rcd 18117 (September 25, 2000).

<sup>5</sup>*See Motient Services Inc., TMI Communications and Company, LP, and Mobile Satellite Ventures Subsidiary LLC, Order and Authorization*, DA 01-2732 (Nov. 21, 2001).

as interstate transportation and oil and natural gas exploration and drilling. MSV also provides a critical means of communications for maritime users. Like all MSS providers, MSV serves a vital role in times of national emergency and disasters. Many disasters, such as earthquakes and hurricanes, disrupt terrestrial wireline and wireless telecommunications systems. Because MSV's satellite is located 22,000 miles above the Earth, however, its infrastructure is unaffected by these disasters. MSV thereby provides a reliable means of communications for emergency response organizations. MSV also offers a unique dispatch radio, or "push-to-talk," service which allows communications to be broadcast to a large group of users simultaneously, thereby allowing for coordination of rescue efforts.

In the above-captioned *Notice of Inquiry* ("NOI"), the Commission sought comment on the effectiveness of its current regulatory tools in facilitating the delivery of terrestrial wireless services to rural areas and how it should modify its policies to further promote terrestrial wireless services to rural areas. In response, a number of Commenters noted the economic barriers terrestrial carriers face in providing wireless services to rural areas<sup>6</sup> and how large "national" carriers often ignore these areas.<sup>7</sup>

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<sup>6</sup>*See, e.g.*, Comments of the National Telecommunications Cooperative Association (Feb. 3, 2003) at 3 ("Whether the technology is wired or wireless, certain economic disadvantages persist in rural America. It is more expensive for telecommunications providers to serve rural areas than urban areas. Fewer subscribers and lower subscriber density translate into higher costs."); Comments of Rural Cellular Association (Feb. 3, 2003) at 2 ("Wireless carriers serving rural areas must recover their capital expenditures and operating costs from few customers and from roamers, and it is not always possible to scale back costs proportionately. As a result, rural carriers' costs per subscriber are most likely higher than those of larger carriers that can spread costs across the high- and low-density markets they serve.").

<sup>7</sup>*See, e.g.*, Comments of Corr Wireless Communications, LLC (Feb. 3, 2003) (noting how Corr "has seen large segments of rural America go unserved while winning bidders concentrate on serving the most densely populated portions of the large territories won at auction"); Comments of Monet Mobile Networks, Inc. (Feb. 3, 2003) at 3 ("The absence of advanced services in rural areas exists largely because licensees often have little economic incentive to build out lightly populated or rural areas once they have met their initial construction

## Discussion

### I. MSS OPERATORS LIKE MSV CURRENTLY PROVIDE CRITICAL TELECOMMUNICATIONS SERVICES TO RURAL AREAS

MSV agrees with those Commenters who demonstrated that there are economic barriers to the provision of terrestrial wireless service in rural and remote areas and how large national terrestrial carriers refuse to serve these areas. In response to these Comments, MSV adds that satellite operators like MSV currently provide instant connectivity for critical telecommunications services to the most rural and remote areas of the country.<sup>8</sup> The Commission has identified rural America's lack of sufficient access to telecommunications services, and "advanced telecommunications capability" in particular, as a major concern.<sup>9</sup> The Commission has also found that satellites can effectively solve this problem.<sup>10</sup> While the

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obligations."); Comments of the National Telecommunications Cooperative Association at 4 ("The economics of serving rural communities have not changed. Driven solely by profit, large carriers and smaller carriers without ties to rural communities understandably concentrate their build out efforts on the more profitable urban areas."); Comments of South Dakota Telecommunications Association (Feb. 3, 2003) at 11 ("[M]ost of the important third generation wireless spectrum has been acquired at auction or thereafter by large national and regional wireless carriers with the 'deep pockets' necessary to bid and pay high prices. These large carriers then have focused their construction and service efforts in the most populous and lucrative urban and suburban portions of their licensing areas.").

<sup>8</sup>Attached hereto as Exhibit A is a letter from the Yurok Tribe discussing how MSV currently provides critical telecommunications services to its Reservation.

<sup>9</sup>See, e.g., *Amendment of Part 1 of the Commission's Rules – Competitive Bidding Procedures, Fifth Report and Order*, 15 FCC Rcd 15293, ¶ 52 (April 14, 2000).

<sup>10</sup>See, e.g., *Qualcomm Incorporated, Order*, DA 00-2438, ¶ 7 (Chief, Wireless Bureau, Oct. 30, 2000) ("[M]obile satellite service may provide an important additional emergency telecommunications resource, especially to callers located in remote and rural areas and callers located in underpopulated regions where neither landline nor terrestrial mobile services exists. Mobile satellite systems . . . can provide continuous, reliable coverage in many areas where cellular coverage is patchy."); *Establishment of Policies and Service Rules for the Mobile Satellite Service in the 2 GHz Band*, 15 FCC Rcd 16127, ¶ 35 (August 25, 2000) ("2 GHz Service Order") ("We believe satellites are an excellent technology for delivering basic and advanced telecommunication services to unserved, rural, insular or economically isolated areas. . . . We remain committed to encouraging the expeditious delivery of telecommunications services, via

Commission's efforts in this *NOI* to facilitate the provision of terrestrial wireless services to rural areas are admirable, the fact remains that simple economic forces may preclude terrestrial wireless carriers from serving sparsely populated areas.<sup>11</sup> The availability of mobile voice and high-speed data connections to many areas of rural America depends on satellite service.

While MSS operators provide excellent coverage in rural areas, they are currently unable to provide acceptable service in urban areas because the satellite signal is typically blocked by buildings and other man-made structures. This lack of coverage in urban environments has prevented MSS providers from developing a critical mass of customers. Recently, however, the Commission granted the requests of MSS operators including MSV to supplement their satellite service in urban areas with ancillary in-band terrestrial facilities (called "ancillary terrestrial

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satellite services, to unserved communities."); *Extending Wireless Telecommunications Services To Tribal Lands, Report and Order and Further Notice of Proposed Rulemaking*, 15 FCC Rcd 11794, ¶ 13 (June 30, 2000) ("Satellite technology also represents a potentially cost-effective means to serve communities with low penetration rates, especially those in remote areas. For example, satellites may offer cost advantages over wireline access in rural and remote areas, where sparsely populated areas cannot provide the economies of scale to justify the deployment costs of wireline networks. Satellites have large coverage areas and, in many cases, can reach an entire nation, thereby spreading the costs of deployment across a number of communities. Satellites also provide communications opportunities for communities in geographically isolated areas, such as mountainous regions and deep valleys, where rugged and impassable terrain may make service via terrestrial wireless or wireline telephony economically impractical."); *Establishing Rules and Policies for the Use of Spectrum for Mobile Satellite Service in the Upper and Lower L-band, Notice of Proposed Rulemaking*, 11 FCC Rcd 11675, ¶ 12 (1996) ("MSS can serve areas of the country that are too remote or sparsely populated to be served by terrestrial land mobile systems.").

<sup>11</sup>The Wireless Bureau recognized this basic shortcoming of terrestrial wireless technology when it authorized a narrowband PCS licensee to operate paging repeaters from a network of high-altitude balloons in order to serve rural and underserved areas that are too remote or too high cost to be covered by ground-based infrastructure. *See Space Data Corporation, Petition for a Declaratory Ruling, Memorandum Opinion and Order*, DA 01-2132 (Chief, Wireless Telecommunications Bureau, Sept. 12, 2001).

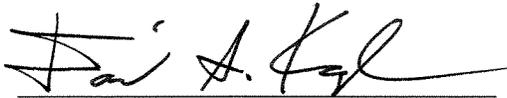
component” or “ATC”).<sup>12</sup> With such facilities integrated with their satellite systems, MSS operators will be able to provide service using smaller, less expensive mobile terminals that operate reliably not only in rural and remote areas, but in urban and indoor environments as well. The Commission’s decision to authorize ATC will thus make MSS an even more attractive service for residents of rural and remote areas.

**Conclusion**

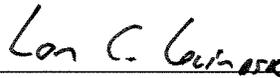
MSV requests that the Commission consider these Reply Comments in connection with the above-captioned *NOI* on facilitating the provision of terrestrial wireless services to rural areas

Respectfully submitted,

**MOBILE SATELLITE VENTURES  
SUBSIDIARY LLC**



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<sup>12</sup>See *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 Band, Report and Order and Notice of Proposed Rulemaking*, IB Docket No. 01-185, FCC 03-15 (rel. Feb. 10, 2003).

## **EXHIBIT A**

# YUOK TRIBE

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1034 Sixth Street • Eureka, CA 95501  
(707) 444-8433  
FAX (707) 444-0437

 Klamath

15900 Hwy. 101 N. • Klamath, CA 95548  
(707) 482-2921  
FAX (707) 482-9485

 Weitchpec

Hwy 169 • Weitchpec Route  
Hoop, CA 95548  
(707) 444-5608

June 27, 2002

Ms. Marlene H. Dortch  
Secretary  
Federal Communications Commission  
The Portals  
445 Tweifth Street, SW  
Washington, DC 20554

Re: **Federal-State Joint Board on Universal Service**  
**CC Docket No. 96-45**  
**Comments of Mobile Satellite Ventures Subsidiary LLC**  
**Filed December 20, 2001**

Dear Ms. Dortch:

The Yurok Tribe (the "Tribe") supports the comments filed by Mobile Satellite Ventures Subsidiary LLC ("MSV") on December 20, 2001, asking for clarification or reconsideration in order to facilitate the use of MSV's system to provide Universal Service supported services in rural and remote areas. Granting the relief requested by MSV is consistent with the Commission's commitment to bringing telecommunications to Native American lands and to other remote and rural areas. Further, it allows both MSV and customers, such as the Tribe, to receive the benefits intended by the Universal Service provisions.

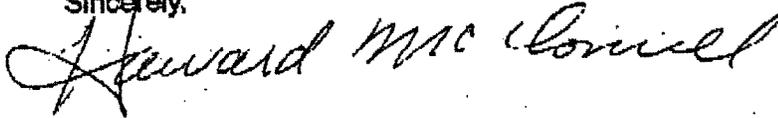
The Yurok Tribe has installed MSV's satellite dispatch service in various Tribal offices and vehicles, including the Tribal Department of Public Safety, Fisheries, Watershed Restoration, United Indian Health Services Health Clinic, and other Tribal offices. It has done so because there is no wireline or wireless telephone or other communications service option available on most of the Yurok Reservation. The Yurok Tribe has chosen to use the MSV system to provide communications on and off the Reservation until such time as more traditional telephone service is available.

The Yurok Reservation follows the narrow and winding Klamath River canyon approximately 45 miles, from the confluence of the Klamath and Trinity Rivers to the Pacific Ocean. The geography of the Reservation makes it extremely difficult for telephone service to be provided using existing wireline and wireless technologies. Use of the MSV network has provided the Yurok Tribe with extensive and quality communications coverage without incurring the capital costs associated with a

terrestrial based system. Allowing MSV to obtain Universal Service subsidies for services offered under these circumstances would offer substantial benefit to the residents of the Yurok Reservation.

For these reasons, the Yurok Tribe supports the Mobile Satellite Ventures Subsidiary LLC petition before the FCC. If you have any questions, please feel free to contact Peggy O'Neill, Yurok Tribe Planning & Community Development Department (707-444-0433).

Sincerely,



HOWARD MCCONNELL  
Vice Chairperson  
Yurok Tribe

cc: Stephanie Jayne Tilden, MSV